

2.02 GENERAL REQUIREMENTS FOR COAL EXPLORATION

2.02.1 Scope

A.P. Maxwell (50 percent owner of LCC) conducted coal exploration during 1996 under Notice of Intent number X-96-218-00. This permit is no longer active.

In 2020, New Elk Coal Company LLC operator of the Lorencito Canyon Mine filed for a Notice of Intent number X-2020-232-03. The permit is still active with drilling to begin and be completed in 2021.

Should future coal exploration activity be required within the permit area, the appropriate permit revisions will be obtained. Likewise, for activities outside the permit boundaries, the appropriate Notice of Intent shall be filed.

2.02.2 Exploration Involving Removal of 250 Tons or Less of Coal

As part of the 2021 drill program NECC will conduct one exploratory drill hole location within the current Lorencito Canyon Mine Active Permit Area.

In the area proposed for exploration the surface is owned by Hill Ranch and coal ownership is held jointly by Hill Ranch, F.E. Hill Company, and MGP Enterprises as described in **Section 2.03.4**. Ownership is indicated on **Map 2.03.4-1**. Right of entry for the lease is explained in **Section 2.03.6** of this Permit Application Package. The location and approximate depths of the drill hole are described below. The location of the drill is shown on **Map 2.04.6-1**.

Drill Number	Easting*	Northing*	Elevation	Approximate Depth (feet)
LC-17-20	3,202,758	1,165,165	7,130	610

*State Plane 0503

Exploration activities will primarily consist of drilling and associated drill site construction. Limited road construction will take place due to the extensive existing road network used in gas exploration and production. The equipment to be used includes two truck mounted rotary drills, one truck to haul pipe, two water trucks, one backhoe, one bull dozer, a road maintainer, and a logging truck. 4 wheel drive pickups will be used on a daily basis to access the sites.

Construction activities will be minimized. Existing roads will be used wherever possible. Any road spurs required will be constructed in such a manner as to minimize erosion and disturbance to the land surface using a dozer and/or track mounted excavator. Brush will be disposed in accordance to the agreement with the landowners. The amount of surface disturbance necessary

will depend on the drill site. The amount of disturbance at each drill site will be kept to a minimum. A pit for the collection of drill cuttings and fluids will be excavated with a backhoe at each location. The pit will be approximately 8 ft by 40 ft by 6 ft deep. The pit will be pumped on a regular basis and all fluids transported to a disposal site at the New Elk Mine. The pit will be backfilled upon completion of the drilling activity. Present plans call for one pit per drill site. Drill location estimated acreage of disturbance for road and site construction is shown below.

Hole no.	Estimated Site Area (sf)	Estimated New Road (ft)	Estimated Site (Acres)	Estimated New Road (Acres)	Estimated total Disturbance (Acres)
LC-17-20	3,600	30	0.083	0.001	0.083

The irregular terrain precludes making an accurate estimate of the amount of material to be disturbed. Each pad is estimated to disturb 3,600 square feet.

Approximately 30 foot of light use road will be necessary to access the site. The location is located right of an active road in the Lorencito Permit Area. The road details are explained in detail in Section 2.05.3 (c).

Drilling activities will include rotary and core drilling. The hole diameter will be 5 inches while rotary drilling and a 3 inch diameter core when coring. Drilling fluids include air and water with a mist foaming agent and drilling mud if necessary. All chemicals used will be biodegradable so as not to adversely impact the surrounding area or any groundwater which may be encountered.

Topsoil will be salvaged from the drill sites prior to their construction. Salvaging will include removing the top 12 inches of soil or the amount available and stockpiling this material in the general vicinity of its removal in an area where it will not be removed from the drill site area. Stockpiles of topsoil will be compacted to prevent erosion by wind and other elements until used for reclamation. Topsoil at each drill pad will be stored on the upslope side of the drill pad when safe and practicable to do so to minimize risk of erosion. Reclamation of the site will be completed after the complete of the drilling and abonnement of the hole.

The pre-mine land use is shown on **Map 2.04.3-1** covering the entire Permit Area. The soil for the Permit Area is shown on **Map 2.04.9-2**. The vegetation survey for the Permit Area is shown on **Map 2.04.10-1**. Revegetation for the drill sites will be consistent with practices the have been completed with the mine site described in the **Revegetation Plan** in **Section 2.05** of this Permit Application Package.

The hole will not be developed as a monitoring well.