

Module 20: Postmining Land Use and Reclamation

[Section 7 NSMCRA/§§77.462/77.591/77.593]

20.1 Proposed Postmining Land Use

For premining land use areas identify the postmining land use to which the land will be restored, how each land use is to be achieved and the necessary support activities which may be needed to achieve the land use. Identify the type of reclamation for each area (approximate original contour, terrace, water impoundment, etc.). (Key the postmining land use(s) to the "Land Use and Reclamation Map" Exhibit 18.)

The pre-mining land uses are Forestland, Unmanaged Natural Habitat, and Pastureland/Land Occasionally Cut for Hay.

<u>Premining Land Use</u>	<u>Postmining Land Use</u>	<u>Seed Mix Number</u>
Forestland	Forestland	4
Unmanaged Natural Habitat	Unmanaged Natural Habitat	3
Pastureland/Land Occasionally Cut for Hay	Pastureland/Land Occasionally Cut for Hay	2

All areas that will be affected by surface mining will be restored to their respective premining land use. The three (3) existing land uses that will be affected will be restored as follows: after the area is backfilled and graded with proper drainage control, the operator will redistribute the topsoil and add soil amendments as indicated in the soil test results and then seed with the appropriate seed mixture. Forestland areas will be planted with seedlings the following spring. In order to improve reforestation potential, compaction should be avoided in the upper four (4') feet of backfill and topsoil. In order to reduce compaction, equipment travel on the area should be minimized to the greatest extent possible. One or two passes with a dozer should be adequate to finalize backfilling and one pass to spread topsoil. In reestablishing forestland and unmanaged natural habitat, the area should not be graded smooth, but should be left rough and un-compacted. In Forestland areas, hardwood species shall be randomly interspersed with other tree species being planted. Black Locust shall be limited to less than 50 stems on any given acre. If a blight resistant American Chestnut is available, 5 to 10 of them shall be planted per acre.

Detailed Management Plan for Pastureland:

1. Topsoil will be sampled from the stockpiles and analyzed to determine optimum supplemental levels of fertilizer and lime needed to achieve the desired grass mixture.
2. Topsoil will be redistributed in accordance with Module 21.
3. Lime and fertilizer will be spread in accordance with the soil test results.
4. Seed mixture 2 will be planted in accordance with Module 23.3.
5. Revegetated areas will be measured periodically. Retopsoiling, addition of more soil amendments and/or reseeding will be done if necessary.
6. Grazing animals will be kept out of the reclaimed area for the first growing season.
7. The first year's growth will be mowed and left on the ground.

Please refer to Module 23.5 for more detailed plans.

20.2 Approximate Original Contour

For postmining land use areas to be reclaimed to approximate original contour show that the reclaimed land will be capable of supporting the uses it was capable of supporting prior to mining or higher or better uses. Notes: A higher or better use is a post-mining land use where the economic value or nonmonetary benefit to the landowner or the community is greater than for the pre-mining land use. A highest or best use is where the economic value or nonmonetary benefit to the landowner or the community is maximized. If you are proposing an alternative to AOC, complete either section 20.3 or 20.4, as appropriate.

Are you proposing an alternative to AOC? No Yes

If Yes is checked fill out either section 20.3 or 20.4 as appropriate.

20.3 Alternative to Approximate Original Contour (AOC) Reclamation under Section 7 (c)(2)(ii) of NSMCRA§ 77.593(1)

- a) Show that the alternative to AOC is likely to be achieved and that it poses no actual or potential threat to public health or safety, or of water diminution, interruption, contamination or pollution.

Due to the remote location of the operation and the nearest dwelling being located approximately 0.6 miles from the operation, the alternative to AOC should be achieved with no actual or potential threat to public health or safety. All homes in the immediate area are served by public water, so water problems should not be an issue.

- b) Demonstrate that the proposed operation will be carried out over a substantial period of time; the ratio of the minerals proposed to be mined, relative to the volume of the overburden, is very large; and the overburden and other spoil material at the proposed permit area are insufficient to restore the area to AOC.

The surface mining operation is projected to be active for at least 5 more years. Also, the ratios of the Benwood Limestone to be removed relative to the volume of overburden (110' maximum overburden & 40' of Benwood Limestone to be removed) will not allow the area to be restored to approximate original contour of the pre surface mining. The expected life of the underground mining operation is approximately 30 - 35 years. The underground opening pits will be filled in and post mining contours created with the underground mine will vary very little from what is left after the surface mining is completed

- c) Show that the alternative to AOC reclamation is consistent with applicable land use policies, plans and programs and with Federal, State and Local law.

Township guidelines were used to prepare the application for their review, and their land use policies were followed. No sewage biosolid material is proposed to be used as a soil amendment.

- d) Demonstrate that the restored land will be capable of supporting the highest or best use it can reasonably support and that the proposed postmining land use is compatible with adjacent land uses.

Since site soils will be stored and replaced on the site, and the same premining land use will be developed in the post-mining setting, it is reasonable to expect that the land use can be achieved. It is consistent with the adjoining area.

20.4 Alternative to Approximate Original Contour (AOC) Reclamation under Section 7 (c)(2)(iii) of NSMCRA§ 77.593(2)

- a) Show that the alternative to AOC is likely to be achieved and that it poses no actual or potential threat to public health or safety, or of water diminution, interruption, contamination or pollution.
- b) Demonstrate that the proposed alternative to AOC will leave no highwalls, will improve the watershed of the area, and that the landowner has approved the alternative to AOC. (Submit a notarized statement by the landowner approving the alternative to AOC.)
- c) Demonstrate that the affected land will be restored to a condition capable of supporting the uses it was capable of supporting prior to mining or to a higher or better use.