# CCR 0994-23-02 Well Pad

# Fluid Leak Detection Plan
# ECMC Rule 304.c.(13)

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

# 1. INTRODUCTION

The following plan addresses the applicable requirements for the Colorado Energy and Carbon Management Commission's (referred to hereinafter as ECMC or the Commission) Rule 304.c.(13) Leak Detection Plan under 300 Series as required for a Location Assessment permit application.

## 1.1. CCR 0994-23-02 WELL PAD

Laramie Energy, LLC (Laramie) (Operator # 10433) is pursuing a Form 2A for an Oil and Gas Location Assessment permit in Mesa County, Colorado. The Colorado Canyon Ranch (CCR) 0994-23-02 well pad (CCR Pad) is a proposed, new location. 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 will develop fee and federal minerals.

Laramie will utilize a closed-loop drilling system at the CCR Pad. A combination of water-based bentonite drilling fluids and oil-based fluids will be utilized for the two (2) new horizontal natural gas wells. Water-based mud will be used for the vertical section and oil-based mud will be utilized for the horizontal distance. The site will operate in accordance with applicable local, state, and Federal regulations.

**OGDP Title:** 2024 CCR 0994-23-02 OGDP
**Location Name:** CCR 0994-23-02
**Location ID:** New Location
**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)
**Surface Owner:** Colorado Canyon Ranch LLC
**Nearest Public Crossroads:** HWY 330 & 64 3-10 Road (Mesa County Public Roads)

**Table 1. Surface Information**

| Surface Owner | Surface Owner Mailing Address | Parcel Number | Parcel Acreage | Site Feature |
|---|---|---|---|---|
| Colorado Canyon Ranch LLC (CCR) | 9800 Metcalf Ave 5th Floor Overland Park, KS 66212 | 2665-231-00-220 | 34 | Well Pad & Access Road |
| | | 2665-232-00-219 | 32.5 | Well Pad (Only Pre-Preproduction /short-term pad disturbance), Access Road, and pipeline |
| | | 2665-232-00-237 | 37 | Pipeline |

**Table 2. Disturbance Acreage**

| **Well Pad** | **Disturbance in Acres** |
|---|---|
| Area of Disturbance | 7.5 |
| Working Pad Surface | 4.3 |
| Area to be Interim Reclaimed | 5.2 |
| Production Pad Surface (after Interim Reclamation) | 2.3 |
| **Access Road** | **Disturbance in Acres** |
| Proposed Access Road Acreage (2,542 feet length) | 1.9 |
| **Pipeline** | **Disturbance in Acres** |
| Proposed Pipeline (703 feet length) | 0.8 |

| **Disturbance Totals - Acres** | | |
|---|---|---|
| **TOTAL DISTURBANCE** | **Short-term** | **Long Term** |
| **10.2** | **6.0** | **4.2** |

Operations will be conducted in the following phases at the CCR Pad: construction, production equipment installation, drill rig mobilization, drilling, completions and flowback (including equipment mobilization, staging, and demobilization), production, interim reclamation, inspections, and final grading/reclamation of the site. Inspection activities will occur during the lifespan of the site. Laramie anticipates that the well pad will remain in production for approximately 30 years, based on the average lifespan of wells within the area. **Table 3** details the anticipated timeframe for each operational phase. Laramie anticipates continuous drilling, completions, and flowback operations in order to reduce the number of pre-production days needed to develop the proposed two (2) wells.

**Table 3. Timeframe for Operational Phases**

| **Phase/Activity /Stage** | **Timeframe (Days)** |
|---|---|
| Construction | 50 |
| Production Equipment Installation | 30 |
| Drilling Mobilization | 7 |
| Drilling | 46 |
| Drilling Demobilization | 7 |
| Completions Mobilization | 10 |
| Completions and Flowback | 48 |
| Completions Demobilization | 10 |
| Interim Reclamation | 14 |
| **Total Pre-Production Timeframe** | **222** |
| Production | Up to 30 years |
| Inspection Activities | Will Occur During All Phases |

### 1.2. ASSOCIATED PLANS

The following plans are associated with flowline management, notification, safety, and incidence response.

- 2024 CCR 0994-23-02 OGDP Emergency Response Plan
- Spill Prevention Control and Countermeasure Plan: Western Colorado Facilities
- 2024 CCR 0994-23-02 Stormwater Management Plan
- Laramie Energy Flowline Management Plan
- Collbran Stormwater Management Plan

## 2. DRILLING AND COMPLETION FLUIDS

Preliminary pre-production equipment proposed for the CCR Pad is detailed in the Form 2A Layout Drawings. Equipment for each operational phase (drilling, completions, and flowback) is preliminary and subject to change due to equipment availability and scheduling.

**Table 4. Fluids and Circulating System**

| Equipment | Description | Number of Units | Total Capacity (Barrels) |
|---|---|---|---|
| Upright tanks for Freshwater storage | 400 barrel each - Upright tanks for freshwater storage | 3 | 1200 |
| Upright Tanks for Mud Storage | 400 barrel each - Upright tanks for mud storage | 7 | 2800 |
| Rig Mud pits (active capacity) | Active volume during drilling operations. | 3 | 1200 |
| Rig Trip tanks | 40-barrel trip tanks used during tripping or slug operations | 2 | 80 |
| Mud shack | skids to store all mud products | 2 | |
| Rig diesel tank | 400-barrel diesel tank during drilling | 1 | 400 |
| Mud pumps | | 3 | |
| Generators | | 4 | |
| Cutting Management Area | (2) High Wall 3-sided tanks/bins are utilized for the storage of drill cuttings generated on-site, pending their subsequent removal to an off-site location. | 2 | 125 cubic yards |
| Closed Loop Solids Control Equipment | Centrifuge, de-watering unit, and drying shakers. | | 120 |
| Frac Tanks | Capacity of each frac tank is 500 barrels | 64 | 32,000 |
| Frac Pump (diesel) | Frac Pump - 230-gallon capacity | 20 | 4,600 gallons |
| Charge Pump / Blender | 100-gallon capacity | 2 | 200 gallons |

Drilling facilities (pre-production) typically operate in accordance with the controls specified in facility specific SPCC Plan provided by the drilling and completions operators.

## 2.1. TEMPORARY SURFACE LINES

To transfer freshwater during drilling and completions, Laramie will utilize temporary HDPE (high-density polyethylene) or lay flat style dedicated freshwater surface water lines to transfer freshwater from Buzzard Creek to the CCR Pad. Equipment will be situated on a previously Mesa County right-of-way (ROW) that was previously a section of Mesa County 34 3/10 Road (Brush Creek Road) until Mesa County built a bridge and abandoned that section of the ROW . Laramie has communicated with Mesa County and the Surface Owner regarding the placement of equipment and temporary lines. Further, Laramie has consulted with Colorado Parks & Wildlife (CPW) and Ute Water Conservancy District (Public Water Systems entity) regarding the fresh water take-out and utilization of freshwater.

Temporary surface water lines will be laid on privately owned surface. Some sections of the temporary lines will be placed on an existing pipeline ROW. No surface disturbance will result from the placement of the temporary surface water lines. These lines will be removed following completions and flowback operations. Prior to being placed in service, temporary surface water lines will be pressure tested. During use, temporary surface lines will be inspected daily with operators checking pressure gauges frequently. Temporary lines will be drained of liquids when not in use. Best Management Practices (BMPs) were discussed with CPW and Ute Water Conservancy District regarding fresh water take out. These BMPs are listed are listed **Section 8**.

To ensure that there is no risk of water flowing backward (reverse flow of water) into Buzzard Creek through the dedicated fresh water surface lines, the lines transferring water from Buzzard Creek to the well pad tanks will discharge into a dedicated fresh water receiving tank. The discharge section of the fresh water pipes will be installed above the top of the receiving tank which will prevent the reverse flow of liquids. The surface link will terminate above the receiving tank (as depicted in **Figure 1**.) so even in the unlikely event of an overflow of the receiving tank, no water could enter the surface pipelines.

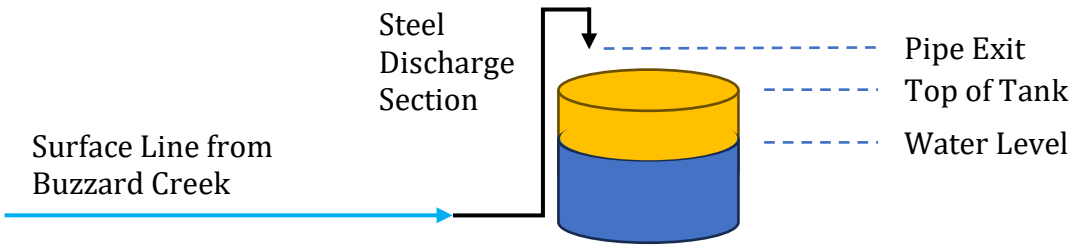


**Figure 1**. Fresh Water Line Discharge Arrangement

## 2.2. PRE-PRODUCTION MONITORING

All inspections are performed by qualified inspectors who are knowledgeable of facility operations, the equipment type and its associated components, and the characteristics of the material being stored, transferred, or processed. During drilling, completions, and flowback operations, personnel will be located onsite fulltime (24 hours a day, seven days a week). The consistent presence of personnel on location will allow for fluids to be continuously monitored.

During drilling, completions, and flowback operations, a fully equipped emergency spill response trailer will be staged at an adjacent Laramie operated Oil and Gas Location, the David 23-7 well pad (Location ID # 334500) and prepared for immediate response in the event of the release or spill during pre-production activities. A second emergency spill response trailer will be available for immediate mobilization if needed at Laramie's Harrison Creek Water Treatment Facility (Location ID # 413056) approximately 7 miles from the CCR Pad location.

## 2.3. PRE-PRODUCTION INSPECTION

Laramie will conduct AVO (Audio, Visual, Olfactory) inspections daily in accordance with Rule 609.d. *Audio Visual Olfactory Inspections*. AVO inspection is conducted by Laramie operations personnel on at a minimum of a weekly basis. The following list details pre-production equipment inspections.

- A pre-spud inspection will be performed prior to drilling a new well. All hoses, connections, tanks, pumps, and other fluid circulating equipment will be checked to ensure it is properly installed and will not leak prior to utilization. Any equipment that has failed or will leak while in service will be removed from service and replaced.
- All fluid circulating equipment will be visually inspected by both day and night shift to ensure it is properly connected and there are no leaks.
- Laramie Energy requires all contractors on-site to have and adequately perform their own spill prevention measures for their equipment.

## 2.4. TESTING AND MAINTENANCE

Laramie conducts standard preventative maintenance routinely and will conduct required maintenance as needed. Equipment showing signs of deterioration and wear will be replaced. Equipment will be inspected per API and ASME guidelines by vendors and manufacturers prior to shipment to the site. Equipment is then inspected by Laramie personnel prior to installation. Production flow lines, liquids dump lines, and gas gathering piping is hydrostatically tested per ASME standards after installation.

# 3. PRODUCED FLUIDS

Preliminary production equipment proposed for the CCR Pad are detailed in the Layout Drawings. Production equipment will include tanks, flowlines, and pipelines.

**Table 5. Proposed Production Tanks**

| Oil Tanks | | Produced Water Tanks | | Gunbarrel Tanks | | Sand Tank | |
|---|---|---|---|---|---|---|---|
| # Of Tanks | Barrels | # Of Tanks | Barrels | # Of Tanks | Barrels | # Of Tanks | Barrels |
| 1 | 400 | 2 | 800 | 1 | 400 | 1 | 400 |

Five (5) production tanks are planned for the well pad. The tanks will be 400 barrels each, with a total capacity of 2,000 barrels for Location. All production equipment will be located on the "cut" portion of pad. Each tank will be located more than 3 feet apart in accordance with ECMC Rule 608.a.(2).A. Installed tanks will be connected to combustors and will not be vented. Laramie will label all tanks on the subject pad to comply with ECMC Rule 605.h. and Rule 608.a.(12).

Tanks will be installed within secondary containment, in accordance with ECMC Rule 603.o.(1). Secondary containment will be sized to contain 150 percent of the volume of the largest tank. All proposed tanks have a capacity of 400 barrels. The capacity for secondary containment, therefore, will be sized to contain a minimum of 600 barrels at the CCR Pad. The containment will be constructed of metal wall and spray-in liner. Spray-in liners are more durable and have a longer lifespan than HDPE liners. The spray-in liner will minimize potential spill incidents and impacts. Spray-in liner specifications are detailed in **Appendix A**.

During production, four (4) 330-gallon chemical storage units with secondary containment will be located on the Production Pad Surface. Two (2) of the chemical storage units will consist of corrosion/scale inhibitor, wetting agent, and H2S scavenger. The other two (2) portable chemical storage units will be a methanol tote with injection pump. The total capacity of these chemical storage units will be 1,320 gallons for the CCR Pad. Each portable chemical storage unit is outfitted with a secondary containment feature which is adequate for the size of the storage tank to prevent discharges.

The CCR Pad will include several types of lines within the site perimeter to accommodate associated activities. All flowlines will be buried 4 feet below the surface. The material used for each flowline is compatible to transfer the substance under a variety of conditions. Crude oil transfer lines will not be installed within the perimeter of the Laramie CCR Pad.

Each well (2 horizontal wells proposed) will have a flowline that is connected to a separator within the Working Pad Surface. A 4-inch fusion bonded epoxy (FBE) coated carbon steel flowline will start at each of the 2 wellheads and connect to the separators. The FBE coating is non-toxic, and the FBE coated carbon steel flowline is resistant to corrosion. Laramie will also install sacrificial anodes on the flowlines to provide cathodic protection providing further resistance to corrosion.

The produced water/condensate dumplines from the separators to the tanks will consist of 2-, 3-, or 4-inch steel above ground transitioning to an underground Flexpipe or Flexsteel. The below ground Flexpipe or Flexsteel will be either 3-inch or 4-inch (determination will be made during the drilling phase).

Sales Lines will consist of 4-inch steel above ground tying into a 12-inch header below ground. Approximately 703 feet of 12-inch welded steel gas gathering line and 4-inch Flexpipe water line will be required to tie into Laramie's existing 16-inch gas gathering line and 4-inch Flexpipe waterline south of the proposed pad. The gas will be transferred to Laramie's Mega Vega Compressor Station (MVS) (Facility ID 430003) in the SE¼NE¼ Section 22, Township 9 South, Range 93 West, and the water will be pumped to Laramie's HCWTF (Location ID # 413056) in the NE¼NE¼ Section 22, Township 9 South, Range 93 West, 6th P.M.

## 3.1. PRODUCTION MONITORING AND INSPECTION

All inspections are performed by qualified inspectors who are knowledgeable of facility operations, the equipment type and its associated components, and the characteristics of the material being stored, transferred, or processed. Laramie's Pad Inspection Checklist is provided in **Appendix B** and Laramie's "Periodic Facility Monitoring Procedures" are provided in **Appendix C.**

Laramie will conduct AVO (Audio, Visual, Olfactory) inspections at least weekly in accordance with Rule 609.d. *Audio Visual Olfactory Inspections*. AVO inspection is conducted by Laramie operations personnel during every site visit.

| AVO (Audio Visual, Olfactory) | |
|---|---|
| **Audio** | Listen for any gas leaks or any noise out of the ordinary |
| **Visual** | a. Visual signs of a gas leak (bubbling, staining, or leaking around components.<br>b. Tanks- visual signs of seeping or leaking on tanks. Check for fluids in containment. Check valving to insure closed tight an no seeping or leaking.<br>c. Wells and wellheads- check for visual signs of gas leaking from tree and around base of well.<br>d. Location overall- Inspect location for wet spots not associated with natural conditions (rain, snow, run-off, etc.). Check for staining and odor during work on site.<br>e. Travel between sites inspect flowline corridors for any bubbling, leaking, staining or wet spots not associated with natural conditions (rain, snow, run-off, etc.). |
| **Odor** | Check for odors not normally associated with site |

Production Equipment Subject to AVO Inspection and FLIR Camera Inspection:

- Water Bath Heat Exchanger

- Production separators
- Gunbarrel, water, and oil (condensate) tanks
- Combustor knock out separator
- Combustor
- Generator (if required)
- Flow meters
- Water and condensate pumps
- Above grade pipe, valves, fittings

During production, tanks will be equipped with dedicated continuous monitoring through a SCADA platform at the CCR Pad for remote monitoring, alerting, and shut-in capabilities. Laramie's SCADA system, which provides real-time fluid level data, will allow for continuous monitoring of tank volumes.

Laramie's *Western Colorado Spill Prevention Plan* (prepared in accordance with 40 CFR Part 112) will be utilized after production activities have commenced at the CCR Pad. Laramie performs a minimum of three types of inspections for all Spill Prevention Control and Countermeasure Plan (SPCC) regulated facilities: Annual Inspections, ECMC Inspections and Periodic Observations. Laramie's SPCC inspection procedures are detailed in **Appendix D.**

### 3.2. TESTING, AND MAINTENANCE

Laramie will conduct ongoing maintenance and testing procedures to minimize leaks or spills. If any significant upgrades are made to the CCR Pad, including flowlines and/or tank battery containments, a Form 27 Site Investigation plan will be submitted for approval prior to upgrades.

## 4. STORMWATER COMPLIANCE INSPECTIONS

During both pre-production and production operations, the stormwater inspections will be conducted at the CCR Pad. The CCR Pad Stormwater Management Plan was prepared in accordance with ECMC Rule 304.c.(15) and identifies operating procedures that comply with the requirements set forth by ECMC in Rule 1002.f. The North Vega SWMP identifies operating procedures that comply with the requirements set forth by Colorado Department of Public Health and Environment (CDPHE) and Water Quality Control Division for controlling stormwater discharges associated with construction activity. Installation, maintenance, and inspection of stormwater BMPs minimize the potential for erosion, sedimentation, or the discharge of pollutants.

For pre-production, a V-ditch and berm will be installed along the perimeter of the WPS perimeter to convey water away from the pad and to concentrate stormwater to WPS perimeters where water will be directed alongside pad berm to sediment traps. Rock armored outlets will direct flow to designated construction ditches that have rock checks to dissipate flow, eradicate velocity and eliminate erosion. Laramie's stormwater

management efforts may include additional engineering measures such as the installation of culverts and/or flexpipe to divert water flow away from surface locations as needed. Flexpipe will be utilized in certain areas to carry flow over disturbed soils to where they will tie into said construction ditches with riprap to eradicate erosion and/or channeling. Flexpipe will be installed in areas to move water quickly from site and will be caught in rock channels for protection of ditches and/or sediment traps for outlets. For the production phase, a V-ditch and berm will be installed along the perimeter of the Production Pad Surface perimeter to convey water away from the production pad. Laramie will construct and maintain stormwater and erosion control features, implementing the SWMP, to minimize erosion, the transport of sediment offsite, and site degradation.

To maintain compliance, in areas of active construction, or areas that will resume construction, inspections must be made once every 14 days or more frequently if necessary to ensure BMPs are in place and functioning properly.

BMP inspection intervals may be reduced to once a month and post-storm inspections are no longer required if the following conditions exist: all ground disturbance construction activities are completed, all activities identified in the SWMP for final restoration are completed (seeding not required), and/or SWMP has been amended to indicate areas under reduced inspection intervals.

Routine 14-day, monthly, and post-storm inspections are not required for those areas where construction activities are temporarily halted, snow cover exists over the entire site for an extended period, and melting conditions are not present.

## 5. FLOWLINE AND PIPELINES - TESTING, AND MAINTENANCE

Laramie will conduct ongoing maintenance and testing procedures to minimize leaks or spills. If any significant upgrades are made to the CCR Pad, including flowlines and/or tank battery containments, a Form 27 Site Investigation plan will be submitted for approval prior to upgrades.

Existing pipelines and newly installed pipelines are tested and maintained in accordance with established Laramie protocols including the Laramie mechanical integrity program. The management practices implemented include the utilization of established standards for the selection and installation of pipelines. Management practices also include procedures for the routine monitoring, testing, and maintenance of pipelines as well as their valves, flanges, and associated devices. To aid in ensuring employee safety and environmental protection, all maintenance and testing activities are performed by personnel who are knowledgeable in facility operations and the specific operation of the equipment being maintained.

Laramie performs pressure and integrity testing of all new construction production piping and pipeline facilities prior to being placed into active service. Initial pressure tests will be conducted for flowlines installed at the well pad. Laramie will comply with applicable rules

and standards stated in the 1104 rules as detailed in the *Laramie Energy Flowline Management Plan*. Flowlines and pipelines are designed, inspected, and tested to the applicable ASME and API standards to include ASME B31.4, ASME B31.8, ASME B31.3, and API 15S.

Flowlines will be integrity-tested per the 1100 series of the ECMC Rules. After the installation of flowlines at the well pad, Laramie will conduct pressure testing to determine integrity prior to use. A Form 44 Flowline Report will be submitted to the ECMC prior to construction in accordance with ECMC Rule 1101.d. Laramie will retain the results of flowline testing, as stated in ECMC Rule 1104.a.(1). Laramie will conduct tests in a manner to ensure that precautions are taken to protect employees and the public. Laramie will conduct triennial pressure tests in accordance with Rules 1104.e and 1104.f. Laramie will perform an annual function test per ECMC Rule 1103.a.(1).A. on isolation valves installed at the CCR Pad. Laramie will repair or replace isolation valves that are not fully operable.

## 6. PROCEDURES AND INCIDENT RESPONSE

During drilling, completions, and flowback operations, a fully equipped emergency spill response trailer will be staged at an adjacent Laramie operated Oil and Gas Location, the David 23-7 well pad (Location ID # 334500)and prepared for immediate response in the event of the release or spill during pre-production activities. A second emergency spill response trailer will be available for immediate mobilization if needed at Laramie's Harrison Creek Water Treatment Facility (Location ID # 413056) approximately 7 miles from the CCR location. One of Laramie's spill response trails is shown in **Photo 1.**


**Photo 1. Spill Response Trailer**

If a leak is detected, personnel must immediately notify their supervisor and/or personnel will notify the appropriate contact as indicated on the Notification Chart in **Appendix E**. Both the Western Colorado Spill Prevention Plan and the Emergency Response Plan provide detailed response procedures for incidences.

If during inspections a leak or spill is observed or suspected, Laramie EHS department will

assess potential leaks and spills and determine appropriate procedure depending on the scenario of the leak and/or spill. The Spill Report Form is provided in **Appendix F**. In the event of a leaking tank, Laramie will isolate the tank and transfer fluids to other tanks. The subject tank will be taken out of service until cause is determined and repairs or replacement is completed. If a flowline is suspected of leaking, the line will be taken out of service and drained as much as possible. Laramie will determine the cause and extent of the leak. The flowline will remain out of service until repairs are made and the line is tested to operating pressure.

## 7. RECORD KEEPING

In accordance with Rule 1102.m. *Record Keeping*, Laramie will retain records at the field office located in Grand Junction. Flowline transfer line size, route, materials, maximum anticipated operating pressure, pressure or other integrity test results, inspections, repairs, integrity management documentation, applicable technical standard(s) used, design, installation, cover for subsurface flowlines transfer lines, top soil management and reclamation, marking, maintenance, and corrosion control, until Laramie submits abandonment information pursuant to Rule 1105.f. Physical and/or electric records will be kept in proprietary, with a minimum of 5 years. Documents and records may be available to ECMC upon request.

## 8. SITE-SPECIFIC FLUID LEAK DETECTION BMPS

The following fluid leak detection BMPs are applicable to the CCR Pad stated in this plan.

- Flowlines will be integrity-tested per the 1100 Series rules.
- Laramie spill response procedures will be adhered to for any spills or releases. All spills will be managed in accordance with the ECMC 900 Series rules
- Laramie will conduct weekly AVO inspections during operations at the CCR Pad.
- A V-ditch and berm will be constructed along the perimeter of the Working Pad Surface and the Production Pad Surface in conjunction with rock armored channels and sediment traps.
- A properly sized containment will be installed and maintained around the production tank battery.
- Production tanks will include remote level monitoring devices to rapidly alert operators of a potential leak or spill.
- Drilling fluid products will be stored on location off the ground and in containment sheltered from the weather.
- Fuel storage tank will have secondary containment underneath fuel pump, fittings, and hose connections.

- Closed loop solids control system will be utilized with no reserve pits.
- All temporary surface water lines will be inspected for leaks every 24 hours when in use.
- An emergency spill kit (95-gallon drum spill kit) will be placed on the pad for any spills that might occur for the life of the producing wells.
- During drilling, completions, and flowback operations, a fully equipped emergency spill response trailer will be staged at an adjacent Laramie operated Oil and Gas Location, the David 23-7 well pad (Location ID # 334500) and prepared for immediate response in the event of the release or spill during pre-production activities. A second emergency spill response trailer will be available for immediate mobilization if needed at Laramie's Harrison Creek Water Treatment Facility (Location ID # 413056) approximately 7 miles from the CCR Pad location.
- The discharge and dedicated fresh water receiving tank, along with the pump equipment, will be inspected at least once every 12 hours.

| **LIST OF APPENDICES** | |
|---|---|
| **Appendix A** | Spray Liner Specifications |
| **Appendix B** | Pad Inspection Checklist |
| **Appendix C** | Periodic Facility Monitoring Procedures |
| **Appendix D** | SPCC Inspection Procedures |
| **Appendix E** | Notification Chart |
| **Appendix F** | Spill Report Form |

# Appendix A

# Spray Liner Specifications

VersaFlex™
686 S. Adams St.
Kansas City, KS 666105
(913)321-9000

# VF 280

Elastomeric Polyurea

## Technical Data Sheet

### Selection & Specification Data

**Description**

VF 280 is a fast set, rapid curing, elastomeric pure polyurea developed for applications such as geotextile lining membranes. VF 280 may also be applied to concrete and steel substrates. VF 280 is a volatile free, odorless system applied with 1:1 mix ratio with plural component spray equipment. VF 280 may be applied at varying thicknesses in a single application using a multi-pass spray technique.

**Ideal for Applications in:**

- Waterproofing membranes
- Geotextile coatings
- Secondary containment
- Flexible membranes

**Features:**

- 100% Solid, Zero VOC's
- Extremely low curing stress shrinkage
- Seamless, monolithic, waterproofing membrane
- Rapid cure, for fast return to service

**Color & Stability (Limitations)**

Standard colors are Tan, Shale Green, and Black, other colors are available upon request. Note: Custom colors are not returnable, custom color options can be viewed at www.versaflex.com. The A-side (Iso) color could vary from clear to amber.

**Limitations**

VF 280 is an aromatic polyurea and discoloration from exposure to ultraviolet light may occur, however the physical properties are unaffected. VF 280 should not be used for direct contact with extremely high or low pH levels. When applying to geotextile fabric, the installer must ensure a method for properly anchoring the geotextile fabric to the host surface.

**Theoretical square feet per gallon**

Theoretical coverage is 1604 square feet per gallon at 1 mil DFT. Actual surface coverage will depend on substrate porosity and roughness, and application technique.

**Typical Physical Properties –** (Tested after 24 hour post cure at 225°F)

| Description | Test | Result |
|---|---|---|
| Solids | | 100 % |
| Mix Ratio | | 1 : 1 |
| VOC | | ZERO |
| Hardness, Shore A | ASTM D2240 | 85 |
| Hardness, Shore D | ASTM D2240 | 35 |
| Elongation | ASTM D638 | 456% |
| Tensile Strength | ASTM D638 | 3289 psi |
| Tensile Modulus | ASTM D638 | 100% Modulus: 974<br>200% Modulus: 1,393<br>300% Modulus: 1,904 |
| Tear Strength | ASTM D624 | 497 lb./in. |
| Gel Time | ASTM D1640 | 10 - 18 seconds |
| Tack Free | ASTM D1640 | ~ 30-45 seconds |

The value ranges stated in this Technical Data Sheet are based on system processing under controlled laboratory conditions. Equipment configuration and/or field application conditions may produce variances in the final system values.

# VF 280

Elastomeric Polyurea

## Technical Data Sheet

### Substrate and Surface Preparation

**Surface Preparation**

Prior to coating, the substrate must be prepared in a manner that provides a uniform, clean, sound, neutralized surface suitable for the specified coating. The substrate must be free of all contaminants, such as oil, grease, rust, scale, or deposits. In general, coating performance is proportional to the degree of surface preparation.

**Concrete**

Reference SSPC SP-13/NACE No. 6 Surface Preparation of Concrete. Surfaces must be sound and contaminant-free with a surface profile equivalent to a minimum CSP3 to CSP5 in accordance with ICRI Technical Guideline No. 310.2R-2013. This can generally be achieved by abrasive blasting, shot blasting, high-pressure water cleaning, water jetting, or a combination of methods.

**Steel (Atmospheric/Non-Immersion Service)**

Visible deposits of oil, grease, or other contaminants shall be removed according to SSPC-SP 1 followed by SSPC SP-6/NACE No. 3 Commercial Blast Cleaning, resulting in a sharp angular anchor profile of 2.5-4.0 mils.

**Primers**

**Concrete & other porous substrates**

Surface Primer: VersaFlex VF 15 (6 to 10 wet mils): Two-component primer. Maximum recoat window: 24 hours, after which a light recoat is required (2 to 4 wet mils).

VersaFlex VF 20 (6 to 10 wet mils): Two-component primer. Maximum recoat window: 72 hours, after which a light recoat is required (2 to 4 wet mils).

### Mixing Instructions

**Components & Mix Ratio:**

Mix ratio is 1:1 by volume

**Mixing:**

B-Side component must be mixed prior to use. See Material Processing & Handling Information for further details.

**Thinning:**

DO NOT THIN.

**Pre-warming:**

A and B components should be warmed to a minimum of 70°F prior to mixing.

### Material Processing

**Application Process:** High pressure heated equipment with impingement gun

**Recommended Material Processing**

| | |
|---|---|
| A-Side Primary Heat | 160°F |
| B- Side Primary Heat | 160°F |
| Hose Heat | 160°F |
| Dynamic Pressure | 1,800-2,000 psi |
| Dynamic Pressure Differential | 200 psi |

**Recommended Proportioning Equipment**

| | |
|---|---|
| Graco | Reactor E-XP2 |
| | Reactor H-XP2 |
| | Reactor H-XP3 |

**Recommended Spray Gun Configurations**

| | | |
|---|---|---|
| Graco | Fusion AP | AR/AF 2929 |
| | | AR/AF 3737 |
| | | AR/AF 4242 |
| Graco | Fusion MP | MR/MF 3535 |
| | | MR/MF 4747 |
| Graco | Probler P2 | 00 - 02 |

Note: Contact VersaFlex for questions regarding other approved application equipment.

# Appendix B

# Pad Inspection Checklist

# LARAMIE - PAD INSPECTION CHECKLIST

**revised 06/30/21**

**Facility Name:** **Date :** _____

**Inspector:** _____

| Items | Yes | No | N/A | Comments |
|---|---|---|---|---|
| **Production Units** | | | | |
| Equipment is free of signs of leakage, damage, or deterioration? (SPCC) | | | | |
| There are no accumulations of oil in drip pans? (SPCC) | | | | |
| Soil contamination - There are no signs of leakage on the surrounding ground? (SPCC) | | | | |
| **Well-Heads, Piping & Appurtenances** | | | | |
| There is no swelling, cracking, deterioration, discoloration, rust, or corrosion visible on any piping or appurtenances? (SPCC) | | | | |
| There are no pipelines improperly supported or unprotected in an area where damage is likely to occur? (SPCC) | | | | |
| Soil contamination -There is no evidence of leaks around the wellhead or gathering lines? (SPCC) | | | | |
| **Tank Battery** | | | | |
| There are no signs of corrosion evident (paint chipping, discoloration, pitting, cracking, rust)? (SPCC) | | | | |
| The tank, valves, or fittings do not show signs of leakage? (SPCC) | | | | |
| Thief or other hatches closed (SPCC) | | | | |
| Thief hatch or other hatches not leaking | | | | |
| Tank level indicators installed (added 2-11) | | | | |
| Are tank heaters installed (added 2-11) | | | | |
| Labeling - Tanks labeled with contents (SPCC) | | | | |
| There is no evidence of tank overflow (SPCC) | | | | |
| If present, VCU knockout drum labeled | | | | |
| There are no issues with the foundation or supports evident (cracks, gap between the tank and foundation/support)? (SPCC) | | | | |
| Bottom equalization lines present are maintained in the closed position (SPCC) | | | | |
| Process water/condensate tanks are equipped with high level indicators? (SPCC) | | | | |
| **Secondary Containment Structures** | | | | |
| There are no spilled/leaked oil or oil stains visible within the containment? (SPCC) | | | | |
| There are no oil stains visible outside of secondary containment? (SPCC) | | | | |
| There is no standing water/snow present within secondary containment? (SPCC) | | | | |
| - If "No" above, there is no sheen present on any standing water? (SPCC) | | | | Arrange for proper disposal. |
| There is no trash or materials present within the secondary containment? (SPCC) | | | | |
| Containment drains do not show signs of leakage and are they closed/plugged? (SPCC) | | | | |

# LARAMIE - PAD INSPECTION CHECKLIST

**revised 06/30/21**

| Items | Yes | No | N/A | Comments |
|---|---|---|---|---|
| There are no evident secondary containment integrity concerns (weeds or burrows in earthen berm, soil erosion, holes or gaps in metal sheets, tears in liner, cracks in concrete or earthen berm, etc.)? (SPCC) | | | | |
| **Blow downs (search the perimeter of the pad as well)** | | | | |
| Hearing protection labels | | | | |
| All blow down vents have rain caps (added 2-11) | | | | |

# LARAMIE - PAD INSPECTION CHECKLIST

**revised 06/30/21**

| Items | Yes | No | N/A | Comments |
|---|---|---|---|---|
| **Waste Management** | | | | |
| There is no waste on site that needs hauling off? | | | | |
| **Temporary Equipment Onsite** | | | | |
| Specify Type of Equipment/Use | | | | |
| Is equipment properly labeled? | | | | |
| Is equipment in good working order? | | | | |
| **Out-Of-Service Equipment Onsite** | | | | |
| Out-of-Service equipment is labeled and/or tagged | | | | |
| **SWD** | | | | |
| Soil contamination - There are no signs of leakage on the surrounding ground? (SPCC) | | | | |
| Secondary containment for all tanks (SPCC) | | | | Condition: |
| There is no standing water/snow present within secondary containment? (SPCC) | | | | |
| - If "No" above, there is no sheen present on any standing water? (SPCC) | | | | Arrange for proper disposal. |
| There is no evidence of tank overflow | | | | |
| Thief hatches closed | | | | |
| Thief Hatches not leaking | | | | |
| **Pits/Ponds** | | | | |
| Specify Pit type: | | | | |
| There is no indications that the liner has or may be expected to fail (visible leaks, bubbling or cracks in liner, etc.)? (SPCC) | | | | Condition: |
| No hydrocarbon sheen present (SPCC) | | | | |
| - If 'present', contact Ops immediately | | | | |
| Is there a 2 foot freeboard? (added 2-11) (SPCC) | | | | |
| **SPCC Inspection Items:** | | | | |
| Is the information on the SPCC Facility Diagram correct? (SPCC) | | | | If no, sketch corrections on diagram and return to Laramie Regulatory Department. |
| Is the information on the SPCC Overview Sheet correct? | | | | If no, note corrections on Overview Sheet and return to Laramie Regulatory Department |
| **Other Comments:** | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Inspector Signature: | | | | |

# Appendix C

# Periodic Facility Monitoring Procedures

| Laramie Periodic Facility Monitoring Procedure | |
|---|---|
| Approved By: | Approval Date: |

## 1.0 PURPOSE & SCOPE

All facilities operating within the Laramie Cascade Creek, Collbran and De Beque Operational Areas of Colorado must be visually monitored in accordance with the requirements of this procedure on a periodic basis no less frequent than 30 days apart. Laramie's Production Technicians shall use this procedure each time they visit a facility. In the event that a deficiency or issue requiring significant corrective action is observed, the Production Technician will report the deficiency to Laramie's ACTS Department. The ACTS Technician will issue a work order to authorize corrective action. The ACTS Technician will also review the deficiency to determine if the deficiency requires tracking under Laramie's Spill Prevention, Control and Countermeasure (SPCC) Plan. If the deficiency does apply to Laramie's SPCC monitoring procedures, then a Facility Corrective Action Tracking Form will be completed.

This procedure provides requirements for conducting periodic visual monitoring of all facilities managed under Laramie's Cascade Creek, Collbran and De Beque Operational Areas and guidance for completing the Facility Corrective Action Tracking Form. Included in the periodic monitoring are any existing or new facility containers, equipment, or infrastructure associated with oil and gas production. Once in operation, all facilities shall be inspected per this procedure.

## 2.0 TRAINING

Production and 7ACTS Technicians must receive training on this procedure and have participated in on-site training prior to performing periodic monitoring observations. Personnel performing periodic monitoring should also be familiar with the facility, Laramie's SPCC Plan, and applicable Federal and State SPCC rules and regulations. Personnel performing this monitoring must have a good understanding of the overall objectives of the periodic facility monitoring procedures. All Production Technicians should also have a basic understanding of equipment operation so that potential problems can be easily identified. The ACTS Technicians shall have a clear understanding of how to complete the Facility Corrective Action Tracking Form. Training shall be scheduled and provided by Laramie's Regulatory Department with support from the Operations Department.

## 3.0 MATERIALS AND EQUIPMENT

Production Technicians shall have the following materials available to them when performing periodic monitoring:

- Laramie Corrective Action Tracking Form
- A copy of this procedure

Periodic monitoring may be conducted daily, weekly, or other frequency, but not less than monthly, according to the Production Technician's periodic schedule associated with the facility. This general procedure shall be followed during periodic monitoring.

1) **Observe the condition of tanks, separators, wellheads, piping, portable containers and other equipment at the facility**
    a. Evidence of leaks on tanks, portable containers, seams, pipes, valves, fittings, connections or other equipment?
    b. NFPA labels damaged or absent?
    c. Evidence of improperly secured loading/unloading connections?
    d. Evidence of new or temporary tanks or other portable equipment and/or containers? If yes, refer to the Facility Change Guidance Document to determine if Laramie Regulatory needs to be notified of a facility change.
2) **Observe the condition of secondary containment structures**
    a. Evidence of damage to containment structure walls or foundation?
    b. Evidence of tank product within secondary containment?
    c. Evidence of precipitation (rainwater/snowmelt) of a quantity that may compromise secondary containment capacity.
    d. Evidence of trash/debris/out of place equipment within the containment?
3) **Check for the presence of spills and releases**
    a. Evidence of spills or releases outside of secondary containment?
    b. Evidence of spills or releases from loading/unloading areas?
    c. Evidence of spills or releases from portable containers?

If significant deviations to this procedure are determined to be necessary, the changes must be approved by Laramie management prior to implementation of the proposed deviation.

## 4.0 IMPLEMENTING THE FACILITY CORRECTIVE ACTION TRACKING FORM

This form is not intended to record a release or other unauthorized discharge of fluids. In accordance with Laramie's policies, a release shall be reported to the Laramie HES department and an Exhibit A form shall be completed.

1) If no deficiencies or issues are observed during periodic monitoring, completion of this form is not required.
2) If Observations indicate the need for corrective actions that can be performed immediately and onsite with minor repairs, then make those repairs and do not complete the form.
    a. Examples of minor repairs that can be made onsite and do not require completion of the form include, but are not limited to: (1) removal of trash or equipment improperly stored inside of secondary containment, (2) tightening connections and moving valves to the appropriate operational position, (3) replacing missing bolts on containments or other equipment, (4) removing small,

improperly stored portable or temporary storage containers, (5) replacing or correcting NFPA or other ID labels, including signs, and (6) closing thief hatches.

3) If observations indicate the need for corrective actions that cannot be completed immediately onsite, then the Production Technician will contact the ACTS Department to generate a work order. The ACTS Technician will also assess the deficiency and if appropriate, complete the Facility Corrective Action Tracking Form.
4) The completed ACTS work order will track the work to completion. The ACTS Technician will only generate Facility Corrective Action Tracking Form when the deficiency is SPCC related. SPCC related deficiencies include, but are not limited to secondary containment repairs, equipment failure repairs, and removal of fluids from the secondary containment units. Once the work is completed, the ACTS Technician will close both the work order and the tracking form.
5) The Regulatory Department will be consulted on any deficiency that triggers a Facility Corrective Action Tracking Form.

## 5.0 REVIEW AND CLOSURE OF COMPLETED FACILITY CORRECTIVE ACTION TRACKING FORMS

1) The Regulatory Department will review all completed Facility Corrective Action Tracking Forms. The Regulatory Department may request additional corrective action to the Operations Department.
2) The Operations Department will determine if the additional corrective actions are appropriate and implement as necessary.
3) Any additional corrective action will be provided to the ACTS technician to issue a new work order. The ACTS technician will use the original tracking form to track the new work order issued and close the tracking form then the additional corrective action has been completed.
4) The Regulatory department will review the SPCC plan to determine if the corrective action plan has altered the appurtenant information. Changes will be made as necessary.
5) Documentation of the ACTS work order and closure will be provided to the Regulatory Department for filing.

## 6.0 RECORDKEEPING

1) Records of completed Facility Corrective Action Tracking Forms and ACTS work orders are to be kept on file for a minimum of 3 years at the Laramie Grand Junction Office.
2) Training records are to be maintained in the same manner.

# Appendix D

# SPCC Inspection Procedures

| Laramie SPCC Inspection Procedure | |
|---|---|
| Approved By: | Approval Date: |

## 1.0 PURPOSE & SCOPE

All facilities operating within the Cascade Creek, Collbran and De Beque Operational Areas must be visually inspected for SPCC compliance and documented in accordance with the requirements of this procedure on an annual basis. This also includes any existing, modified, or new facility meeting the definition of a Spill Prevention Control and Countermeasures (SPCC) facility. This document provides procedures for conducting annual SPCC facility inspections. The inspections do not include equipment testing and are not intended as a substitute for the regularly scheduled monitoring of equipment by field personnel. It is anticipated that Laramie's Production Tech will serve as the inspectors.

## 2.0 TRAINING

Inspectors shall receive training on this procedure. Inspectors should also be familiar with the SPCC Plan and applicable Federal and State SPCC rules and regulations. Inspectors must have a good understanding of the overall objectives for performing the inspections. All inspectors should also have a basic understanding of equipment operation so that potential problems can be easily identified. Training shall be scheduled and provided by Laramie's Regulatory Department. Inspectors can request on-site training prior to performing annual facility inspections.

## 3.0 MATERIALS AND EQUIPMENT

The following SPCC inspection form and documents are necessary to complete annual facility inspections. This section should be used as a checklist for those personnel entering the field to conduct annual facility inspections.

- ☐ Laramie Piceance SPCC Inspection Form (Appendix B.1 of this SPCC Plan)
- ☐ Laramie Piceance SPCC Inspection Procedure (this document)
- ☐ Current Facility Diagram (FD)
- ☐ Current Facility Overview sheet (FOS)
- ☐ Measuring device (optional)
- ☐ Laptop computer (optional)
- ☐ Logbook (optional)
- ☐ Digital camera
- ☐ Personal Protective Equipment (PPE)
- ☐ Permit to Work Form (if required)

## 4.0 PERFORMING THE SPCC FACILITY INSPECTION

The following general procedure should be followed during the annual SPCC facility inspection. If significant deviations are determined to be necessary, the changes must be approved by Laramie management prior to implementation of the proposed deviation. The SPCC Inspection Form is divided into 6 sections (7 sections for facilities with pits or SWDs). The following procedure should be followed to complete each section of the checklist.

1. General Site Inspection. This section covers site drainage systems, non-production process equipment, temporary containment, lube-oil systems, and system alarm and shut-offs. Review each item and mark yes, no, or N/A as appropriate.
    a. 'Yes' indicates that the item is in place and properly operating.
    b. 'No' indicates that the item is in place but is either not properly operating, has leaked or requires corrective action to ensure continued operational integrity. Provide corrective action recommendations, for any item marked 'no', in the Required Corrective Actions section at the bottom of the inspection sheet.
    c. 'N/A' indicates that the item is not present at the facility or is not in service.
    d. Review the Facility Overview Sheet and Facility Diagram to make sure that all existing facility drainage systems, lube-oil systems, chemical storage, and temporary containers are reflected on them.
    e. Use the remainder of the sheet to document additional issues that need addressed.

2. Flowlines. This section covers flowline leaks, corrosion, pressure gauges and clamp-type repairs. Review each item and mark yes, no, or N/A as appropriate.
    a. 'Yes' indicates that the item is in place and properly operating.
    b. 'No' indicates that the item is in place but is either not properly operating, has leaked or requires corrective action to ensure continued operational integrity. Provide corrective action recommendations, for any item marked 'no', in the Required Corrective Actions section at the bottom of the inspection sheet.
    c. 'N/A' indicates that the item is not present at the facility or is not in service.
    d. Review the Facility Diagram to make sure that all flowlines, above or below-ground, are reflected there. If not, document the discrepancy on the bottom of the inspection sheet or directly on the FOS or Diagram.
    e. Use the remainder of the sheet to document additional issues not covered by the inspection checklist.

3. Process Equipment. This section covers all process equipment and related valves and flowlines. Review each item and mark yes, no, or N/A as appropriate.

a. ‘Yes’ indicates that the item is in place and properly operating.
b. ‘No’ indicates that the item is in place but is either not properly operating, has leaked or requires corrective action to ensure continued operational integrity. Provide corrective action recommendations, for any item marked ‘no’, in the Required Corrective Actions section at the bottom of the inspection sheet.
c. ‘N/A’ indicates that the item is not present at the facility or is not in service.
d. Review the Facility Overview Sheet and Facility Diagram to make sure that all existing process equipment and flowlines are reflected on them.
e. Use the remainder of the sheet to document additional issues that need addressed.

4. Tanks/Tank Battery (non-SWD). This section covers bulk storage containers, secondary containment, and all associated drains, vents and flowlines. Review each item and mark yes, no, or N/A as appropriate.
    a. ‘Yes’ indicates that the item is in place and properly operating.
    b. ‘No’ indicates that the item is in place but is either not properly operating or requires corrective action to ensure continued operational integrity. Provide corrective action recommendations for any item marked ‘no’ in the comments column.
    c. ‘N/A’ indicates that the item is not present or not in service.
    d. Review the Facility Overview Sheet and Facility Diagram to make sure that all existing bulk storage containers, secondary containment, and all associated drains, vents and flowlines are reflected on them.
    e. Use the remainder of the sheet to document additional issues that need addressed.

5. Pits/Ponds (If pertinent). This section covers produced water storage pits or ponds, as well as any associated liners and housekeeping. Review each item and mark yes, no, or N/A as appropriate.
    a. ‘Yes’ indicates that the item is in place and properly operating.
    b. ‘No’ indicates that the item is in place but is either not properly operating or requires corrective action to ensure continued operational integrity. Provide corrective action recommendations for any item marked ‘no’ in the comments column.
    c. ‘N/A’ indicates that the item is not present or not in service.
    d. Review the Facility Overview Sheet and Facility Diagram to make sure that any pits or ponds and any associated piping are reflected on them.
    e. Use the remainder of the sheet to document additional issues that need addressed.

6. Salt Water Disposal SWD (If pertinent). This section covers facilities where salt water is disposed of into permitted SWD wells. Review each item and mark yes, no, or N/A as appropriate.
    a. 'Yes' indicates that the item is in place and properly operating.
    b. 'No' indicates that the item is in place but is either not properly operating or requires corrective action to ensure continued operational integrity. Provide corrective action recommendations for any item marked 'no' in the comments column.
    c. 'N/A' indicates that the item is not present or not in service.
    d. Review the Facility Overview Sheet and Facility Diagram to make sure that any SWD well, associated piping and containment are reflected on them.
    e. Use the remainder of the sheet to document additional issues that need addressed.

7. Site Diagram/Facility Overview Sheet review. Verify that Facility Diagram and Facility Overview Sheet correctly reflect current site operations. If there are discrepancies, make notations on the attached copies.

8. Completing the report. After the facility inspection is complete, complete the Certification section by signing the inspection report. Attach the SPCC Inspection Form to the updated Facility Overview Sheet, and Facility Diagram. Return this package to the Regulatory Department.

## 5.0 REPORTING AND REVIEW

The steps outlined in this section must be performed following completion of the annual SPCC visual facility inspection to ensure that the discrepancies noted during the inspection are adequately communicated, reviewed, and addressed. All facility inspections must be reviewed prior to finalization.

1. Laramie's Production Techs/Inspectors shall provide the original SPCC Inspection Form to the Regulatory department.
2. The Regulatory department will review the inspection checklist and arrange to meet with the Production Techs/Inspectors to clarify any comments generated or questions raised as a result of the inspection(s), and to help identify appropriate corrective actions. Corrective actions should be completed as soon as possible, but no later than 6 months from the time of the inspection. Once all corrective actions have been completed, the inspection form will be signed by either the production tech, their supervisor or SPCC coordinator in the regulatory department.
3. Following review and discussions draft corrective actions shall be identified for the FD and FOS.

4. Corrections shall be made and those that require a review by a P.E. shall be submitted for review and/or approval.
5. Following review and approval by the P.E., update and/or amend the SPCC Plan as directed by the P.E.
6. Provide a copy of the updated/amended SPCC Plan to the field offices.
7. Retain documentation of all of the above in the appropriate file on the Grand Junction server.

## 6.0 RECORDKEEPING

Records of these inspections, including record of reviews, approvals, and subsequent SPCC Plan updates are to be kept on file for a minimum of 3 years at the Laramie Grand Junction Office. All completed inspection forms must be signed by the inspector or inspector's supervisor. Training records are to be maintained in the same manner.

# Appendix E

# Notification Chart

# Emergency Notification Chart

**First Responder: contact emergency services as necessary 911. Direct Dispatch numbers are listed below.**

****Verbal contact MUST be made or move to next person in line. Voicemail, email or text are not acceptable for emergency notification****

## Operations & Facilities

**NORTH**

Luke Cody
North Prod Mgr
C 970-618-2571
O 970-263-3605

**SOUTH**

Rory Mortensen
South Prod Mgr
C 970-778-5161
O 970-487-3843

## Completions

Jason Petermen
Completions Mgr
C 970-456-6334
O 970-263-3610

## Drilling

Aaron Duncan
Drilling Manager
C 406-498-4526
O 303-339-4913

Chris Clark
VP-Field Operations
C 970-462-8375
O 970-263-3607

Wayne Bankert
Regulatory & Env Manager
C 970-985-5383
O 970-812-5310

*For spills, environmental, wildlife*

Greg Anoia
Health & Safety Coordinator
C 970-216-1387
O 970-263-3627

*For injury, fire, vehicle, damage*

| | |
|---|---|
| Mesa County Dispatch (Debeque/Collbran) | 970-242-1234 |
| Garfield County Dispatch (Rifle) | 970-625-8095 |
| Rio Blanco County Dispatch (Buckhorn Draw/Piceance) | 970-878-9625 |
| St. Mary's Careflight | 970-332-4923 |
| Poison Control Hotline | 800-222-1222 |
| Chemtrec | 800-424-9300 |

LARAMIE ENERGY

# Appendix F

# Spill Report Form

# *SPILL REPORT FORM*

| | | | | | |
|---|---|---|---|---|---|
| **Reported by & Company:** | | **Location [Route]:** | | **Date:** | |
| **Weather:** | | **County:** | **Mesa / Garfield / Rio Blanco** | **Time** | |

**INCIDENT CLASSIFICATION KEY**

1. **Has the release left the site, or does it threaten to leave the site? NO / YES – Notify Environmental Immediately (Wayne 970-985-5383 and/or Matt 970-901-9007)**
2. **Is there potential for the release to cause combustible or toxic fumes (Hazardous atmosphere)? NO / YES – Notify Safety (Greg 970-216-1387)**

**EXTENT OF SPILL**

| | | |
|---|---|---|
| **Circle one or more** | **Confined to Secondary Containment** | **Outsite Secondary Containment** |
| | **Confined to Bermed Surface of Pad** | **Outside Bermed Surface of Pad** |

**Additional Info:**

| | | |
|---|---|---|
| **Discharge to water body or wetland?** | **YES** | **NO** |

**Type of Fluid/Material Release:**

**Estimated Volume of Spill:**

**Estimated Volume of Fluid/Material Recovered:**

**Method of Recovery:**

**Additional Actions Taken Toward Containment/Recovery:**

| | | |
|---|---|---|
| **Disposal Needed?** | **YES** | **NO** |

**Detailed Description of Event (included additional pages as necessary):**

**Cause of Event:**

**Spill Documentation**

1. **PHOTOS** – An adequate number to provide extent of project.
2. **Witness Statements –** If appropriate, collect witness statements from personnel.

**Follow Up Procedures**

1. **Email completed form with pictures and other documents if collected to cclark@laramie-energy.com, wbankert@laramie-energy.com , mkasten@laramie-energy.com and ganoia@laramie-energy.com if applicable.**