

## **GEOLOGICAL AND LAND MANAGEMENT DIVISION DEPARTMENT OF ENVIRONMENTAL QUALITY**

The Geological and Land Management Division (GLMD) is responsible for two distinct program areas: geological resources and land/water interface resources. The mission of the GLMD is to promote the best use of these resources for their social and economic benefits while protecting associated resource values, property rights, the environment, and public health and safety. The division conducts permitting, inspection, and enforcement activities, and provides resource information to Michigan businesses, industry, and citizens.

The GLMD has about 180 employees. About half are located in Lansing, and half in 10 DEQ field offices. Records and information on all operations under GLMD jurisdiction are accessible in Lansing and in our field offices. The public can contact specialized staff for most program areas at each field office, although for some smaller programs staff coverage may not be available in each office. Information on division programs and organization is also available on the DEQ Website.

### **GEOLOGICAL RESOURCES PROGRAMS**

#### **Oil and Gas**

The GLMD regulates the locating, spacing, drilling, operating, plugging, and restoration of oil and gas wells, and the operation of associated storage and disposal facilities. The division also regulates production rates of wells to conserve oil and gas, and protects property rights by allocating production among the owners of a common reservoir. The GLMD plugs oil and gas wells and restores sites where there is no viable owner or an environmental emergency is declared, using funds from a tax on the oil and gas industry.

#### **Mineral Wells**

The GLMD regulates the location, drilling, operation, and closure of mineral wells, which include wells for waste injection, solution mining, mineral exploration, brine production, and underground storage.

#### **Mining and Minerals**

The GLMD regulates mining and reclamation at mines for metallic minerals, and at industrial sand mines in designated sand dune areas within two miles of the Great Lakes shorelines. The GLMD also cooperates with the U.S. Department of the Interior to mitigate or correct abandoned coal mine problems, including filling or closing mine shafts.

#### **Geologic Information**

The GLMD develops and disseminates maps and information on oil and gas, minerals, groundwater, and other earth resources for use in resource development, environmental protection, and public information. This information includes topographic maps; geologic maps; and brochures, posters, and publications on Michigan geology and geologic resources.

## **Geological Resources - Information Sources**

- The GLMD maintains an electronic database, called MIR, of information on the location, technical data, and status of oil and gas wells, including applications for permits. Information from MIR can be accessed by the public on the DEQ website at [www.deq.state.mi.us/mir/](http://www.deq.state.mi.us/mir/).
- The GLMD also provides a weekly application and permit list for oil and gas wells by mail upon request.
- Applicants for oil and gas well permits must provide copies of the applications to the County Clerk and to the surface owner of the proposed well site.
- The GLMD posts applications for permits for storage or disposal wells, and for mining permits, on the DEQ Calendar.
- The GLMD provides a list of pending applications for mining and reclamation permits upon request.

## **Geological Resources - Opportunities for Public Input**

- GLMD staff accepts comments from any interested person in reviewing applications and making permit decisions.
- The oil and gas and mineral well programs have explicit provisions for public hearings. An interested person may file a petition for hearing, or the Department may hold a hearing on its own initiative. The hearings are generally formal proceedings, with participation limited to persons directly affected by the well in question.
- In many cases, an informal public meeting is more effective than a hearing in addressing public concerns. The GLMD does not commonly hold a public meeting on a single well, but we may hold a meeting on a significant mining operation. The GLMD also holds public meetings on general or regional issues involving wells or mining operations, where warranted by the level of public interest.
- The GLMD utilizes an Oil and Gas Advisory Committee and a Mineral Well Advisory Committee for advice on policy, technical interpretations, and matters of public interest. The committees are composed of industry and public members. Committee meetings are posted on the DEQ calendar and are open to the public.

## **LAND/WATER INTERFACE PROGRAMS**

### **Wetlands**

The GLMD regulates construction and development in wetlands, to protect their value for wildlife habitat, flood abatement, and water quality protection. Staff oversees the creation and enhancement of wetlands to offset wetlands unavoidably destroyed or damaged by development.

### **Inland Lakes and Streams**

The GLMD regulates construction activities such as channel dredging, bottomland filling, marinas, docks, harbors, and seawalls in inland lakes and streams.

### **Great Lakes Submerged Lands**

The GLMD regulates construction on, and occupation of, the Great Lakes bottomlands. This includes marinas, harbors, dredging, filling, and shoreline protection structures. The GLMD administers the sale, lease, or exchange of state-owned bottomlands and the designation of underwater preserves to protect cultural resources such as shipwrecks.

### **Sand Dune Protection and Management**

The GLMD regulates earthmoving, vegetation removal, and construction activities in designated Critical Dunes—Michigan's most unique and fragile coastal sand dunes.

### **Shorelands Protection and Management**

The GLMD designates environmental areas (such as coastal wetland areas that provide fish and wildlife habitat), high risk erosion areas, and flood risk areas along the Great Lakes shoreline, and regulates construction activities within these designated areas.

### **Dam Safety**

The GLMD regulates the construction, maintenance, and dismantling of dams over six feet in height with over five-acre impoundments. Staff inspects dams owned by the Department of Natural Resources and municipalities; reviews emergency action plans and inspection reports submitted by dam owners; and maintains a statewide inventory of dams.

### **Flood Hazard Management**

The GLMD regulates construction in floodplains to protect property and prevent obstruction of stream channels that can worsen flooding. The GLMD also works with local units of government to assist them in meeting the National Flood Insurance Program. This is carried out through a program of education, technical assistance, and oversight.

### **Hydrologic Data Collection and Analysis**

The GLMD collects, evaluates, and analyzes hydrologic data to provide technical support to other Department programs. Staff provides flood discharge estimates, drought flow estimates, groundwater hydrologic modeling, stream gauging, stormwater management, and evaluation of drain projects.

### **Land/Water Interface - Information Sources**

- The GLMD has a searchable on-line system called the Coastal and Inland Waters Permit Information System (CIWPIS), which can be accessed at [www.deq.state.mi.us/ciwpis](http://www.deq.state.mi.us/ciwpis). The CIWPIS database can be searched for permit applications, public notices, and hearing notices.
- The GLMD mails a bi-weekly list of permit applications to subscribers at a cost of \$25/year.
- The GLMD mails public notices of applications to local units of government and governmental agencies. Depending on the type of application, the GLMD may provide a notice to the local Health Department, Road Commission, Soil Conservation District, Drain Commissioner, Watershed Council, U.S. Army Corps

- of Engineers, US Environmental Protection Agency, Fish and Wildlife Service, Michigan Department of Natural Resources, Michigan Historical Center, Michigan Department of Agriculture, and other DEQ divisions.
- For most types of activities (except for applications to occupy or alter floodplains) the GLMD mails public notices of applications to adjoining property owners.
  - The GLMD provides a number of brochures, posters, and pamphlets with information on resources and programs.

#### **Land/Water Interface - Opportunities for Public Input**

- The public and governmental agencies have 20 to 45 days to respond to permit applications, depending on the program.
- If requested by an interested party, the GLMD will hold a public hearing on a proposed permit.
- Public involvement in the floodplain permitting program differs somewhat from that for other programs in that there are no provisions for public hearings. However, there is opportunity for input from the public and local communities in reviewing floodplain maps produced by the Federal Emergency Management Agency (FEMA).
- In addition to public hearings, the GLMD holds a variety of public meetings, workshops, and cooperative outreach programs on specific issues or programs.