

# **Michigan Department of Environment, Great Lakes, and Energy Oil, Gas, and Minerals Division**

Response to Public Comments – Part 637 Sand Dune Mining Permit application by Chad and Jenny Van Horn, Van Horn Site, Permit CVH-VHS-134, Saugatuck Township, Allegan County, Michigan.

## **INTRODUCTION**

Chad and Jenny Van Horn (Van Horn) of Saugatuck, Michigan have submitted a sand dune mining permit application pursuant to Part 637, Sand Dune Mining, of the Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451, as amended (Part 637). The Michigan Department of Environment, Great Lakes, and Energy (EGLE) Oil, Gas, and Minerals Division (OGMD) administers Part 637.

A permit is required for sand dune mining under Part 637. Sand dune mining can be defined as the removal of sand from sand dune areas for commercial or industrial purposes, or both. Sand dune areas are designated by the department. They are located within 2 miles of a Great Lake and include geomorphic features, or landforms, made primarily of sand. It is important to note that an activity does not meet the definition of sand dune mining if sand is not removed from a designated sand dune area. Likewise, if the sand is removed from a designated sand dune area but sand is not used for a commercial or industrial purpose, the activity is also not sand dune mining.

## **Background**

A timeline of the Van Horn site history is helpful to understand the nature of the permit application and the project.

In May of 2020, the OGMD received a complaint that sand was being mined from the Van Horn site. Upon investigation, the OGMD determined the sand was removed from the property but not from the sand dune area and wasn't used for commercial or industrial purposes. This activity did not meet the definition of sand dune mining and a sand dune mining permit was not required. In a letter dated August 3, 2020, the OGMD informed Mr. Van Horn of this determination, and advised him to obtain a permit if the removed sand were to have a commercial or industrial secondary use. It was also determined that the excavated waterbody was less than five acres. Van Horn was advised that creation of a water body five acres or larger requires a Part 301 permit under the NREPA. The May 2020 complaint was then closed.

In October of 2020, a complaint was received that sand was being removed from the site and the sand dune area was being used for commercial purposes. The OGMD investigation confirmed this was the case. Van Horn was issued a violation notice on October 22 and was required to

1) cease mining activities and removal sand from the site, 2) identify the volume of sand removed from the property and used for commercial purposes, and 3) submit a Part 637 application for a sand dune mining permit. Van Horn ceased mining and sand removal activities immediately, and the excavated sand remained stockpiled at the site. His agent submitted a Part 637 permit application on his behalf, and later the volume of sand was reported to be 3,000 cubic yards.

### **Part 637 Application and Public Engagement**

The Van Horn Part 637 application proposed to expand the existing pond to 10.7 acres. Sand already stockpiled and sand that would be excavated from pond expansion would be removed from the site to locations likely outside of the sand dune area, potentially for commercial or industrial purposes, or both. At the same time Van Horn submitted the Part 637 permit application to OGMD, Van Horn submitted their Part 301 application to EGLE's Water Resources Division (WRD) to expand the existing waterbody to 10.7 acres.

Upon completion of EGLE's review of both the Part 637 and the Part 301 permit applications, EGLE gave public notice of the applications. The OGMD is not required to conduct a public hearing under any provisions of Part 637; however, one was held due to interest from the public and at the request of citizens.

The EGLE had a public comment period from January 27 to March 5, 2021. The notice was posted on the MiWaters home page and included a Public Hearing Notice for both the Part 301 (waterbody expansion) and Part 637 (sand dune mining) applications. In addition to the MiWaters notice, the Part 637 documents were posted on OGMD's Sand Dune Mining page. The EGLE held a virtual public meeting and hearing on February 23, 2021, where both the OGMD and the WRD officials presented information, responded to questions, and listened to formal comment.

There were thirty-eight attendees at the virtual public hearing. Twelve people provided verbal comment during the hearing, most also provided a written comment. There were over twenty written comments submitted opposed to the project and forty-two in support of the project. At the conclusion of the formal public comment period, the OGMD received over sixty written comments from individuals and organizations, either opposing or supporting the Part 637 permit.

### **Project Modification**

Following conclusion of the public comment period, the WRD investigated the size of the waterbody and issued a Violation Notice to Van Horn. Van Horn withdrew the Part 301 permit application for waterbody expansion and revised the Part 637 sand dune mining application. The pond expansion plans were removed from the Part 637 application. The revised Part 637 proposal was scaled back to removing only sand that had been excavated and stockpiled during the creation of the existing waterbody.

### **RESPONSE TO COMMENTS**

The OGMD is not responding directly to individual public comments either supporting or opposing the proposal; however, the OGMD has reviewed and grouped each comment written and oral. Comments have been evaluated with respect to Part 637 permitting criteria. The OGMD is only responding to the comments as they relate to Part 637, not Part 301. Predominantly, comments regarding the size of the pond pertains to the Part 301 permit application and not to Part 637. Comments expressed both in support of and in opposition to the project by themselves are not criteria for approval or denial.

The OGMD considered all comments for applicability in the Part 637 permit decision review. The review also included site inspections, detailed file reviews, and a hydrogeological review to determine compliance with Part 637. The OGMD has determined that the Van Horn permit application meets the Part 637 criteria and has issued Permit CVH-VHS-134.

### **After the Fact Permit of Part 637**

As described in the background above, creation of the pond did not require a Part 637 permit. In October of 2020, the OGMD responded to a complaint and observed sand being removed from the sand dune area and used for commercial purpose. This activity did require a permit, and the OGMD subsequently issued a violation notice to Mr. Van Horn. The violation notice required Mr. Van Horn to cease operations immediately, report the volume of sand removed from the sand dune area used for commercial purposes, and to submit a Part 637 sand dune mining permit. Mr. Van Horn has complied with these requirements. The OGMD exercised its enforcement discretion and has elected not to pursue further enforcement action. The volume of sand already transported off site will be included in the annual report for 2022. This volume will be incorporated into the surveillance fee. The violation is considered resolved.

The Part 637 permit is issued for the purposes of removing the excavated sand stockpiled on the Van Horn site and is not after the fact.

### **Pond Size**

The size of the pond that has been excavated at the site pertains to Part 301 Inland Lakes and Streams requirements, was created prior to regulated sand dune mining activity (sand being removed from sand dune mining area and used for commercial purposes) and does not pertain to Part 637 Sand Dune Mining for the mining of stockpiled sand.

### **Aquifer Impact/Hydrogeological Study/Water Well & Wetland Impacts/Wellhead Protection Area**

Although the creation of the waterbody is not the subject of this permit application to remove stockpiled sand, the EGLE did evaluate models from Lakeshore Environmental Incorporated (one of the applicant's agents) and Dr. Kendall (on behalf of a group opposed to the project). Both models were found to be unreliable to accurately predict the impacts on groundwater from the proposed 10-acre pond.

The Lakeshore model was not designed to evaluate the impacts associated with the creation of the original waterbody which is approximately 5-acres in size and was completed by November 2019.

Dr. Kendall's groundwater impacts presented due to the pond creation in his public comments appear to have a greater extent and magnitude than found in the model files subsequently provided to the EGLE. The Kendall model of the existing pond (Pond model) does not show the same drawdown as those displayed in the Kendall comment document. The extent of the drawdown does not extend to Goshorn Lake in the model files submitted for the Pond model.

A private water well located roughly 800 feet from the existing pond was reported by its owner during the 2021 comment period to have had sediment in the water during the summer of 2019, coincidental with the pond excavation. Aquifer parameters submitted by the applicant were reviewed by an OGMD hydrogeologist. It was determined that sediment-laden (turbid) water would have taken a few years to reach the water well from the pond 800 feet away, not even considering the gravity effect of the sediment settling out. OGMD staff did not observe this turbid water as it was reported well over a year after the reported occurrence and cleared up. The reported turbid water is not likely to have been caused by the excavation. All regulated wetlands, two stream corridors, and Goshorn Lake are beyond the 1,000-foot groundwater review criteria in Part 637. Further, the waterbody was created 2.5 years ago, and

actual conditions observed would supersede predictive modelling at this point. The removal of stockpiled sand, the subject of the Part 637 permit application, is not expected to have impacts to surface and groundwater levels.

### **Contaminated Soil (Arsenic, lead)**

Comments were made concerning the presence of arsenic and lead at the site. Lead is not known to be present at the site, and the applicant responded to the EGGLE's inquiry as such. The original application contained a reference to arsenic topsoil spoils and how they would be managed. The OGMD requested that Van Horn provide additional information. Based on the applicant's review of aerial photographs, the site and vicinity were previously utilized as orchards with fruit production. The historic use of arsenic for pesticide control is well known and prior to purchasing the property, Mr. Van Horn performed extensive soil sampling at the site. Arsenic was found in a thin layer in the topsoil at the site. This topsoil is managed by placing in a berm onsite, covered by clay, soil, and seed. This berm will be marked with signs.

### **Blowing Sand**

The OGMD agrees that the stockpiled sand at the site does pose a risk to blowing sand. The steep, unvegetated slopes also represent an erosion risk and rill erosion has been observed on the stockpiled slopes. The applicant has installed fences at the site previously to control any blowing and off-site migration of sand via wind action. The site being surrounded by mature trees further helps mitigate the potential of blowing sand. The removal of the stockpiled sand, final site grading and stabilization will address the concern of blowing sand.

### **Bond**

A conformance bond was submitted to the OGMD and received August 18, 2021, prior to the issuance of this permit.

### **Businesses Impacted**

Several businesses provided written comments regarding the impacts to their businesses. One of the issues was related to blowing sand. As discussed above, the installed fences mitigated the sand blowing onto these business properties. Other issues were related to noise. As mentioned below, noise is outside the purview of Part 637; however, the OGMD often mediates in response to noise complaints and other quality of life complaints and works towards a resolution or mitigation of the situation where possible.

### **Deny**

Commenters requested the OGMD engage the Attorney General to bar the sale of excavated sand, prohibit further excavation, and restore site to pre-excavation conditions. The applicant has scaled back the project proposal, no longer requesting to further expand the waterbody. The project is limited to removal of stockpiled sand and sand above water level. The OGMD has found that the Van Horn permit application has met the criteria of Part 637 and has issued a Part 637 permit.

### **Developments Destroying Natural/Cultural Resources**

Preservation vs Conservation: Natural resources such as sand and gravel deposits are valuable commodities demanded by society and inherently involve modification of the landscape and habitats. Environmental regulations for mining seek to honor mineral rights and the value of these commodities while providing a framework for protection of the environment, human health, and public safety. The Part 637 sand dune mining statute is one of conservation of sand as a valuable commodity as well as protection of the environment as mining occurs. The intent of the

statute is also to provide for the preservation of critical dune areas/barrier dunes from new mining unless the narrow criteria are met. The Van Horn site is outside of those critical dune/barrier dune areas, but still within a designated sand dune mining area.

### **Developers/Wealthy Outsiders**

A comment was made in opposition to wealthy outsiders pushing their projects through. This is outside the scope of Part 637. With respect to a person engaging in sand dune mining, Part 637 defines an operator as the owner or lessee of mineral rights, or any other person engaged in or preparing to engage in sand dune mining with respect to mineral rights within a sand dune area.

**Environmental Impact Statement (EIS)** Several comments were submitted which relate to various aspects of the EIS. Topics pertaining to the EIS are discussed below.

- Disingenuous: Commenters expressed the sentiment that the EIA was disingenuous in not describing the site prior to excavation of the existing waterbody. A list of plants and animals as observed in 2018/2019 was submitted with the application. Existing flora was impacted with the original excavation completed between February 2019 and November 2019, and prior to a Part 637 permit being required for sand removal outside of a sand dune mining area for commercial purposes. There is no specific requirement on qualification of person submitting a description of fauna and flora. A sufficient description of impacts was also submitted.
- Insufficient: The OGMD finds that all required items of a complete EIS as required by Part 637 are contained in the submitted EIS. The OGMD also finds that the EIS adequately addresses the potential impacts associated with removal of the stockpiled sand from the site, as proposed in the amended permit application.
- Inconsistent with After the Fact permit(s): This has been addressed previously in this response to comment document.
- Schools nearby: Part 637 requires schools within 2,000 feet to be indicated on the EIS. The Oxbow School of Chicago Art Institute is roughly 3,000 feet from the mining area, and therefore not required to be included on the EIS.
- Issues with List of Flora & Fauna: The OGMD has found that the submitted list of fauna and flora as observed in 2018/2019 is sufficient for the purpose of evaluating the impact of removal of sand from previously disturbed area and stockpiles of sand.

### **EGLE Oversight**

Commenters expressed that the EGLE should have been more diligent in overseeing the initial activities. The OGMD has been involved since the original complaint was filed in May of 2020, including several site inspections and correspondence with Van Horn.

### **Historical/Cultural Significance to Native Tribes/Tribal Consultation**

Tribal consultation was requested by the Gun Lake Tribe and held on March 26, 2021. Response to their written comments are being provided separately and directly to the Gun Lake Tribe.

Commenters provided statements regarding the eligibility determination associated with the Kalamazoo River Mouth Traditional Cultural Property and the possible listing in the National Register of Historic Places. The EGLE appreciates the historical and pre-contact significance of this area and other areas throughout the state and with the need to minimize inadvertent discovery and protect cultural resources. The OGMD requested the applicant to provide a statement whether any materials of possible archaeological, paleontological, historic, or cultural

value were unearthed during the excavation of the existing pond. The applicant confirmed that no such materials were unearthed during excavation of the existing pond or any other areas of earth work that have been completed on-site as part of the residential development. The OGMD has established a standard permit condition that is incorporated on the permit form and is on the Van Horn permit. It should be adhered to during removal of stockpiled sand. It reads, "The permittee shall immediately suspend relevant operations and notify the Department in the event that any materials of possible archaeological, paleontological, historic, or cultural value are unearthed by the mining operations."

### **Illegal Mining, Piecemeal and Sand Dune Mining definition**

Commenters expressed varying opinions as to what is perceived as sand dune mining. Sand dune mining is defined by the legislature in Part 637 and must meet two criteria. First is the removal of sand from a designated sand dune area. Second is that the sand is used for commercial or industrial purposes, or both. The removal of trees and the creation of the existing pond does not meet the definition of sand dune mining. Moving the sand to nearby properties within the designated sand dune area, to spoil the sand on the property is not sand dune mining under Part 637. This is because, first, the sand is not removed from the designated sand dune area, and second, because the sand is not used for commercial or industrial purposes. In order to remove the stockpiles of sand from the sand dune area for commercial or industrial purposes, a Part 637 permit is required and has been issued. Regarding the perceived piecemeal nature of this project, it is noteworthy to mention that a permit is not required until the activities meet the definition of sand dune mining in Part 637.

### **Land Use/Conflict**

The OGMD received a range of comments regarding the land use compatibility. On one end of the spectrum commenters expressed concern with the compatibility of this waterski pond and seasonal homes development within a quiet residential area. On the other end, commenters were excited about the large home sites and pond within a residential area, rather than high density residential development. The applicant addressed land use in the EIS as required.

The OGMD recognizes the conflicts over land use between extractive activities and residents in the vicinity of such development. The goal of the OGMD is to minimize such conflicts while adhering to the authority given to the OGMD by the legislature under Part 637. It is also worth noting that the initial excavation activities for this development were authorized based upon local permitting and zoning.

### **Landowners supporting activity:**

Comments in support of this project were submitted during the public comment period and signed electronically by 42 individuals. The comments in support of the permit highlighted the future enjoyment of the property and the benefits to the local economy. Comments expressed both in support of and in opposition to the project by themselves are not criteria for approval or denial.

### **Mine Plan**

Several comments were submitted which relate to various aspects of the progressive cell unit mining and reclamation plan and the 15-year mining plan. It is noteworthy to mention that elements of the plans were included both in written format as well as shown on the site maps and plans submitted with the application. Topics pertaining to the mining and reclamation plans are discussed below.

- Setbacks: Part 637 allows for exceptions to the 200-foot setback requirements. The applicant has requested a 50-foot setback to the north, east, and south. The application documents clearly indicate provisions for this 50-foot setback. The proposed setback is consistent with the township permit approval and is appropriate due to the limited size of the site. The exception to allow for a 50-foot minimum setback has been granted. Additionally, the permit applicant has acquired land to the east, which further creates a larger setback from property lines.
- Overburden Stripping: Although overburden stripping was completed prior to the time a permit was required, the requirement to discuss overburden stripping was met in the contents of the application.
- Surveys/ALTA Surveys: Maps and site plans need to be submitted as part of the mining and reclamation plans. There is no requirement in Part 637 to submit a survey or an ALTA survey. ALTA surveys are specific to land title insurance needs and are above and beyond the requirements or scope of Part 637.
- Cell Unit size: A cell unit is a sub-unit of the total sand dune mining project. The operator determines the site's cell unit sizes and locations, but a cell unit cannot exceed 10 acres in size for sand dune mining operations commencing after March 31, 1977. A mine site can thus be greater than 10 acres and have multiple cell units. Part 637 allows up to three cell units to have active mining and reclamation status at a time and allows up to three cell units to be in interim status, in which mining, and reclamation have taken place, but vegetation requires a full growing season. The May 2021 Progressive Cell Unit Plan for the Van Horn site shows three cell units for the site. Each cell unit is less than 10 acres. The cell units meet the requirements of Part 637.
- Direction of Mining: The direction of progressive excavation is shown on the May 2021 Progressive Cell Unit Plan map for the Van Horn site. It shows the stockpiled sand will be removed from the west to the east, then north or south to the center of the site and access drive
- Fencing: Part 637 requires that all cell-unit mining and reclamation plans shall include fencing or other techniques to minimize trespass or unauthorized access to the sand dune mining activity, and access is. The Van Horn site has a gated and locked access drive on the south end of the property, and there is fencing on the south side of the property that also acts as a wind barrier and visual screen. The site is posted with "Danger, No Trespassing" signs around the perimeter of the property, as per the map labelled "Reclamation Plan Van Horn." Additionally, the applicant lives adjacent to the sand removal area and provides additional site security. These measures are found to be acceptable and meet the requirements of Part 637.

### **Noise/Noise Control**

While Part 637 doesn't specifically regulate noise, site inspections do occur in response to complaints, and the OGMD often mediates in response to noise complaints and other quality of life complaints and works towards a resolution or mitigation of the situation where possible.

### **Piles of Sand**

The stockpiled sand from an approximate 5-acre waterbody created between February 2019 and November 2019, is a large manmade feature that has potential for erosion if left unvegetated/unstabilized. The current Part 637 permit application requests removal of the stockpiled sand and erosion concerns will be addressed upon removal, final grading, and establishment of vegetation.

### **Threatened Owls**

Several commenters expressed concern for the destruction of wildlife habitat when the Van Horn property was cleared of vegetation, prior to pond excavation. It was asserted that two species of State Threatened owls lost their habitat due to the clear-cutting. The two species of owls named were the Long-Eared Owl (*Asio otus*) and Northern Saw-Whet Owl (*Aegolius acadicus*).

As part of its permit application review processes, the OGMD utilizes Michigan State University Extension's Michigan Natural Features Inventory (MNFI) to determine presence of threatened and endangered species. On November 13, 2020, a location search using the MNFI database did not result in a report of any observed occurrences of the Long-Eared Owl. The Northern Saw-Whet Owl is not indicated as a State Threatened species in the MNFI Database.

### **Township Permits/Violations**

Part 637 does not give the OGMD the authority to uphold or take enforcement action on permits issued by townships.

### **Truck Traffic**

Truck traffic is outside the scope of Part 637. A letter from the Allegan County Road Commission to Mr. Van Horn regarding truck traffic ingress and egress for the site was submitted with the Part 637 permit application. The permit application is posted on the OGMD's website and has been available for the public's viewing. Issuance of this permit doesn't alleviate the necessity for complying with other requirements, such as local and road commission ordinances.

### **Applicant's Response to Comments from the Hearing**

The applicant's attorney has submitted a response to comments made at the hearing and has requested that it become part of the permit application file.

### **Violation/Permit non-compliance**

A sentiment was expressed that the applicant will say what he needs to say to get the permit, then will do what he wants. Sand Dune Mining permits are issued by the OGMD under the authority of Part 637. OMGD staff are authorized to inspect the site during mining and reclamation activities and to ensure activities are carried out in accordance with Part 637, the permit, and its conditions.

### **Volume of Sand Mined**

Commenters pointed out the volume of sand being removed is significant when compared to the total production of active sand dune mining sites statewide. Since the inception of the Sand Dune Mining program, the regulated sand mining annual production volumes have seen a significant downward trend, and these volumes are currently about half of the historical average. This has coincided with the reduction of active sand mining sites and a reduction in overall operations at these sites. This trend appears likely to continue. According to the revised Van Horn site application, the sand volumes proposed have been reduced to 365,000 cubic yards. Based upon this estimate, and the current trends of sand dune mine production, the EGLE agrees that it will likely result in an appreciable increase in forthcoming annual reporting of sand production in Michigan. While we acknowledge there will be an increase in annual sand production volumes, it is not expected to be long term. Due to constraints in the size of the site and the nature of the project, as compared to sites that have mined sand for decades directly for the purposes of selling sand as a commodity, this site has a limited life and project timeline for removal of stockpiled sand.



### **OGMD DECISION**

The OGMD has determined that this application has met the applicable regulatory requirements and has approved a Part 637 permit for the removal of stockpiled sand at the Van Horn site. Of all the comments we received in opposition to the issuance of this permit, we did not receive any matters of fact that would require denial under Michigan statute or rules. We recognize that this decision may not satisfy all parties; however, we are confident that the decision is the correct one, and we hope that this document adequately responds to the comments which have been expressed. EGLE staff will monitor and oversee this project as it moves forward, and we will continue to hold the operator accountable and ensure that they adhere to Michigan regulations and requirements.