



## Oregon Department of Geology and Mineral Industries

### 2005 Mined Land Reclamation Awards

**Portland, Oregon:** Creating a new park for the city of Lyons, making new neighborhoods from reclaimed gravel pits in Keizer, and creating new pasture lands in central Oregon are some of the highlights of the 2005 Mined Land Reclamation Awards presented by the Oregon Department of Geology and Mineral Industries (DOGAMI).

Each year the MLRR office, with an independent panel of experts, selects specific mine sites and operators to receive awards for outstanding reclamation and mine operation. The Oregon Plan Award for salmon protection was not awarded this year. The awards, based on an operator's performance during the previous year, were presented at the Oregon Concrete and Aggregate Producers Association (OCAPA) annual conference in June 2006.

"We consider these awards important recognition to those owners and operators that go beyond the basic requirements of rules and regulations," said Vicki S. McConnell, State Geologist. "By using innovative ideas and responsible techniques of reclamation they are working to improve the environment and be good neighbors."

"The companies we recognize with these annual awards really show a deep commitment to the environment and the communities where they are based," notes Gary Lynch, Assistant Director of Regulation for DOGAMI's MLRR office. "It's also an encouragement to others in the mining industry to follow suit."

#### 2005 award winners:

- **Good Neighbor Award - Freres Lumber Company, Lyons, Linn County**  
Contact: Randy Silbernagel (503)-859-2121
- **Outstanding Reclamation, Government Agency Oregon Department of Transportation (ODOT), Region 5, Burns, Harney County**  
Contact: Gary VanHouten, (541) 963-1334
- **Outstanding Small Operator - Sierra Cascade LLC, Chemult, Klamath County**  
Contact: Dana VanPelt (541) 365-2440
- **Outstanding Reclamation - PGE - Property Services, Madras, Jefferson County**  
Contact: Bruce Carroll (503) 464-8126
- **Outstanding Reclamation-Exploration - Malheur Mining Corporation LCC, Malheur County**  
Contact: Alan Glaser (775) 738-9531
- **Outstanding Operator - Windsor Rock Products Inc., Salem, Marion County**  
Contact: Bill McCall (503) 393-8920
- **Outstanding Voluntary Reclamation - Staats Corporation, Salem, Marion County**  
Contact: Jay Compton (503) 363-9281

For more information on the MLR Annual Awards and the MLRR Program, contact Ben Mundie, telephone (541) 967-2149;  
email: [ben.a.mundie@mlrr.oregongeology.com](mailto:ben.a.mundie@mlrr.oregongeology.com).

## Good Neighbor Award - Freres Lumber Company, Lyons, Linn County

Contact: Randy Silbernagel, (503)-859-2121

### Background:

It is not certain when mining at this site began. An aerial photo from 1967 clearly shows mine disturbance. Mining was conducted with a dozer and front end loader, creating shallow ponds.

Freres Lumber Company (FLC) purchased the property in 1969 and began deepening the pond with an excavator. The average depth of mining was 12 to 15 feet. Mining began on the northern end of the property and slowly progressed south. Mining took place on an annual basis and crushed rock every four to six years for as needed use.

The deeper pond became a refuge for water fowl, fish, and beaver. Over this time the City of Lyons grew up around the pond, which is now a central feature of the town.

FLC was issued a Grant of Limited Exemption (LE) in 1984 to allow production for off-site use in excess of 5,000 cubic yards. As a mine site eligible for exempt status, reclamation requirements are limited.

However, Freres Lumber Company (FLC) began reclaiming portions of this site in 1986. The in-water pond slopes were backfilled or cut to 3:1 or flatter. This slope angle is a requirement by state statute on permitted sites. The slope angle allows people to walk out of the pond and allows wetland plant species to establish. In 2002 an independent landscape architect drew up a plan to convert this site into a city park. In 2004 mining was complete, and FLC began the process of turning the property over to the city.

Final grading was completed to allow safe public use of the water features. By deeding this property over to the city Freres Lumber Company shows the commitment to give something back to the community they have been a part of for some fifty years.

FLC is recognized with the Good Neighbor Award for their commitment to give something back to the community they have been a part of for 50 years, but they could also have been recognized for Outstanding Reclamation award and/or the Voluntary Reclamation award.

## **Outstanding Reclamation, Government Agency - Oregon Department of Transportation (ODOT), Region 5, Burns, Harney County**

Contact: Gary VanHouten, (541) 963-1334

### **Background:**

This upland quarry site has been used by the county and state since at least the mid 1950s. The quarry is located along the Steens Highway southeast of Burns.

This site has been permitted by ODOT since 1984 and has been used as a material source sporadically over the years. In between maintenance jobs the quarry lies dormant.

ODOT Region 5 has done an excellent job of maintaining this site. The quarry slopes have been reduced to 2:1 or flatter, soil/overburden stockpiles have been seeded in native grasses to reduce erosion, a perimeter berm was constructed to contain stormwater, and the quarry floor was sloped toward the highwall to help contain stormwater on site.

Use of existing topography has effectively screened this site from public viewing areas along the Steens Highway.

ODOT Region 5 is being recognized for the extra effort that went into mothballing this site after the last extraction project to insure there are no off-site impacts.

## **Outstanding Small Operator - Sierra Cascade LLC, Sierra Cascade Site, Chemult, Klamath County**

Contact: Dana VanPelt, (541) 365-2440

### **Background:**

This upland pumice pit is located in the leeward shadow of Mt. Mazama one mile south of Chemult along Highway 97. Mining began in the early 1980s.

In 2003, Sierra Cascade LLC purchased the property and assumed the DOGAMI permit. Eventually, additional reclamation security was submitted, a new operating and reclamation plan was compiled and submitted, and concurrent reclamation was begun on mined-out areas.

To supplement the organic poor soils in this area, Sierra Cascade arranged to have boiler ash waste delivered from White City. The material was spread and incorporated into the soil material with earth-moving equipment.

Sierra Cascade also sought authorization to apply sewage lagoon bio-solids from the Oregon Water Wonderland Unit, a 200-home subdivision outside of Sunriver, as a soil amendment. Post-mine reclamation calls for replanting trees for commercial harvest on this site. Adding organic content to the soils will significantly improve revegetation efforts.

Since 2003, Sierra Cascade has done an excellent job of

concurrent reclamation, developing a system whereby a one-acre parcel is mined and the overburden and soil from the next cell is placed on the mined-out acre. Soil amendments are added, and the site planted.

Sierra Cascade is awarded Outstanding Small Operator for 2006 for its willingness to go beyond the basic requirements of mine reclamation.

## **Outstanding Reclamation - PGE - Property Services, Pelton Pit – 16-0019, Madras, Jefferson County**

Contact: Bruce Carroll, (503) 464-8126

### **Background:**

This upland basalt quarry pre-dates the 1972 reclamation laws by at least a decade. The quarry operated as a Grant of Limited Exemption from 1981 through 1989 with 10 acres deemed exempt. A DOGAMI operating permit was first issued for the Pelton Pit in 1989 to allow production in excess of 5,000 cy/year.

PGE acquired the DOGAMI permit in 1993 and completed reclamation in 2005 when the file was closed. This site is located five miles northwest of Madras overlooking the Deschutes River.

The quarry was initially opened as a material source for the Pelton Dam in the early 1960's. Use of existing topography and the elevation difference between the quarry and the river effectively screens the site from the river level.

A 1994 DOGAMI inspection report states the reclamation within the area eligible for exempt status looked "very good." To supplement the soil material originally on site, PGE imported clean fill to complete reclamation. The fill material was scarified to decompact the material after placement and then seeded in a native grass mixture.

A 2001 DOGAMI inspection report states the on-going

backfilling and reclamation have been so successful that the site blends in well with the surrounding area.

At the final inspection 2005, it was noted the revegetated slope within the quarry supported a more vigorous vegetative cover than adjacent undisturbed areas.

The area was successfully reclaimed to grazing pasture land. PGE is being recognized for Outstanding Reclamation for their efforts to reclaim a quarry that was primarily exempt from the reclamation laws.

# **Outstanding Reclamation-Exploration – Malheur Mining Corporation LCC, Kirby Site, Malheur County**

Contact: Alan Glaser, (775) 738-9531

## **Background:**

An exploration permit was first issued for the Kirby Site in 1988 for a drilling program on unpatented claims on BLM lands. Exploration activities continued through the years with concurrent reclamation occurring each year. Malheur Mining completed drilling in 2003. The DOGAMI file was closed in 2005.

In 1991 DOGAMI personnel commented that “as has been the case in the past, Malheur Mining continues to do an excellent job of reclamation.” Sites from the 1990 drilling program were reclaimed late fall, and even with poor precipitation over the winter, the techniques of leaving areas rough and seed tracked in with grouser marks perpendicular to the slope aided successful revegetation.

A DOGAMI inspection report from 1995 describes how difficult it was locating access roads that had been reclaimed previously. Vegetation, especially sagebrush, was found to be growing better on the reclaimed areas than on undisturbed areas.

New access road construction was kept to a minimum. All temporary roads were reclaimed at the end of the drilling season. The road surface was ripped to decompact the surface, then salvaged soil was replaced and seeded.

During a July 2005 inspection by DOGAMI personnel the exact location of roads and drill sites could not be determined. The recovery of planted and volunteer native species has been exceptional in this harsh growing environment.

For its consistent and outstanding reclamation at this site over the years, Malheur Mining is awarded for Outstanding Reclamation-Exploration.

## Outstanding Operator – Windsor Rock Products LLC, Salem, Marion County

Contact: Bill McCall, (503) 393-8920

### Background:

This large gravel mine located north of Keizer on Windsor Island has been in operation since the early 1960s and consists of several ponds and a central processing area where rock is crushed, screened, or washed. The property lies entirely within the 100-year floodplain and is bordered on the east by a former channel, which is now a slough and the main stem of the Willamette River on the west. The property is owned by the Division of State Lands.

This site has been covered by a DOGAMI Operating Permit since 1974. Several operators worked this site prior to Windsor Rock obtaining this operation in August 1996.

Windsor Island has a long history of flooding during high water events. The floods have had little impact on the sand and gravel operation other than temporarily shutting down the site. Five months after purchasing this site and setting up operations, the 96/97 flood event occurred. During the recent flooding events there was some erosive activity between the slough and the gravel pond at the southeast end of the site. To address this problem Windsor Rock began by backfilling the pond in this area which has sealed the headcuts and a connection from the slough to the pond has been sloped and reinforced to improve stability.

The previous operator had stockpiled a considerable amount of old unusable equipment and scrap on-site. Fortunately most of this junk was removed prior to the flood, but a lot of scrap remained. Windsor Rock completed this clean-up as part of the overall rebuilding after the flood. By May 1997, Windsor Rock had the site back on-line and in compliance with the DOGAMI permit.

To minimize the potential for erosion and head cutting during flood events Windsor Rock ceases all pit dewatering between November 1, and March 1, of each year to allow the ponds to fill. The 300-foot setback in the riparian zone between the river and the mine and the 100-foot setback from the slough has been enhanced. A 100-foot setback on either side of the natural gas pipeline at the north end of the property has been maintained and a 10H:1V slope on the downstream side of the setback will be maintained.

Reclamation activities that have been performed concurrently with mining include 3:1 sloping of all pond

banks to 6-feet below the ordinary low water mark. Above water embankments are being sloped at 3:1 and hydroseeded with a mixture of ryegrass and creeping red fescue.

Because the site floods periodically there is a potential for entrapment of anadromous fish in the pond(s). Currently there is a connection between the slough and the east pond at the southeast end of the property, this is also where water first enters the site during early stages of rising river levels. Although the east pond is connected to the slough the other mine ponds will need to be connected to the east pond to allow fish egress and the pond on the north side of the pipeline will also require connection to the slough.

Windsor Rock has committed to developing a comprehensive plan that will connect the mine ponds to the river system that will stabilize the site during flood events as well as allowing fish access and egress from the ponds.

Windsor Rock undertook an aggressive approach to stabilize this site after the devastating floods of 1996/1997 and has continued to work to turn it into a model operation. For these efforts Windsor Rock is awarded Outstanding Operator for 2006.

## **Outstanding Voluntary Reclamation – Staats Corporation, McNary Pit, Salem, Marion County.**

Contact: Jay Compton, (503) 363-9281

### **Background:**

This sand and gravel operation is located within Keizer city limits. This 100-acre pit was mined prior to 1972 and was exempt from the reclamation rules and regulations.

The site was eligible for exempt status from DOGAMI and received a Grant of Limited Exemption in 1974. Mining ceased in the early 1980s, and voluntary reclamation began. The pond slopes were regraded to 3 : 1 or flatter to below the ordinary low water elevation.

Soil material was spread over the slopes and revegetated with grasses. Upland areas were graded relatively level, and soil material was spread. The upland areas were planted in forage crops.

On the north end of the pond a drainage system was constructed to control the water level of the pond and reduce ponding of water on the golf course to the north.

The DOGAMI file was closed in 1986, and the site lay unused except by wildlife.

Staats Corporation purchased the property in 1996 and began the process to develop this parcel into residential housing. Construction began in late 1998, and a neighborhood association was formed in 2001.

Staats Corporation completed the reclamation of this exempt gravel pit by creating an island for wildfowl habitat and riparian plantings. The Turner Lake mine operation permitted to Staats Corporation will create a similar opportunity to develop the area around the gravel pond into a residential community. Planning for that community has been incorporated into the current mine plan.

Staats Corporation is awarded Outstanding Voluntary Reclamation for transforming an exempt sand and gravel pit into a new neighborhood for the city of Keizer.