

**Department of Environment, Great Lakes, and Energy**  
**Oil, Gas, and Minerals Division**  
**Five Year Plan**

**I. Mission Statement**

The mission of the Oil, Gas, and Minerals Division (OGMD) is to promote the best use of Michigan's non-renewable geological resources for their social and economic benefits while protecting associated resource values, property rights, the environment, and public health and safety. As part of this mission, OGMD is responsible for proper handling, storage and retention of core materials extracted from the earth.

The Upper Peninsula Geological Repository (UPGR) holds a collection of drill core and cuttings with an emphasis on Northern Peninsula Geology. Drill core samples are obtained by using specialized drilling tools which allow for discrete intact samples to be brought back up to the surface for geologic evaluation. Drill cuttings samples are fragments of rock which are returned to the surface during the drilling process. The purpose of the UPGR collection is to act as a "rock library" and make the collected material available to researchers and industry for geologic study. Some aspects of this study, may include:

- Mineral resource exploration and development
- Addressing issues related to water quality
- Contributing to research on climate change
- Enhancing the ability to identify geological hazards
- Supporting research of unconventional energy sources

The OGMD moved into the new UPGR facility, located at 416 Avenue C, Gwinn, MI, in the fall of 2020. Located in Michigan's Upper Peninsula near the Sawyer International Airport in Gwinn, the collection is enclosed within in a 44,000 square foot warehouse at the former K.I. Sawyer Air Force Base. The samples were previously stored in two separate buildings that were in a state of disrepair and at maximum capacity. The new UPGR facility has significantly more space that will allow for expansion of the collection and offers greatly improved amenities in a more modern, safe environment. Most core and cuttings are classified as non-confidential and are open and available for viewing. The core storage inventory consists primarily of rock core drilled during mineral exploration on private and state mineral leases. The collection also includes a small number of rock cuttings, chips, and hand samples. The UPGR collection will lead to increased overall geological knowledge and allow informed decisions involving all aspects of our society from agriculture to energy, minerals, drinking water and remediation. The facility is open to the public, by appointment, and includes two examination rooms and a common meeting area.

#### **IV. Facility Assessment**

The Northern Michigan Geological Repository Association donated the current property and building to EGLE in December of 2018. A facility assessment was completed by DTMB to identify immediate upgrades and renovations needed to meet safety and operational standards. Using a one-time Legislative appropriation of \$1 million in fiscal year 2018, lead, mold and asbestos remediation was completed to allow occupancy to occur as well as some building improvements.

Allowing for approximately \$130,000 in moving costs from the old core facility to the new location, EGLE and DTMB oversaw approximately \$850,000 of remediation and upgrades to the UPGR location. The work project could be summarized as modernization and remodeling of front office space area, to include new mechanicals, addition of offices and conference space, two core inspection rooms, exterior wall repairs, exterior repairs, improvements, and painting, lead and asbestos abatement, construction of a wet lab/rock cutting room, demolition of old office and warehouse office space, fire system upgrades, and window replacement. In addition, roof membrane seam stripping and warehouse lighting upgrades were completed.

#### **V. Implementation Plan**

Use of the facility is expanding as public awareness increases. It is necessary to ensure a safe working environment for State employees working within the building, as well as visitors who will be present for viewing materials or using on-site equipment. EGLE has not received any funding for operations or improvement of the facility beyond the original appropriation at the time of acquisition. While maintenance and day to day operations will be overseen by EGLE staff, the following items have been identified as necessary to enhance safety and keep the building in an acceptable operating condition. The cost to replace this facility is between \$6,000,000 and \$7,000,000.

Year 1 (Immediate Need): \$350,000

**Safety:** A recent inspection recommended safety measures and improvements throughout the facility, especially the warehouse areas. Several items can be accomplished with division funding where existing staff can make improvements, post materials, and install protective tape, paint, and bollards.

Other safety items are more substantial and include need for electrical contractor to install additional lighting, exit and not an exit signs, upgrade of loading dock platform, and safety device for rolling loading dock doors. It is estimated that this work may cost as much as \$30,000 over the next year.

**Mechanical and Structural:** There were items of note for the original UPGR update/remodel which were not able to be accomplished in the original 2018 budget. There are also some additional needs which have been identified.

Additional evaluation of warehouse area electrical and possible removal of some unneeded wiring, additional tuckpoint and painting on exterior/interior block, railings on loading dock, construction of laborer workshop, and other small items/repairs are needed. There is a need for an outbuilding and security fencing to house maintenance equipment and vehicles. These items are estimated at approximately \$250,000 to complete.

Capacity: Additional warehouse racking and storage improvement is needed to maximize the capacity, working efficiency, and safety of the core facility. These related costs are estimated at \$50,000.

Security: Currently, this State of Michigan facility has no enhanced security features such as electronic entry, cameras, or other alarm systems. The cost of adding these types of protections is estimated at \$20,000.

Year 2-5: \$650,000

Roof: With the initial upgrades made to the UPGR, some roof work was completed such as sealing and resealing of seams, areas around roof ventilation, and other problem areas. The life of the roof has been estimated to range from 5 years to 10. Roof replacement should be considered in special maintenance for this building. At 44,000 square feet the roof replacement cost is estimated at \$400,000 to \$500,000.

Mechanical and Structural: There are other identified mechanical and structural needs for UPGR, such as warehouse ventilation upgrades, boiler system isolation valves to reduce potential cost of boiler system repairs or failures, and any warehouse electrical upgrades identified and not covered in the immediate need section. These potential costs could be approximately \$75,000.

Exterior and Pavement: The current pavement, asphalt, and gravel areas are in adequate shape, but exhibiting some cracking and plant growth in some cracked areas. The paved areas will need maintenance soon such as topcoat, resealing, and/or crack sealing. The potential costs for such measures could exceed \$75,000.