

# STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY LANSING



November 9, 2016

Ms. Kate Mowbray, Superintendent ODAWA Casino Resort Wastewater Treatment Plant 1760 Lears Road

Petoskey, Michigan 49770

Dear Ms. Mowbray:

SUBJECT: ODAWA Casino Resort Wastewater Treatment Plant and Septage Waste

Receiving Facility, Approval of Septage Waste Receiving Facility Operating Plan

The review of the ODAWA Casino Resort Wastewater Treatment Plant and Septage Waste Receiving Facility's (ODAWA SWRF) operating plan (plan) by the Department of Environmental Quality (DEQ), Office of Drinking Water and Municipal Assistance (ODWMA), has been completed.

The plan was forwarded to Mr. John Colletti, of the Environmental Protection Agency's Region 5 office, for review and comments. Mr. Colletti responded that the plan and the facility design will be able to treat the extra loading from the disposal of up to 4,000 gallons of septage per day.

The plan is approved and meets the requirements outlined in Section 11715b of Part 117, Septage Waste Servicers, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. The plan will be posted on the Septage Waste Program website at www.michigan.gov/deqseptage.

Be advised that the ODAWA SWRF must operate in accordance with the approved plan. If a change in operations, fee pricing or other conditions is anticipated, please file an amendment to the plan at least 30 days prior to the proposed date for implementation.

If you have any questions regarding this matter, please contact me at 517-780-7874; campbellm4@michigan.gov; or DEQ, ODWMA, P.O. Box 30241, Lansing, Michigan 48909-7741.

Sincerely,

Matthew Campbell

**Environmental Quality Specialist** 

Martha Campbell

Septage Waste Program Coordinator

Office of Drinking Water and Municipal Assistance

cc: Mr. Scott Kendzierski, Environmental Health Director, Health Department of Northwest Michigan

Mr. Brian Jankowski, DEQ - Cadillac District Office

Mr. Matt Rockhold, DEQ



October 12, 2016

Mr. Campbell
Septage Program Coordinator
Environmental Health Section
Office of Drinking Water and Municipal Assistance
Michigan Department of Environmental Quality
PO Box 30241
Lansing, Michigan 48909-7741

Dear Mr. Campbell:

Attached is the Operations Plan for the Odawa Casino Resort WWTP's proposed septage receiving facility. The facility is located on tribal land at 1760 Lears Road in Petoskey, Michigan. Our intention is to accept septage waste on a contract basis only due to the size of our treatment plant. A request for public comment on the proposal was posted on the website of the Little Traverse Bay Bands of Odawa Indians from September 9, 2016 through October 10, 2016. This notice was available to all departments of the Tribe's government, including the Environmental Department and the Health Department, as well as all tribal citizens. No comments were received.

Sincerely,

Katemowlay

Kate Mowbray
Wastewater Tech
Odawa Casino Resort Wastewater Treatment Plant

RECEIVED
DEPARTMENT OF ENVIRONMENTAL QUALITY

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ODWMA/EHS



## Odawa Casino Resort Wastewater Treatment Plant Septage Receiving Operation Plan

#### Name and Location:

Odawa Casino Resort (OCR) Wastewater Treatment Plant 1760 Lears Road Petoskey, MI 49770

#### Hours of Operation:

7am to 3pm, Monday through Friday

#### Plant Loading Data:

The plant design is 400 lbs BOD5/day. Currently, we are receiving approximately 146 lbs BOD5/day. The remaining 254 lbs converts to approximately 4,000 gallons of septage per day at 6,500 mg/l BOD5.

## Categories of Septage Waste Received:

Residential septage waste Holding tank waste Portable toilet waste Septage holding tank supernatant

#### Fee Structure:

\$0.08 per gallon, calculated on site by tank volume

### Service Area:

There is no set service area. Haulers will be accepted on a contract basis by calling the wastewater plant at 231-439-6100 ext. 8651.

## Other Conditions for Receiving Septage:

- All haulers are required to register with OCR and provide a W9 form for billing purposes.
- All haulers will submit to random sample testing of their loads as requested by OCR.
- In the event of a spill at the receiving site, it is the responsibility of the hauler to clean up the site completely.
- Any septage load with a pH outside the range of 5-9 will not be accepted.

## Description of Proposed Wastewater Treatment Facility The New Casino Project April 19, 2007

Wastewater treatment will be provided by the process commonly known as Membrane Biological Reactors (MBR). Treated wastewater will be applied to the land surface, to return into the local groundwater system. Redundancy has been provided for all critical processes and equipment.

Construction of the treatment facility has been planned in three phases. Phase 1 consisting of the casino facility and associated restaurants and will contribute a daily flow of approximately 68,000 gpd. Phase 2 of the project is planned to add a hotel and related facilities, and will result in a total daily flow of approximately 120,000 gpd. Phase 3 of the project will account for the anticipated future construction, and will have an ultimate design flow of approximately 200,000 gpd.

The first phase of the project has been designed to provide tankage and piping suitable for phases 1 and 2; however, equipment is being providing only for the Phase 1 flow. Provisions have been provided for the future addition of tanks and piping extensions to accommodate the Phase 3 flows.

Wastewater will be conveyed to the treatment facility by gravity flow. The gravity sewer has been sized to accommodate the flows projected from the future Phase 3. A grease trap is provided in the gravity sewer system just downstream of the restaurant facilities.

Just prior to the treatment facility, a duplex submersible pumping station will pump water into the treatment plant building. The firm pumping capacity is 350 gpm, providing sufficient capacity to meet the projected demands through Phase 2. A grinder is installed ahead of the pumps to help macerate solid material in the wastewater to help prevent plugging of treatment equipment.

Following pumping, the wastewater will be screened to remove solids of 2 mm or larger. Screenings will be removed, washed, and deposited into a small dumpster for disposal at a landfill. The screened wastewater will flow by gravity into the MBR tanks for secondary treatment.

The MBR process provides treatment in three basic steps: 1) Mixing to encourage biological phosphorus reduction, 2) Aeration to promote biological reduction of organic matter, and 3) Filtration. The MBR process is similar to the conventional activated sludge process, except that solids separation is achieved by filtration rather than gravity settling. As with conventional activated sludge, biological solids from the filter basins are returned (RAS) to the beginning, and excess solids are periodically diverted to an aerobic digester (WAS) to maintain the desired level of MLSS for efficient treatment. The membrane filters are

provided with maintenance systems for back washing and cleaning. The MBR is also fitted with chemical treatment provisions to aid in phosphorus reduction.

Effluent from the MBR is expected to meet the following quality:

BOD: less than 5 mg/l SS: less than 5 mg/l TIN: less than 5 mg/l P: less than 1.0 mg/l

Treated effluent from the MBR will be disinfected by U.V. light.

The disinfected effluent will flow by gravity to a holding tank where it may be either used for irrigation, or disposed of onto one of three rapid infiltration basins.

The excess biological solids (WAS) which are periodically removed from the MBR will be directed to an aerobic digester for stabilization and reduction. Stabilized solids will be accumulated and stored in a storage tank, and will be periodically applied to agricultural land as nutrients. Bio-solid disposal will be contracted with a state licensed disposal contractor. The contractor will be responsible for locating suitable agricultural sites, and completing the necessary testing and permitting.

The treatment facility will be operated under the supervision of an experienced, state-licensed wastewater treatment plant operator. The treatment facility is planned to begin operation in June 2007.

