



JOHN ENGLER, Governor

DEPARTMENT OF ENVIRONMENTAL QUALITY

HOLLISTER BUILDING, PO BOX 30473, LANSING MI 48909-7973

INTERNET: <http://www.deq.state.mi.us>

RUSSELL J. HARDING, Director

October 7, 1997

Ms. Carol Morey Viventi
Secretary of the Senate
State Capitol
P.O. Box 30036
Lansing, Michigan 48909-7536

Ms. Mary Kay Scullion
Clerk of the House of Representatives
State Capitol
P.O. Box 30014
Lansing, Michigan 48909-7514

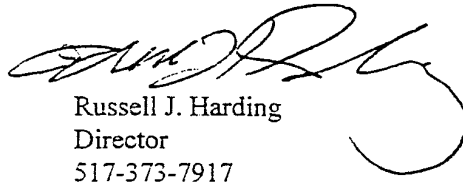
Dear Ms. Viventi and Ms. Scullion:

Section 324.35311 of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), requires the Department of Environmental Quality (DEQ) to appoint a review team to evaluate the accuracy of the Atlas of Critical Dunes and to analyze other portions of Part 353 of the NREPA to determine if the criteria in the statute are appropriate.

Enclosed with this letter please find a copy of the Report of the Sand Dune Review Committee which evaluates designated Critical Dune Areas (CDAs) in Michigan. The report includes a narrative and a set of maps depicting existing and potential new CDAs. This information was prepared under contract by the Center for Remote Sensing at Michigan State University. Also enclosed is a report of a review committee which evaluated standards of Part 353, Sand Dunes Protection and Management, of the NREPA. The review team evaluated whether the slope criteria in Section 35316(1)(a) and (b) are appropriate and supported by the best available technical data and whether stairways and driveways in critical dune areas should be subject to the same criteria as other constructed uses.

The DEQ submits the report to you to meet its obligation under Part 353 of the NREPA. If members of the Michigan Senate or Michigan House of Representatives have questions about these reports or need additional information, please contact Mr. Lawrence N. Witte, Chief, Land and Water Management Division, at 517-373-1170, or you may contact me.

Sincerely,



Russell J. Harding
Director
517-373-7917

Enclosures

cc: Mr. W. Charles McIntosh, Deputy Director, DEQ
Ms. Cathy Carlton, Legislative Liaison, DEQ
Mr. Lawrence N. Witte, DEQ

REPORT OF THE SAND DUNE REVIEW COMMITTEE

INTRODUCTION

The Sand Dune Review Committee (Committee) was formed in February 1996, as required by Section 35311, Sand Dune Protection and Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Part 353). Part 353 required the Department of Environmental Quality (Department) to appoint a Committee to "recommend whether the slope criteria in section 35316(1)(a) and (b) are appropriate and supported by the best available technical data and whether stairways and driveways in critical dune areas should be subject to the same criteria as other constructed uses." A list of members of the Committee is included in this report as Attachment 1. Also included as Attachment 2 is a copy of the invitation sent to each member.

The Committee met in Lansing for three single day meetings on March 11, April 17 and May 15, 1996. The agenda and meeting minutes for each of these meetings are included with this report as Attachment 3.

HISTORY OF SAND DUNE PROTECTION AND MANAGEMENT

In 1976, the Michigan legislature enacted the Sand Dune Protection and Management Act, which regulated sand dune mining in designated sand dune areas near the Great Lakes shoreline. In response to growing concerns about detrimental effects of other development activities in the sand dunes, the Michigan legislature amended the original sand dune act in 1989 to include the regulation of all construction, vegetation removal and earthmoving activities within designated Critical Dune Areas (CDA). In 1994, all environmental protection acts were codified into the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Sand Dune Protection and Management is included as Part 353 of PA 451 and

is administered by the Land and Water Management Division of the Department. The Committee investigated specific areas of Part 353, listed below, with a brief explanation of the current administration:

1. Is the slope criteria in Part 353, appropriate and supported by the best available technology?

Section 35316 of Part 353 prohibits uses on slopes greater than one on three (33 percent) unless a special exception is granted under section 35317.

2. Should stairways be subject to the same requirement as other constructed uses?

Stairways are encouraged and do not routinely require a permit, provided the stairway is constructed on posts, five feet wide or less and constructed by hand.

3. Should driveways be subject to the same requirements as other constructed uses.

The Department considers a driveway to be a use and, therefore, subject to the standards in Part 353.

The discussions began with an explanation of the history of the amendments and a discussion of strategies that could be used to complete the mission of the Committee. The Committee focused on the following three specific areas:

1. How should the Department regulate the construction of stairways and decks?
2. How should the Department regulate the construction of driveways?
3. Is the 33 percent slope standard appropriate and supported by the best available data?

RECOMMENDATIONS

1. Stairways and Decks

The Committee reviewed the Department's current method of regulating stairways and decks and agreed that they can be beneficial to sand dune protection and should be encouraged. In addition, the Committee agreed with the current manner in which stairways and decks are regulated and supported a position paper developed by Department staff detailing how stairways and decks are to be regulated. The position paper, included in this report as Attachment 4, indicates that the Department will not require permits for the construction of stairways and small decks which meet certain requirements.

2. Driveways

The Committee spent a considerable amount of time evaluating how and when driveways in CDAs should be regulated. The Committee concluded that all driveways in CDAs should be regulated, and therefore, require Department approval. Further, it was the consensus of the Committee that there may be certain cases where the impacts of driveway construction on a sand dune would be so great that a permit should not be issued. Finally, it was suggested that, for driveways resulting in minor impacts, a permit could be issued (under a special exception) that would affect slopes greater than 33 percent. Issuance of such a permit would be contingent on having a professionally designed and engineered driveway. The Committee recommended that permeable surfaces be encouraged to reduce runoff and erosion.

The Committee agreed that the Department could require a performance bond to assure that the driveways are constructed as designed and permitted. It was recommended that the performance bonds be retained for two to three years. In addition it was suggested that post construction certifications may be necessary to assure slope stabilization activities have been satisfactorily completed. The Committee agreed that retaining walls should be required and designed to be as environmentally compatible as possible utilizing biotechnical techniques.

The Committee discussed the use of shared driveways within the critical dune areas. It was understood that, while shared driveways clearly minimize the impacts to the CDA, they cannot be required if an application involves two separate lots of record (each created before July 5, 1989). Staff will recommend shared driveways in appropriate situations.

3. 33 percent slope standard

The Committee had several lengthy discussions concerning many issues relating to the 33 percent slope standard. This discussion included: developing a performance standard versus a technical standard; local communities developing performance standards; the development of performance standards at the state level; flexibility of the requirements; and enforceability of a performance standard. Statements by both Dr. Don Gray and Bill Fredrick were made in support of the 33 percent technical standard and the need for a standard that can be readily applied. Dr. Gray provided information supporting the Committee's position on slope standards. This information is included in this report as Attachment 5.

Based on this discussion, the Committee reached consensus on the following statement: The 33 percent slope standard is reasonable and defensible and is appropriate as a regulatory standard for the purposes of the Act.

CONCLUSION

In conclusion, the Committee supports the 33 percent slope standard and supports the attached position paper on how the Department should regulate stairways and decks. The Committee recommends that driveways be regulated as a use and that there may be some instances where the potential impacts to the sand dune are so severe that a permit for a driveway should be denied. When a permit is issued for a driveway the Department should encourage shared driveways and permeable surfaces to reduce the potential for erosion.