

GREEN INDUSTRY NEWS

RECLAMATION

Kentucky seminar presents latest technology

More than one hundred persons seeking information on mined land reclamation technology gathered at the Madisonville Community College in Madisonville, Kentucky for a field trip and seminar in May. Delegates traveled from Illinois, Ohio, Kentucky and Tennessee, for the two-day educational meeting. Hosted by the College of Engineering of the University of Kentucky and Madisonville Community College, the entourage heard speakers from the U.S. Forest Service, Madisonville Community College, University of Kentucky, AMAX Coal Company, and Peabody Coal Company.

The sessions began Thursday, May 11, with the business meeting of the Council for Surface Mining and Reclamation Research in Appalachia. The major concern was revision of that council's by-laws to broaden horizons, yet limit activities to providing information on vital reclamation techniques and research for those involved.

Dr. Richard Barnhisel, associate professor of agronomy at the University of Kentucky, began the educational sessions by explaining the University of Kentucky's role in reclamation research in Western Kentucky. It includes: land preparation techniques, "ripping" versus smooth grading; the effects of lime and phosphorus on orphaned mined lands; and wood fiber with straw as mulch.

Dr. John Sencindiver, a soil scientist with the Forest Service, showed slides of various mulching experiments he has undertaken and explained the results. He is also concerned with analyzing the benefits of various organic soil amendments for mine reclamation.

Dr. Sencindiver's research has shown that lime and fertilizer, applied on an acid spoil, along with a mulch, will increase vegetative cover.

Mike Ellis, senior reclamation

engineer with AMAX Coal Company, talked about using fly ash and sewage sludge in Western Kentucky and Southern Indiana. In one experiment, fly ash was applied to four one-acre plots at a rate of 300 tons per acre. Four different fertilizer rates were used, along with two different seeding rates. Problems immediately cropped up, beginning with incorporation of such a large amount of applied material. The mixture was not homogenous, according to Ellis, and the color was so dark that he felt perhaps enough heat accumulated to damage the emerging seedlings. He also found that the cost of the fly ash far outweighed the advantages and the project was finally dropped.

James Powell, reclamation supervisor-vegetation specialist with the Kentucky division of Peabody Coal Company discussed the research deficiencies of soil reconstruction in land reclamation. Arising out of the new federal regulations and subsequent adoption by states, and mainly in areas classified by the soil conservation service and in the federal register as prime farmland, soil reconstruction presents a dilemma for anyone attempting reclamation. Physical properties, including structure, aggregation, pore space, and bulk density, are going to be affected, probably adversely, during the initial stages of soil reconstruction, Powell said. Compaction will also be a problem, as large machinery necessary to move the soil is employed.

Rufus Allen, U.S. Forest Service, presented data on tree survival on reclamation sites. His research is published in this issue.

Dr. Wayne Rosso, reclamation supervisor and water resource specialist for Peabody, spoke about methods to meet the manganese limits of the new federal surface mining act. Total suspended solids can now be no more than 70 and must average 35 milligrams per liter.

The maximum manganese allowed is four milligrams per liter and the average cannot exceed two.

Norman K. Breeding, hydrogeologist in reclamation/mining technology at Madisonville Community College described the use of domestic waste as an erosion control technique in reclaiming mined land.

The Office of Surface Mining was represented by Dr. David Maneval, assistant director, who spoke at the banquet. The federal program will be concerned with such things as blasting, certification, permits, insurance, bonding, and state and federal grants. The current 60 employees will be expanded to 800 a year from now, indicating a significant government interest in mined land reclamation.

TURF

Mower manufacturers urge practical standards

In a special product demonstration recently before the Consumer Product Safety Commission, the lawn mower industry once again urged that any standards developed by the commission avoid restrictive design requirements. It also asked that performance requirement be adopted which would allow manufacturers to develop new technological approaches to protecting users of power lawn mowers.

The commission is in its fifth year of developing a mandatory power mower safety standard. It is not known what effect those standards, once set, would have on larger mowers.

David T. McLaughlin, vice president of the Outdoor Power Equipment Institute and chairman of The Toro Co., Minneapolis, presented the commissioners with a suggested "first draft" of performance language.

Landscape Contractor News

Mine sites to receive funds chosen

Seven sites where coal mines, long ago abandoned, now cause potential danger or health hazards to nearby residents have been chosen for reclamation by the U.S. Office of Surface Mining, an agency of the Interior Department. The government estimates that these projects will cost about \$5 million and the work will be done by coal operators with heavy equipment to repair underground mines and landscape contractors to reseed the land to make it usable again.

Some projects will require both kinds of reclamation. One site is near a school building used to teach 272 elementary and high school students in Scranton, S.D., where subsidence near old mining tunnels has created caverns easily accessible to the youngsters. Work to fill the subsidence and revegetate will take between 15-18 months.

The projects were announced May 16 and will get final approval sometime between mid-June and mid-August. These projects are just the beginning of an ambitious program to reclaim old mines which could easily total \$100 million in its first fiscal year. Contractors interested in bidding on the projects, which are located in seven states, can write the Office of Surface Mining for further information. Letters should be addressed to Paul Reeves, assistant director for abandoned mine lands, U.S. Department of the Interior, Washington, D.C., 20240.

California tax cut may help landscapers

Landscape contractors in California should experience an upturn in business shortly if that state's voters approve a proposed constitutional amendment June 6 that could cut taxes up to \$7 billion a year.

The proposal would roll back real estate taxes to 1 percent of the 1975-76 assessed value and would prevent assessments from rising to current market value until the property changed hands. Approval of the proposal, referred to as the Jarvis-Gann amendment, would slash taxes paid by businesses and homeowners.

Such a large cut in taxes would probably have a beneficial effect on landscapers since it's believed much of the money would be used to improve corporate grounds and homeowners lots. "Hopefully they'll take the extra money and reinvest in their own business and improve the local surroundings," said Joe Brazin, executive secretary for the California Landscape and Irrigation Council, a group of landscape contractors engaged primarily in commercial and industrial work in 13 counties of Southern California. The landscapers hire union employees for their projects.

Denver erosion meeting planned

A symposium on erosion control and revegetation, coupled with an exhibition on equipment and supplies and followed by a two-day tour of reclamation/revegetation projects in the Rocky Mountains has been scheduled from August 1-5 at the Marriott Hotel in Denver, Colo.

The symposium will feature technical programs, including speakers from some of the largest firms engaged in reclamation projects.

The event is co-sponsored by the Associated Landscape Contractors of America and the High Altitude Revegetation Association. Information about the symposium is available from ALCA headquarters, 1750 Old Meadow Rd., McLean, Va. 22101.

"The public interest will not be served by the promulgation of requirements that compel industry to adopt one specific design which increases costs without commensurate benefits, eliminates any element of choice, and retards the incentive to develop new and innovative approaches to lawn mower safety," he told the commission.

The commission is proposing a requirement on future mowers that would include a "deadman control" device. This would shut off power completely or disengage the blade from the power source when the user releases the handle. The commission's staff is considering implementing this device through a blade brake/clutch mechanism.

McLaughlin told the commission that testing by his company indicates that blade/clutch devices presently on the market are not reliable.

Alternative designs addressing the blade contact hazard, which accounts for 68 percent of lawn mower injuries, say the commission, were also demonstrated. They include:

— A conventional walk-behind mower equipped with a control on the handle which requires continuous activation by the operator in order for the unit to run. When the operator releases the control, the blade stops. Starting and stopping controls would also be mounted on the handle.

— A conventional walk-behind mower modified to place the height-of-cut adjustment control in the handle. The unit also includes auxiliary side shields to reduce the possibility of foot contact with the blade.

— A conventional walk-behind mower that incorporates a blade interlock with the discharge chute, as well as an automatic latching mechanism to the discharge chute. The latching system prevents the removal of the grass bag unless the latch is unhinged.

EQUIPMENT

Jacobsen and Textron ink sale agreement

Textron, Inc., of Providence, R.I., has signed an agreement "in principle" with Allegheny Ludlum Industries to purchase Jacobsen Manufacturing and the sale should be completed by the end of May, Jacobsen officials have announced.

Allegheny Ludlum sold the firm so it could use that money to help buy Wilkinson Sword, one Jacobsen dealer said.