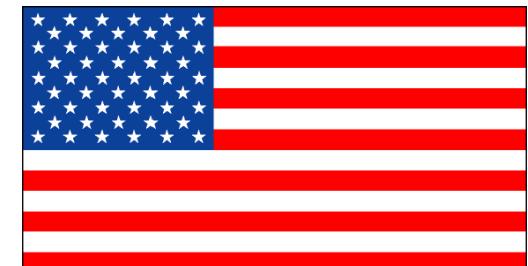


Reclamation Roundtable Discussion



Permitting- General Rules

1. Who needs a reclamation permit (10/10 Rule)
 - A. More than 10 acres of newly affected acreage in one Department fiscal year, which runs from July 1- June 30th of following year. This includes the placement of deposition.
 - B. More than 10 feet of overburden above the mineral to be mined (this includes inner burden that is considered a waste material).
 - C. Permitting may include all or part of a mining operation.
2. Permitted overburden/inner burden must always be placed in a permitted area.
3. Setbacks – 1 ½ times the thickness of the unconsolidated material plus 10 ft. Sand and gravel operations would consider total depth of the pit.

Non-Permitted Aggregate Mining Operations

1. Aggregate operations not required to be permitted by Office of Mines and Minerals (OMM) do not require mining approvals from OMM.
2. In those cases, permitting is typically done through a county or local government
3. Reclamation of these sites would be controlled by the county or local government.
4. Non-permitted overburden can be placed on OMM permitted mining areas. Remember though, that permitted material cannot be placed on unpermitted area.

Bonding

- ❖ Bonding is based on the reclamation plan included with the application. This is what OMM uses to determine its cost should a permit be forfeited in cases of non-compliance.
- ❖ It is important to be as specific as possible in your reclamation plan on how the area will be reclaimed as well as what equipment will be used during reclamation.
- ❖ The main factors that are considered are grading, sloping and revegetation.
- ❖ Other factors to consider could include local government requirements established during zoning of the proposed mining area.

Types of Acceptable Reclamation Plans

Pasture

1. Typically one the cheapest and easiest options.
2. Bermed pasture has additional costs based on berm height, berm length, and if both sides of the berms are sloped 30% vs. one side of the berm being sloped.
3. There are seeding requirements and many additional standards in reference to bonding pasture.

Water

Bonding water brings down the overall costs of all bond per acres to be permitted.

Water to pasture (or any other option) ratio should be calculated very closely to maintain an efficient bond to cover the mine site.

If an operator were to decide to not mine below or into the water table to create lake acres when it is part of the original submission, the Department may reassess the bond cost per acre.

Water-lake reclamation can be a great benefit to a community for residential development, recreational and conservational purposes.

Industrial - Residential

- Needs to be consistent with the overall reclamation plan.
- Can be very beneficial in an area surrounded by an industrial park
- Parks can be created to add benefits to the local communities
- Parks created must meet certain standards including lake standards if there are to be bodies of water involved. Parking must be a factor involved with these types of lands too.
- Again depending on the reclamation plan, these costs can be higher or lower depending on the final plan.

Crop

1. Putting original farm land back in as farmland can be effective if the operator has the proper resources to do so.
2. This is not as common, due to the inability to establish fertile soils within the mine site.
3. Crop needs to be established, prior to releasing the permitted acreage.

Wildlife/Reforestation

Minimum Stocking Standard:

Five hundred (500) living trees per acre will be the minimum standard for acceptable stocking after one (1) growing season. In this text the term "trees" will include acceptable shrubs. Survival counts may be made after the second growing season if requested by the operator. In such a case, four hundred fifty (450) living trees per acre will be the minimum standard for acceptable stocking after the second growing season.

General Permit Application Issues

1. Missing general information such as a fax number, address, wrong FEIN number, consistent information from one page to the next (i.e. wrong site name, different acreage figures, etc.).
2. Not providing enough details on berm location, height, length.
3. Not providing a good map that shows not only the proposed acres to be permitted, but also the end reclamation result including the location of deposition areas, lakes, and any sloped or final cut areas.
4. Not providing a topo map of the proposed mining area as well as the post mining area.

Common Issues Encountered by IDNR Inspectors

1. Operators waiting until the very end of the mine's production of the aggregate reserves to start reclamation.
2. Grading large areas and then not seeding these said areas, which creates washouts months later, and then more wasted costs on grading
3. New managers being hired to the site and having no idea about State permits, where they lie within the site, and what the actual reclamation plan is.
4. Stalling the progress of reclamation as a manager, to make profits for the site look good to the company. When that manager moves on, and when the next manager comes in to run the site, this produces challenging financial conditions.
5. Occasionally the economy and footprint of the local area changes over the longevity of the mine, which can require a change in what may be the desired reclamation plan for both the operator and/or the local area. Sometimes this can be challenging for all involved due to a variety of circumstances.

Reclamation Award

- Should be considered a goal for all who run or own a mining operation. Creating an image
- Must submit a State application provided by the Department or your local inspector, along with a detailed description and many pictures showing the process from the start to the end when reclamation is completed.
- Make sure your local inspector is involved with the process, since the inspector is part of the process for submitting an entry to the Federal Reclamation Award, if one were to win at the State level.



