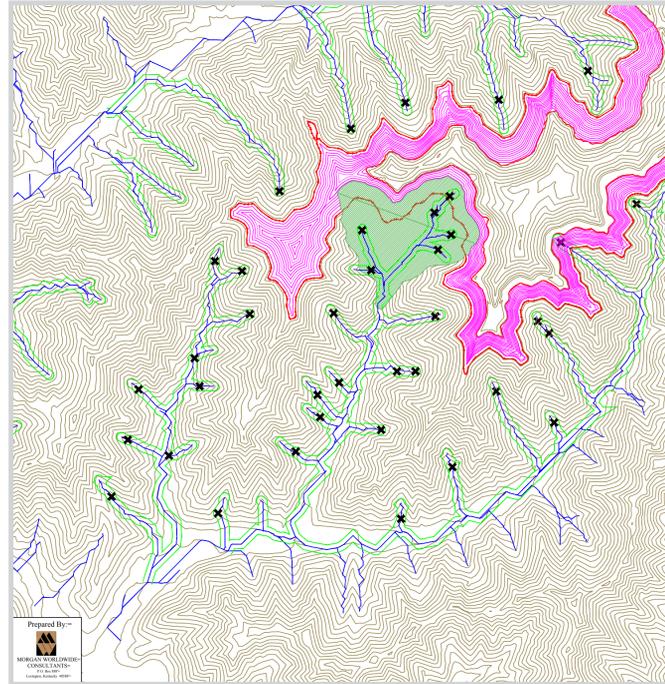




Surface Configuration

Representative Model Mines - Central Appalachia



Contour Mine - Central Appalachia

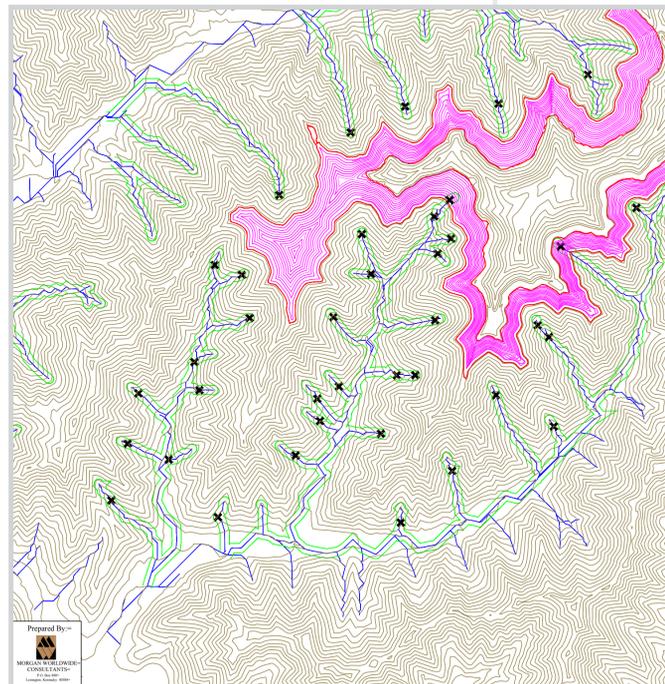
Existing Conditions

(based on current regulations and state policies)

- 0.5 million tons per year mined
- 5 million tons coal resource
- 13.2:1 mining ratio
- 55 million CY initial backfill
- 28 million CY excess fill
 - 87% outside mineral removal area
 - 76% below lowest seam mined
- 458 disturbed acres
- Stream Impacts
 - 235 ft ephemeral stream mined through
 - 704 ft ephemeral stream filled
 - 302 ft intermittent stream mined through
 - 6,928 ft intermittent stream filled

More excess spoil fill is placed outside the mined area, and the toe of the fill extends farther downstream.

Deck of excess spoil fill is typically relatively flat and level and does not blend into the surrounding terrain as would a more natural landform.

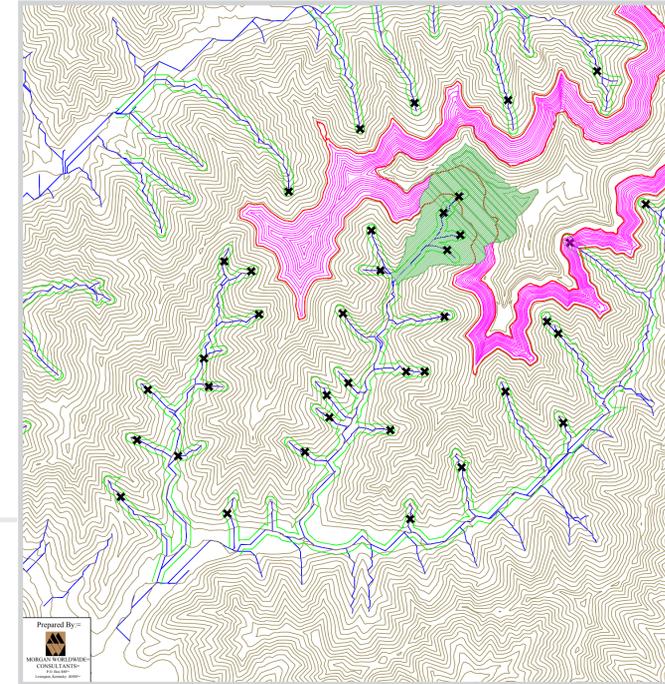
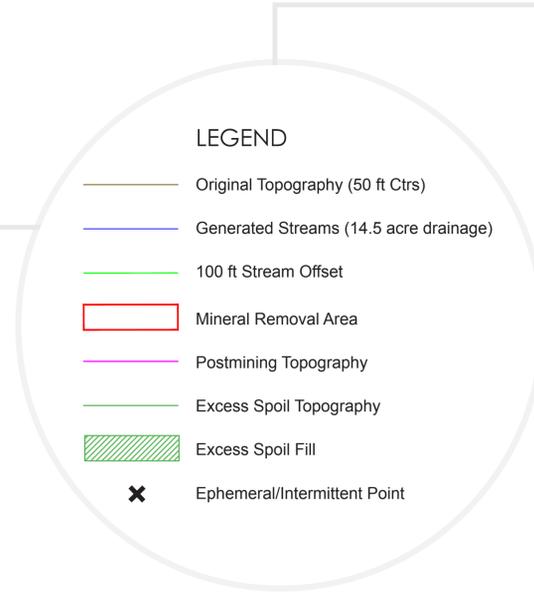


Contour Mine - Central Appalachia

Alternative 2

(Prohibits placement of excess spoil in intermittent/perennial streams)

- 0.5 million tons per year mined
- 5 million tons coal resource
- 13.2:1 mining ratio
- 55 million CY initial backfill
- 28 million LCY excess fill
 - All excess spoil must be located to an offsite storage area
- 371 disturbed acres
- Stream Impacts
 - 235 ft ephemeral stream mined through
 - 302 ft intermittent stream mined through



Contour Mine - Central Appalachia

Proposed Rule

- 0.5 million tons per year mined
- 5 million tons coal resource
- 13.2:1 mining ratio
- 55 million CY initial backfill
- 28 million CY excess fill
 - 46% outside mineral removal area
 - 34% below lowest seam mined
- 448 disturbed acres
- Stream Impacts:
 - 235 ft ephemeral stream mined through
 - 457 ft ephemeral stream filled
 - 302 ft intermittent stream mined through
 - 3,135 ft intermittent stream filled

Deck of excess spoil fill is not necessarily flat or level, fill extends up to and over the crest of the backfilled area. More spoil is placed within the mined area footprint and the fill does not extend as far downstream.

A more natural landform is possible, but all engineering stability requirements must still be met.

The proposed rule includes enhanced requirements for minimization of excess spoil. The permittee must demonstrate how the maximum amount of overburden will be returned to the mined-out area after considering:

- Applicable regulations concerning backfilling, compaction, grading, and restoration of the approximate original contour;
- Safety and stability needs and requirements;
- The need for drainage structures, access roads, and berms. Drainage structures, access roads, and berms may be constructed on the perimeter of the backfilled area, but the total width of these structures must be limited to 20 feet unless the need for greater width can be demonstrated to be absolutely essential;
- Needs and requirements associated with revegetation and the proposed postmining land use;
- Any other relevant regulatory requirements, including those pertaining to protection of water quality and fish, wildlife, and related environmental values.

ABBREVIATIONS	Ctrs - Contour Interval	CY - Cubic Yards	FT - Feet	LCY - Loose Cubic Yards
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