

The system involves the division of large tracts of mineable land in smaller segments, which are in turn subdivided in a series of smaller blocks. These blocks, and their sequence in mining, allow for the movement of the draglines and pipelines as mining progresses. Mine managers must keep in mind that the blocks are to be a unified tract of usable land when mining is completed, and take in consideration the mine depth, the overburden to mine depth ratio, the reached of the dragline, and the contour of adjacent property.

NEW SYSTEM CUTS RECLAIMING COSTS 40 PERCENT

Conventional mining employs cuts 200-ft wide (using draglines with 175-ft booms) up to 2,000-ft long. Overburden is cast in adjacent cuts, usually in high banks.

By contrast, the simultaneous mining-reclaiming technique pivots short cuts around what will be a future lake, distributing overburden in previously mined cuts to about ground level. Bulldozers then have a relatively easy job of grading the overburden as planned.

For example, the layout shows a plan which anticipates an overburden ratio of about 50%. In this case, cuts are designed for 250-ft widths and 400-ft lengths, backed by another 225-ft wide cut. The area thus reclaimed represents 310-ft in land measurement with a 310-ft lake. Note how the pipeline system (shown as a solid line) anticipates mining progress and only a minimum number of changes.

Cyanamid's experience indicates that the cost for mining with simultaneous reclaiming is about on par with conventional methods, but has found that reclamation costs are slashed by 40%.

COMPANIES RECLAIM LAND VOLUNTARILY

Mining companies represented in the Florida Phosphate Council voluntarily pledged that their mining will be conducted so "mined land will be reclaimed when possible and will meet the esthetic and practical needs of the community."

It is not possible to restore all land to the condition indicated in the illustrations. Large areas must be used as setting ponds for storage of clays, wastes from the beneficiation plant, and as part of the vital water recirculation system for process needs. However, once such areas become inactive, they may be used for a variety of agricultural purposes.

As the phosphate area grows economically, with a larger population needing more usable land, the value of most mined phosphate land will appreciate and make reclamation more attractive.

Even now, it is estimated that phosphate companies are currently reclaiming average equal to 75% of that mined. In addition, much mined-over lands is in the hands of private investors who are reclaiming it themselves for home and business sites, as well as for agriculture.

RECLAIMED LAND SERVING THE PUBLIC

Reborn land (reclaimed) is a bold idea which originated from the phosphate companies with the aim of upgrading and advancing the general welfare of the community. The basic contribution of these companies consists of maintaining a profitable operation which benefits the overall economy. However, of almost equal importance is the development of valuable land from property once left upturned and fallow after mining was completed. It is essentially an obligation fulfilled on a voluntary basis.

No longer is scarred, useless wasteland the necessary aftermath of phosphate mining. Proof of this statement exists in the impressive array of recreational areas available for the enjoyment of the public. These parks and lakes were contributed by the various phosphate mining companies from land that has been mined and then reclaimed for other uses.

One of the finest examples of this program is a 315-acre tract of land given to the Florida Audubon Society for use as a wildlife sanctuary. This donation by American Cyanamid Co., established the largest reserve in the state owned outright by the Society for the preservation of indigenous birds, beasts and fish. It is a big step toward conserving our natural heritage.

Outstanding among the many beautiful parks in existence is Peace River Park, east of Bartow, and Saddle Creek Park, east of Lakeland, Fla. Peace River Park, turned over to the city of Bartow, and Saddle Creek Park, now a popular beach,