### PLAN OF OPERATIONS FOR DRILLNG ACTIVITIES ON PRIVATE LAND

Submitted to Montana Department of Environmental Quality April 7 2015.

## I. GENERAL INFORMATION

A. Name of Project: Emigrant

## B. Type of Operation: Minerals Exploration

C. This is a new operation.

The drill area boundary is completely contained within the private land of the St Julian Patent claims. The area that has had a number of drill holes by previous operators, including Pegasus in 1990 and 1991, which implemented drill programs on or about the Emigrant Project area under approved and long expired Plans of Operations. With the exception of placer gold operations in the creeks of the area, no work has been done within the intended project area since 1992.

D. Proposed startup date of operation:

As early as June 15, 2015, contingent on snow and weather conditions. Specific conditions and dates for different types of access and equipment are detailed in Section IV of this Plan. DEQ will notify Lucky when to proceed once the environmental review is completed and the bond is in place. Flowing Notification that Lucky can proceed, the DEQ will be notified five days prior to the actual start up and o final cessation of drilling.

E. Expected total duration of this operation: Seasonal for two years. Drill holes would not be left open during the winter period as all holes would be sealed, also pads and site would be cleaned up prior to closing for the season.

### **II. PRINCIPALS**

A: Name, address and phone number of Operator:

Lucky Minerals (Montana) Inc.	Lucky Minerals	
106 W. Park St. 200 - 8338 12		
PMB 120	Surrey, British Columbia,	
Livingston, MT 59047	Canada V3W 3N4	
208-589-3811	604-443-5060	

B. Name, address and phone number of authorized field representative (if other than the operator). Attach authorization to act on behalf of operator.

Shaun Dykes, Vice-President	Joey Puccinelli, Project Geologist	
Lucky Minerals (Montana) Inc.	Lucky Minerals (Montana) Inc.	
1106 W. Park St., PMB 120,	504 East Hawk Street	
Livingston, MT 59047	Meridian, Id 83646	
604-520-6511 or 604-443-5060	208-589-3811	
email - geologic@telus.net	email - joepooch@live.com	

Lucky Minerals Inc. will ensure that all project personnel, including management, geologists, drillers, driller's, helpers, etc. are aware of and committed to the design and mitigation features in

this Plan of Operations and any future amendments to this Plan of Operations agreed upon with the Montana Department of Environmental Quality

C. Name, address and phone number of claim owners:

All claims are in the process of being transferred to Lucky Minerals (Montana) Inc. and will be registered in their name.

D. Name, address and phone number of original optionee:

Lucky Minerals (Montana) Inc. 200 - 8338 120th Street Surrey, British Columbia Canada V3W 3N4 Ph: 604-443-5060

### **III. PROPERTY OR AREA**

Operation activities will take place on the following patented mineral claims which are a portion of the overall Emigrant Claim Block. All claims are situated in Section 5, Township 7 South, Range 9 East, located in the Emigrant Creek drainage in the Gallatin National Forest.

	LOT NAME	SURFACE
<b>Mineral Survey</b>		
9015	COPPER KING	20.3 acres
9015	BERCRY	16.3 acres
9015	BULLION	20 acres
9015	ST JULIEN FRACTION	7.6 acres
9015	JOSEPHINE	16 acres
9015	HELEN	13.3 acres
6706	ST JULIEN	16.1 acres
6707	BOTTLER	11.21 acres
6705	ST JULIEN MILL	17.68 acres

### **Patented Mineral Claims**

### **IV. DESCRIPTION OF THE OPERATION**

**A. ACCESS:** The operation area is accessed by the county maintained Emigrant Creek Road and then by Forest Service designated **Road 3272.** Access to the Emigrant Creek is from the town of Emigrant by way of the Chico road. Road 3272 is an RS2477 road having been in existence during the operation of the St Julian mine in the late 1800's.

**B. Map, Sketch and Drawings:** Several maps are included in this application.

1. Plates 1 to 3, is regional in extent and shows the Emigrant property location in relation to surrounding geographical and cultural features.

2. Plate 4 is a topography map showing location of the patented claims which will be affected by this Plan of Operations. St Julian patented claims have an existing water right of 2.5 cubic feet per second on Emigrant Creek. Lucky Minerals has purchased/optioned these claims and will use the existing water rights to supply the water requirements for the drilling program. In addition all laydown areas, and equipment storage areas will be located on the patented claims.

3. Plate 5 is a 1"=200' scale map showing an overview of the proposed drill sites.

5. Plate 6 shows the proposed water right diversion (pump site) location for the drilling, where the pump would be located.

6. Plate 7 is a sketch of a laydown staging area on private land using old mill site area

C. Project Description: The work proposed under this Plan of Operations will consist of a two year period of exploration related activities centered on the Emigrant Project St Julian patented claims as depicted on the various location and property maps. The type of work involved is base and precious metal minerals exploration focused on discovery of viable Copper/ gold/ silver/ molybdenum mineral deposits. The primary efforts at this stage of the project would be directed at drilling core holes to allow modeling of the subsurface geology and associated structure and mineralization. The plan is to continue current road maintenance and construction of drill pads. In order to keep disturbance to a minimum, all drill pads would be located on the existing roads. Drill holes would be either vertical or angled holes designed to best investigate the subsurface geology, with multiple holes from each proposed site. Specifics of each of these activities are discussed below. When a drill pad has been fully utilized the pad will be reclaimed by restoring the Road to its existing state and filling in of any sumps. The laydown area on private land will be kept as a storage area for future work programs. Ground trips for the project following an initial delivery of the drilling and associated equipment would be approximately 3 two-way trips per day. The plan is to use two drills and run them two shifts per day, usually 10 hour shifts with time for shift change and drill maintenance between shifts. Night drilling will require the use of small lights similar to the ones used by highway crews and would be localized to the drill area only. Given the tree cover and mountainous terrain any visual impacts would be extremely minimal.

1. Road Maintenance: Road 3272 and 3273 access road and the existing road network on the patented claims would be maintained through grading, in order to keep them serviceable for the type of vehicles that would be involved in the project. All roads, including the ones still drivable will be cleaned of rock and other debris to their original configuration; they will not be made wider. Flaggers with portable radios will monitor and control traffic along those stretches of road where travelers might be passing below where road cleaning is occurring. Flaggers and/or pilot cars will als be used when large equipment is being mobilized and demobilized from the area. All stream crossings will be left as is, with no disturbance or improvements planned. The existing crossings are all used and have been used for many years without problem. We are

in consultation with local private landowners to ensure no restrictions for access. The project does not anticipate doing any work or improvements to any stream crossings. The road up to the base metal claims (pink claims in center of figure 4) is currently a county road owned and maintained by Park County. The County will be contacted, informed and plan implemented with the county prior to the start of work to help in maintenance of the road and also to help control any dust issues arising from road use. We will work with the community to address any issues created by the program, but given that we would be doing only 2 or 3 trips per day it should have minimal effect. As mentioned previously this plan does not include any new road construction, only maintenance and grading of existing roads.

**2. Drill site/pad Construction:** The majority of drill sites will be located along the drill access roads or at wider parts, and intersections on the existing road network. These sites will be made as level as possible to accommodate drill and other equipment. Site locations will be a nominal 50' long by 15 to 20 feet wide with ends contoured back into the roadway. Each pad will have a mud sump constructed at a location appropriate to placement of the drill machine on these pads. Such sumps, or pits, would be on the order of 2 to 3 or so feet long, 1-2 feet wide and on the order of 3 feet deep. The pits would be used for the disposal of dry to damp drill cuttings only, no fluids would be stored in the pits, as the standard practice will have recirculating drill fluid at the drill and separating the cuttings using cyclone technology thus creating a closed system regarding these liquids. The sumps will be lined just in case problems arise in the technology. As the drilling proceeds the cuttings are transferred from the drill to the pit and once the holes are complete they are covered and compacted by dozer and re-contoured to match the pre-pit site conditions. If any liquids do reach the sumps then they will be dewatered before backfilling, but the proposed drilling system used doesn't require water in the sumps.

There will be 23 drill sites proposed for the 2015-2016 field seasons on the Private Land. Exact drill site locations will also be determined with the intent of locating drill sites in a manner that minimizes impacts to the environment.

**3.** Core Drilling: A total of up to 30 diamond drill core holes from 15 of the proposed drill pads are scheduled for completion in 2015. The actual number of holes completed will depend upon drill results of the initial holes. Only the holes on Private land are included in this Plan of Operations. A separate plan has been filed with USFS to cover drilling proposed on federal lands. The holes are close together all within patented land and the patented land road network. The layout should be considered a conceptual plan and not something which is exact in nature. As new information is acquired, additional holes may be required on a specific area or direction, as other locations earlier thought practical are found to be not important.

Most of these holes are planned to be angled. However, geologic trends may dictate that vertical drilling may be more effectual. The holes will be accomplished by either truck, wagon or skid mounted diamond coring machines. Average depth is expected to be around 1000 feet, though some holes may be up to 2,000 feet. Upon completion, all holes will be filled with a bentonite-cement mixture designed to effectively seal and stabilize down hole conditions. At the surface, each will be topped with 5 to 10 feet of cement.

When core drilling, it is necessary to use water or some type of drilling fluid to cool the bit, to lubricate the advancing hole and to remove cuttings from the bit face to the surface. Current practice is to use one or more of several types of synthetic polymer mud products to increase the viscosity of water enough to achieve the desired effects. These additives are non-toxic and biodegradable. MSDS information will be provided for all products used on site and this

information will be provided to the DEQ prior to start of drilling. Plastic or steel tanks will be used to store or hold mixed drill fluids and for storage of make up water at the drill site. Water holding tanks could also be used at pumping sites.

Water will be pumped either from existing artesian wells existing on the private land or Emigrant Creek utilizing the existing water right on the Creek that is attached to the St Julian Mine Patent claims (which we now control). Spillage containment and clean up kits or materials will be provided for each water pump set-up to handle at least 90 gallons of fuel which is 1.5 times the estimated fuel that would be at that location. The pump itself would-be contained within a lined berm to prevent any spillage, berm would be able to handle at least 1.5 times the volume of fuel contained in the pump (15 gallons) and in the attached 45 gallon drum (1.5\*60 gallons= 90 gallons). The pump will be located on the existing disturbed ground, back from the actual creek.

Each vehicle will carry a spill kit, each drill would be equipment with a large industrial spill kit capable of handling 1.5 times the total fuel located at the drill.

Should the need for a secondary pump to reach the drill be required, the same spillage containment and clean up kits or materials will be provided for that setup as the initials setup.

Upon completion of the drill hole there will be an effort to pump the drill cutting down the drill hole. This is not always possible due to rubble caving in the sides of the drill hole or blockages due to other reasons. In the event that all of the cuttings cannot be pumped back down the drill-hole, there are several options available with respect to the disposal of the cuttings. Cuttings will be disposed of in compliance with applicable State regulations (ARM 17.24.107) and in consultation with appropriate MT-DEQ.

All completed drill holes will be abandoned according to Montana DEQ requirements found in ARM 17.24.106.

The proposed methods will be tailored to the specific site and the final determination will be based on an on-site review and pre-approval by the Montana DEQ representative.

**D.** Equipment and Vehicles: The project would be operating two drills at anyone one particularly time, drill pads would be prepared ahead of the drilling and reclamation would occur when feasible, following the completion of drilling on the particular pad. So at any one time 5 of the drill pads on the existing roads would be active.

Equipment to be used on the Project will include,

1) A D-7 type dozer or equivalent to clear roads and work on private land. (only used small portion of time -10%)

2) A G-12-14 type grader or equivalent for surface finishing the various roads, (only used small portion of time -5%)

3) a JD-50 or equivalent type track mounted excavator or tractor mounted back-hoe to dig mud pits, (only used small portion of time -5%)

4) Two track mounted LF-70 track mounted diamond drilling machines, two drills would be active at one time for core drilling, used all the time.

5) Three diesel or gas powered solid displacement "Bean" water pumps for delivering water to the sites using high pressure rubber coated woven steel water hose, (two pumps, used most of the time). Initially one pump can supply two drills, water pumped to top of hill and then distributed by gravity.

6) Two drillers service trucks and small haulage trailers Used all the time.

(7) One operations 4x4 pickup or similar vehicles for site visits and field work. Used all the time

(8) Two ATV's for travelling around the project area. Used all the time for short distances.

Lucky Minerals and its contractors will maintain all equipment operating in good repair and free of abnormal leakage of lubricants, fuel, coolants, and hydraulic oil. Lucky Minerals nor its contractors will service tractors, trucks or other equipment where servicing is likely to result in pollution to soil or water. Lucky Minerals and its contractors will furnish containers or oiladsorbing mats, approved by the DEQ, for use under all stationary equipment or equipment being serviced to prevent leaking or spilled petroleum-based products from contaminating soil and water resources. Lucky Minerals and its contractors will dispose all contaminated soil, vegetation, debris, vehicle oil filters (drained of free flowing oil), batteries, oily rags, and waste oil resulting from use, servicing, repair, or abandonment of equipment.

**Road Use and Travel Management** - In order to protect existing vegetation and not contribute to additional erosion within the project area, Lucky Minerals will confine all wheeled vehicles and equipment to existing roads and trails or other overland travel routes. If crews need to access outcrops or any mineral exposures that are not immediately adjacent to roads, access to these features will be by foot travel. Equipment will not be operated when ground and road conditions are such that excessive damage will occur (i.e.: saturated road or soil conditions).

**Fire Danger and Equipment** - In order to reduce or eliminate potential for a wildfire associated with this approved Plan of Operations, while operating, Lucky Minerals will adhere to current and imposed fire restrictions that are enacted by the Forest Supervisor pertaining to fire restrictions on the Gallatin National Forest. Additionally, Lucky Minerals will ensure that all vehicles are equipped with a functional spark arrestor, baffled muffler, and are equipped with an axe, bucket, shovel and fire extinguisher. All support or crew transport vehicles will be parked in an area in which the natural vegetation does not directly contact the catalytic converter of the vehicle. The Company will comply with USFS regulations regarding fire rules and/or closures.

All pumps/generators and other combustion engines will be placed away from combustibles and be equipped with functional spark arrestors and fire suppression kits.

Warming fires in constructed fire pits may be used at drill sites and lay-down areas.

Appropriate fire protection equipment (axe, bucket, shovel and fire extinguisher) will be present at such sites. Warming fires will be put completely out if left unattended. All fire pits will be reclaimed. No green trees will be cut specifically for firewood, but slash and downed wood from site clearing or dead or down trees in the vicinity may be used for warming fires.

In the event that a fire occurs as a result of operations, Lucky Minerals will immediately report the fire to the appropriate authorized agency and take suppression actions until told not to do so by appropriate authorized agency fire personnel. If Lucky Minerals employees or contractors spot a fire outside of their project area, they will report it immediately to the appropriate authorized agency.

**Noxious Weed Infestation** - Lucky Minerals equipment will be washed and inspected by the appropriate authorized agency personnel prior to being used in project implementation within the administrative boundaries of the Gallatin National Forest This includes, but is not limited to drill rigs, vehicles used for transportation within the project area, helicopters, and ATVs. Lucky Minerals will notify the Forest Service representative of type and location of noxious weeds on National Forest lands and notify Montana DEQ of them on the private land. Returning Vehicles will be re-certified before re-entry onto NFS administered lands. Additionally, Lucky Minerals will be bonded for potential treatment of weeds in the event that noxious weeds are noted within the project areas the following growing season. Lucky Minerals will commit to annual field inspections of drill sites and lay-down areas which are used and occupied by Lucky Minerals under this Plan of Operations to monitor for noxious weed treatment will be coordinated with the USFS and the Company will be responsible for the treatment of the noxious weeds.

**E. Building Structures:** There will be no permanent physical structures placed or fabricated on the private land within the project area. Any temporary camp or lay down structures will be located on private land controlled by Lucky Minerals. Cold weather or heavy rain periods may dictate that some sort of temporary shelter be provided for the water pumps. All other temporary structures required would be located on the private land.

## V. ENVIRONMENTAL PROTECTION MEASURES

**A.** Air Quality: No air quality degradation is anticipated as a result of the road repair, maintenance or construction, or from any of the drilling activities anticipated.

All equipment will be equipped with approved spark arrestors, mufflers, catalytic converters, and other equipment required to operate legally. Work crews will utilize vehicles in such a manner as to minimize traffic on Forest Road 3772 thereby reducing dust.

## **B.** Water Quality:

Drill sites will not be located in streams and wetlands.

Operations will be conducted to prevent pollutants or debris from entering streams and wetlands. Pollutants entering streams will be reported. In the event that Lucky Minerals or its contractors cause debris to enter streams and wetlands in amounts that may adversely affect the natural flow of the stream, water quality, or fishery resource, Lucky Minerals or its contractor will remove such debris as soon as practicable, but not to exceed 48 hours, and in an agreed manner that will cause the least disturbance to streams and wetlands.

Drill sites will be located a minimum of 100 feet (100 feet slope distance, 200 feet including both sides of the stream channel) from all perennial streams and 50 feet from other riparian areas (ponds, lakes, reservoirs, and wetlands.

Lucky Minerals has access to a water right in the project area of 2.5 Cubic Feet per second (1,122 gallons per minute). The drilling will require approximately 50 gallons per minute a small fraction of the license. The following points cover water utilization.

1. As mentioned, drill water, would be pumped from either the existing artesian wells on the private and or Emigrant Creek and transported up the mountain to the various drill sites via a steel-rubber high pressure hose water line. Containment will be provided for all engine driven pumps located near streams or other water sources to mitigate accidental spillage of fuels or oils. Spill kits or materials will be stored at each site hosting such equipment. Should a secondary assist pump be required it would have the same berm and spill prevention kits as the main station on creek.

Drill systems operate on a 'closed system' concept. Fluids are mixed at the drill site in holding tanks from which fluid is pumped directly down the drill pipe. Return fluids and cuttings circulate back up the hole to be directed into the cutting handling system attached to the drill. Cuttings settle out via a partitioned series of holding compartments within the cyclone, effectively cleaning the fluid enough that it can be reintroduced into the primary holding tank. The cuttings are then disposed of in small pits on the drill pad. Cuttings will be disposed of in compliance with applicable State regulations (ARM 17.24.107) and in consultation with appropriate MT-DEQ personnel.

The fluid products are non toxic or biodegradable and are considered acceptable throughout the drilling industry.

2. Water erosion is not expected to be a problem regarding road cleaning and maintenance. Most of the terrain is extremely rocky mitigating any drainage problems. Where springs are present, culverts will be installed. Currently there are no new stream or spring crossings proposed in the plan. The roads will be sloped to the outside wherever practical to enhance drainage and prevent channeling. A contractor experienced in working on Forest Service roads will be hired and Lucky is willing to work with DEQ personnel to put in water bars and culverts where needed. Best Management practices (BMP's) will be used at all times.

Based on site-specific review of sediment transport potential (based on slope, existing vegetation, soil depths, proximity to riparian areas) by the DEQ representative, silt/drift fences or straw wattles will be installed at drill sites where deemed necessary. When such a need is determined, silt/drift fences or straw wattles will be installed immediately down slope of cleared drill sites and infiltration galleries to prevent sediment delivery to aquatic habitats in the event of an intense precipitation event or infiltration gallery failure.

Any work to develop water sources for pumping to drill sites will be done in a manner that minimizes disturbance of stream channels or spring sites.

3. Surface and ground water monitoring should not be an issue during the core drilling phase of this operation. All drill fluid additives pumped down hole are regulated and meet all state and Federal safety and environmental standards.

Oil, grease, hydraulic fluid and other petroleum products will not be released on the exploration site. If a release occurs, the contaminated material will be removed immediately and disposed of at a proper disposal site (ARM 17.24.105). Surface will be visually monitored especially in

areas of fuel transfer at the pump stations to ensure any leas or splits are no escaping the containment areas around the pump

4. Seasonal closures or temporary cessations of operations (none are anticipated) will have no impact on water quality in the Project area.\_Drill sites and roads constructed will be stabilized to minimize potential for offsite transport of sediment prior to cessation of activities.

5. Land use application for waste water disposal is not an issue for the Emigrant drilling operation, as the project does not intend to discharge any waste water to environment. The drilling fluids and water used are pumped down the drill hole with drill return fluids being processed and recycled. Volume of new water actually used would depend on the how much of the water can be recycled, but in reasonable ground conditions 80 to 90% can be expected. If there was no recycling about 50 gallons of water per minute is required for the drilling. In regard to land use application for work on private land that will be handled with the County though we are covered be several exemptions in reference to drilling which is the only use.

6. Hygiene measures will consist of a Port-A-Jon serviced weekly or when required to serve the drill sites and work crews on the project site. These would be located at the drill sites where 99% of the work would be completed. Lay down and storage areas are only temporary working places and a Port-A-Jon is not required in these areas.

7. Lucky minerals does not anticipate any modification or disturbance to existing creek crossings, given their continued current use by the current owners and local community. However should any work need to be done in order to safely cross stream channels then any and all required permits from DNRC, FWP, the army Corps of Engineers or EPA would be obtained and copies provided to Forest service prior to starting any work.

**C.** Solid Wastes: Drill cuttings, which consist of finely ground rock flour produced as the diamond bit cuts core samples will be the only material resulting from operation activities which could possibly fall under a solid waste category. As stated above, the cuttings will consist of rock material obtained from the site. These cuttings will be disposed of in the mud sumps dug at each drill location. These sumps will be filled in, compacted and contoured to match site topography, when drilling is completed.

**D.** Scenic Values: The proposed operation is not expected to degrade the scenic value of the Area. The drill site will be stabilized to minimize potential for offsite transport of sediment

**E.** Fish and Wildlife: The proposed operation will not threaten or endanger any fish or wildlife. In the case of Water pumped from Emigrant Creek, a screen will be placed around the water intake to keep fish from entering the pump. Measures will be taken to restrict any wild life from drinking any of the drilling fluid being used.

Lucky Minerals will remove from the activated drill sites, any material that could be considered as a food source or attractant for bears or other animals. This is specifically aimed at the daily removal of garbage, crew foods, etc.

Those requirements are as follows:

1. All food, refuse or other attractants must be acceptably stored or acceptably possessed during daytime hours.

2. All food, refuse or other attractants must be acceptably stored during nighttime hours, unless it is being prepared for eating, being eaten, being transported, or being prepared for acceptable storage.

3. Any harvested animal carcass must be acceptably stored, unless the carcass is being field dressed, transported, being prepared for eating, or being prepared for acceptable storage.

4. Camping or sleeping areas must be established at least one quarter mile from a known animal carcass or at least 100 yards from a known acceptably stored animal carcass.

5. The responsible party shall report the death and location of livestock to appropriate authorized agency official within 24 hours of discovery. Any user finding dead livestock should contact the appropriate authorized agency.

6. Burnable attractants that cannot be completely consumed by fire (i.e., no post burning residue) must be packed out.

When departing the area, all food and refuse will be removed.

**F.** Cultural Resources: At this time, there are no known archeological or historical cultural sites within the claims covering the Plan of Operations.

Cultural Resources - If undiscovered cultural resources are found during program implementation, Lucky Minerals will immediately cease operations at that location and notify the appropriate authorized agency.

### G. Hazardous Substances:

1. Diesel fuel will be used to power most equipment on site including the drill machine and water pumps. There could be an exception regarding water pumps as some of the older units in use gasoline engines. The drillers usually have a commercially available type storage tank mounted in their service pickups which is used for delivery of fuel to the various machines on site. Containment will be provided for fuel, either diesel or gasoline on site in small amounts to alleviate any spillage or leakage risk. Approximately 100 gallons of diesel will be consumed each day by each rig setup employed. In event additional storage of fuel is required on site, it will be contained in 45 gallon drums or other legal containers and stored in plastic lined or steel containment. As previously mentioned, spill kits will be provided for each such storage set-up.

2. Drill fluid additives will be used to thicken and condition the drilling water used for coring activities. Some of these products are in powder form and come in plastic lined paper bags, usually in the 50 pound or lighter range. Other products are liquid and come in five or six gallon plastic containers. An example of each of these product types would be bentonite gel (Max Gel) which is commonly used throughout the drilling industry for thickening drill mud. It comes in 50# paper bags. For liquids, Poly Plus 2000 polymer and Rod Ease at two liquid products. The first is a biodegradable polymer which forms long chain molecules when mixed with water. The second is a vegetable based oil product added to the drill fluid to loosen up the drill string when squeezing conditions are present in the hole and to better lubricate the bit and

drill string. These and similar products are commonly used in the drilling industry and are essential to core drilling in the geological formations existing under the project area.

On site storage of drill consumables including drill fluid products will be held to a minimum. Bagged items will be protected from weather using plastic sheeting. The plastic drum contained liquids will be stored on wood pallets. All refuse and debris generated by use of these products will be brought off the hill on a regular basis and disposed of via the local waste disposal provider.

3. Plans for spill prevention and containment will consist of the following: Containment procedures will be employed such as ground tarps and absorbent material for all diesel fuel, gasoline, hydraulic fluid, motor oil, and other hazardous material. Absorbent material will be kept on hand at each site where petroleum products are being used or stored. Fuel barrels or tanks will be stored in containments that have capacity for 1.5 times the volume of the liquid being stored. Operating water pumps will also be in containers or will have absorbent material under them.

The Company will report all significant spills of hazardous substances to the appropriate authorized agency, regardless of minimum quantities identified in the Spill Management and Reporting Policy.

Should any contaminated soils be encountered within the area they will be removed and replaced with clean soils and all contaminated soils will be disposed of in the appropriate manner at a proper licensed facility for disposal.

Release of reportable quantities of hazardous material will be reported and dealt with in accordance to the following:

# SPILL MANAGEMENT AND REPORTING POLICY

## I. CONTAINMENT AND CLEANUP

All releases or spills of hazardous or deleterious substances or other wastes, regardless of size, must be properly and expeditiously managed, contained, and removed to protect public health and the environment. This policy is written to provide guidance to the public about when and how to report spills. This policy is intended to assist in the implementation of the following Montana laws and the administrative rules adopted thereunder: Comprehensive Environmental Cleanup and Responsibility Act (§75-10-701, et seq., MCA); Hazardous Waste Act (§75-10-401 et seq., MCA); Solid Waste Management Act (§75-10-201, et seq., MCA); Underground Storage Tank Act (§75-11-501, et seq., MCA); and the Water Quality Act (§75-5 101 http://www.deq.state.mt.us/enf/spill.asp, et seq., MCA).

Releases and spills must be reported immediately to the state's Disaster and Emergency Services (DES) 24-hour phone number (406) 431-0411. If no one can be reached at that number, the release or spill may be reported to the Montana Department of Environmental Quality (DEQ) duty officer at (406) 431-0014. Notification to the National Response Center (NRC) may also be required. NRC can be reached at 800-424-8802. DEQ and DES are not responsible for making this notification.

II. MONTANA DEQ NOTIFICATION REQUIREMENTS

A. The following types of spills must be reported:

- Releases or spills of hazardous substances in amounts that meet or exceed reportable (420 or 25 gallons as outlined in "C" below) quantities as set out in 40 CFR Part 302. Notification to the DES and NRC is required.
- Spills, overfills, and suspected releases from underground storage tanks and petroleum storage tanks. ARM 17.56.501, et seq.

• Releases or spills of any materials that would lower the quality of groundwater below water quality standards. ARM 17.30.1045.

- B. The following types of spills should be reported:
- Spills that enter or may enter state water or a drainage that leads directly to surface water;
- Spills that cause sludge or emulsion beneath the surface of the water, stream banks or shorelines,
- Spills that cause a film, "sheen", or change the color of the water, stream banks or shorelines; or
- All other spills except as noted in C.

C. The following types of spills are not required to be reported provided they do not enter surface water or a drainage that leads directly to surface water:

- Spills of ten barrels (420 gallons) or less of crude oil, produced water, injection water, or combination thereof that occur on property leased for the purpose of oil and gas exploration; or
- Spills of twenty-five (25) gallons or less of refined crude oil products, including but not limited to gasoline, diesel fuel, aviation fuel, asphalt, road oil, kerosene, fuel oil, and derivatives of mineral, animal, or vegetable oils.

## H. Reclamation:

Best management practices will used to keep disturbance to a minimum required for the safe and successful completion of the project. Reclamation of the sites will be initiated on a site by site basis as soon as the drilling and/or use of the site has been completed. Re-vegetation and reclamation of drill-sites, water pumping sites, campsites, roads, trails and other areas disturbed by exploration and exploration associated activities, will be conducted in consultation with the appropriate authorized agencies.

To ensure adequate reclamation potential, any organic litter layer present will be stockpiled separately from the mineral soil.

Final and interim reclamation of drill-sites, water pumping sites, lay-down areas, travel routes, and other areas disturbed by exploration and exploration associated activities, will be conducted in consultation with the appropriate authorized agencies on a site by site basis. Reclamation measures will be adjusted as necessary to best achieve reclamation objectives.

It is estimated that a maximum of 4 drill sites would be open at any particular time within the existing road alignments, Two drill sites would be actively drilling, two pads being prepared and possible a fifth pad just be starting to be setup.

Following is a general reclamation plan applicable to areas disturbed by exploration activities:

# Objectives

The objectives of reclamation measures under this Plan of Operations are to:

1) Reclaim the surface disturbed by operations by taking such measures as will prevent or control onsite and off-site damage to the environment and forest surface resources (36 CFR 228.8 (g)).

2) Return areas disturbed by operations to a stable configuration that approximates the original condition to the extent possible.

# **Facilitating Reclamation**

Application of reclamation measures will be concurrent with operations and/or begin immediately upon completions of operations at each site.

Disturbed areas will be kept to the minimum size necessary to accommodate the exploration operation (ARM 17.24.105). If ground-leveling activities are needed or sumps are dug, all suitable on-site organic litter layer, soil and soil material will be salvaged prior to any other site disturbance (such as drilling or leveling), and either stockpiled or used for immediate reclamation (ARM 17.24.105). Felled or cut vegetative material (trees, logs, brush, etc.) will be stockpiled in amounts adequate for reclamation.

Lucky Mineral's will assume responsibility for any necessary reclamation resulting from activities of contracted and or sub-contracted employees.

## **Interim Reclamation Measures**

While completion of final reclamation as soon as possible is preferable, this may not always be possible due to snowfall or weather. In such an event, interim reclamation needs identified by the appropriate authorized agency representative will be completed for the purposes of erosion control on all exploration disturbance areas (ARM 17.24.105). This could include draining sumps and infiltration galleries; erosion control measures such as constructing or installing water bars, scarifying compacted surfaces, placement of woody debris, interim re-vegetation, etc.

## **Final Reclamation Measures**

Exploration drill holes will be plugged at the surface five to 10 feet with cement, except as provided in Administrative Rules of Montana 17.24.106. Drill-hole collar pipe or casing will be removed or cut off below ground level (ARM 17.24.107). Drill cuttings and other non-toxic lubricants in sumps/infiltration galleries will be removed from the site or allowed to percolate into the ground prior to backfilling (ARM17.24.107).

Excavations will be backfilled with excavated spoil material and topped with salvaged organic material. Compacted surfaces created by exploration activities will be loosened. (ARM 17.24.107). Disturbed areas will be re-contoured to original condition to the extent possible by reapplying salvaged material over disturbance areas (ARM 17.24.107). This will include reapplication of mineral soil, topped with organic soil material, woody debris, and slash.

Upon completion of reclamation, any excess salvaged material (rock, soils, slash, woody debris, etc.) will be scattered in the vicinity. Excess rock or soils will not be placed or scattered in streams or wetlands.

If soil disturbance occurs, re-vegetation efforts will primarily rely on creation of micro-sites (roughened ground surfaces, placement of woody debris, etc.) for natural re-vegetation and redistribution of the salvaged on-site organic litter layer. Because of the lack of anticipated soil disturbance (due to use of a self-leveling drill rig or timbers for leveling), additional seeding of disturbed areas may not be necessary. Reseeding may be prescribed if, upon inspection, it is noted that adequate organic material containing seed is not available. Only native, certified weed-free seed of a mix pre-approved by appropriate authorized agency personnel will be used. Prescribed re-vegetation will be accomplished as soon as possible; however, re-vegetation will be performed in the proper season in accordance with accepted agricultural and reforestation practices (ARM 17.24.107) identified in consultation with Montana DEQ personnel on a site-specific basis.

Any damage to roads, ditches, trails, or associated drainage features (water bars, ditches, culverts, etc.) resulting from exploration activities and/or associated travel by Lucky Minerals personnel will be repaired to a functional condition as specified by appropriate authorized agency personnel.

## **Reclamation Monitoring**

Lucky Minerals will commit to annual field inspections of drill sites, and lay-down areas which are used and occupied by Lucky Minerals under this Plan of Operations to monitor for reclamation effectiveness and noxious weed infestations for a 3 year period. Such field inspections will be documented with photographs or written descriptions.

In the event that any of the above reclamation efforts do not meet with the established criteria as stated below, Lucky Minerals will collaborate with the DEQ representative and make changes to the site, incorporating such changes and additional procedures as may be expected to provide reclamation to the stated standard. (ARM 17.24.107 addresses re-vegetation only).

### **Reclamation Bond Release**

Release of the reclamation bonds for a specific drill site will be requested when:

• Monitoring indicates that reclamation measures have effectively prevented or controlled onsite and off-site damage to the environment for a period of three years and such prevention is expected to continue into the future.

• Re-vegetation at reclaimed areas is adequate. Re-vegetation will be deemed adequate when: 1) Species composition is similar to that of adjacent areas; and 2) Vegetative crown cover is 60 to 75 percent of the existing percent vegetative crown cover of adjacent areas not disturbed by operations authorized by this Plan.

### RECLAMATION WORKSHEET Lucky Minerals Montana Inc. Emigrant Project Park County, Montana

Davis-Bacon wage plus fringes, plus FICA, Unemployment and Workman's Compensation Insurance for Group \* Equipment Operators: \$47.50/hour.

Davis-Bacon wages plus fringes, plus FICA, Unemployment and Workman's Compensation Insurance for Group 1 Laborer: \$35.00/hour.

Drill Sites:

Exact estimated disturbance for drill pads with road component removed (already disturbed).

23 pads at 500 square feet /pad.

Total estimated disturbance for program is 11,500 sq. feet of 0.27 acres.