



MARQUETTE AREA WASTEWATER TREATMENT FACILITY ADVISORY BOARD MEETING MINUTES December 15, 2022

A regular meeting of the Marquette Area Wastewater Treatment Facility Advisory Board was held at 10:04 a.m., December 15, 2022, at the Marquette Area Wastewater Treatment Facility.

ROLL CALL

PRESENT Brad Johnson, Chocolay Township (Chair)
Leonard Bodenus, Marquette Township
Harold Hayse, City of Marquette
George Patrick, City of Marquette

ABSENT Mary Schlicht, City of Marquette

OTHERS Mark O'Neill, City of Marquette
Melissa Erkkila, City of Marquette

AGENDA It was moved B. Johnson to amend the agenda and move the Solids Handling Update to after Prior Meeting Minutes since they are on a Zoom meeting call. Approved by L. Bodenus, supported by H. Hayes. Approved 4-0.

MINUTES It was moved by L. Bodeunus, supported by H. Hayes to approve the October 20, 2022, meeting minutes as written. Approved 4-0.

SOLIDS HANDELING UPDATE

Mark O'Neill stated Allen Williams and Craig Heisel are here from Donohue to provide a short presentation. A. Williams stated the solids handling update project is occurring because it is aligning with the City of Marquette strategic planning. Investing in improvement aligns with regulatory compliance and operational performance, improving energy efficiency and conserving resources. This project provides waste receiving services for septage, high strength waste, and grease/oil/fats. This will then produce additional biogas that can be used in the generators the facility already has to produce additional electricity and heat onsite. It will also reduce the biosolids disposal volume. After the project, the facility will mostly only need to dispose of dewatered solids which is a lower volume. It also addresses reliability in the biosolids processing system and provides 180 days of onsite storage that EGLE requires. Other needs such as effluent DO compliance, vactor debris handling and decant pump station issues are also addressed.

The project is funded through the SRF loan program that is managed by EGLE. The estimated project cost submitted to EGLE, including all the project costs, is 11.7 million dollars. The state has granted the city a principal forgiveness of 50% of that amount, a little over 5.8 million dollars. If the city uses the entire amount the estimated loan will be 5.8 million dollars.



Charter Township of Chocolay

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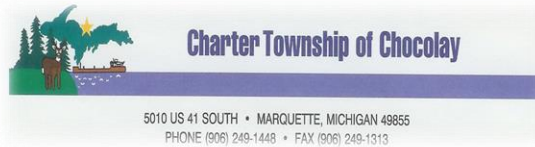
Main components of this project include a new waste receiving station near the digesters, a new dewatering facility and cake storage facility on the south side of the property. Any waste received in the digester will be utilized as gas that can be used in the CoGen units. These items are similar to the previous bid and cost saving measures that were removed in the last bid are now being included in the current bid. The dewatering building was originally a prefabricated metal structure but given it is handling wet material that can be corrosive, it is preferred the building to be made of block. This material has been changed. There is an odor control system for the waste receiving tanks that will be an alternate. Depending upon the budget, it may be added to the project. Also, the dewater equipment was upsized from 1.5 meters to 2 meters which allows it to not be ran so often. The last major change is the fire alarm system. It was removed from the project and is currently under construction with funding strictly from the facility.

Bid alternates have been kept the same as the previous bid because it is anticipated the same contractors will be bidding. M. O'Neill asked A. Williams to explain why the project is being bid with the alternates instead of including them in the final bid package. A. Williams stated it is a mechanism to give the city more control of the project costs and scope. It is difficult to project the cost of these projects with the current economy and we want to make sure the project meets the budget but if there is additional money available then the city has the option to choose these items that are not necessarily required for the project to move forward but it may benefit the city operationally. It was contemplated to consolidate some of the alternates and putting them in the base bid, so it is simpler for the contractors to bid and for Donohue to design, but since it was already presented this way in the first bid, it has been decided to stick with the similar bid format.

B. Johnson asked what the difference between the original cake storage building is compared to the alternate cake storage building. M. O'Neill stated the base bid will provide the 180 days of storage. However, the facility will have a better press and will be able to dewater the material more efficiently. That building will be filled up in the winter and then staff will have to utilize the existing storage building on the north side of the property. He would rather build it bigger than the 180 days in case the room is needed, and it is more efficient to handle in one area. Septage will also be received so the solids handling will increase. A. Williams stated the original building is around 60x100 feet and the alternate is 60x120 feet, an extra 20% of storage. B. Johnson stated it is important for the storage building to be built large enough, so it does not have to be added onto later. Even if we need 60x140 feet then it is important to address it now during this project.

G. Patrick introduced himself as a new board member and longtime construction estimator. He asked if all the alternatives plan to be adds. A. Williams acknowledged with a yes. G. Patrick suggested that Donohue stagger the bid openings. Such as having the main bid opening at 2 p.m., do not open the bids, and then have the bid alternatives submitted at 3 p.m. A. William said he would take it into consideration and have further discussions.

H. Hayes asked why the odor control is an alternate. M. O'Neill stated that during the previous bid, as prices were increasing, it was pulled as an item that we may possibly be able to get by without and added later if possible.



M. O'Neill stated the post aeration is not in the SRF funding. It will have to be funded with the replacement fund because it was not in the original project plan. Post aeration is an engineered fix to the DO problem in the chlorine contact tanks. A final effluent straight line and valve will be installed so staff can add aeration as needed. A. Williams stated the price is estimated around \$50,000-\$100,000.

G. Patrick asked if Donohue has been in contact with the previous bidders regarding the upcoming bid. A. Williams explained two of the three previous bidders have reached out to him wanting status. G. Patrick suggested Donohue reach out to the list of bidders they have and contact them.

H. Hayes asked what the vector pad modification entails. A. Williams stated it is proposed to slope the pad from the front to the back. Then on the back end there will be an addition with a drainage channel on the side so the liquid will fall into a filter pipe that will transfer it to the pump station. Hopefully with the redesign, there will be space for the material to stand without having sand or debris get into the piping.

H. Hayes asked if the decant pump station was for the liquid storage. M. O'Neill stated that it was for the liquid storage and the vector pad. All the water from the new dewatering building will be routed through that lift station. It will be designed with the valves in a separate valve box for easy maintenance and will have the ability for staff to flush it out easier. It will be pumped to the head of the primary clarifiers. A. Williams stated it will be an all new forced main, larger with larger pumps to handle the additional flow.

G. Patrick explained the previous four addendums were excessive with three weeks to bid the job. He asked if all the addendums are being incorporated in the main bid packet this time around. A. Williams assured him they would be.

H. Hayes asked what percent septage solids are being expected. A. Williams stated 3-5% solids is expected. H. Hayes asked what kind of solids they are expecting on the new belt presses. A. Williams believes it is 16-18%. It is designed to load at a lower rate than the current press over more days. It is a different style of belt press that gets better solids, so the percentage is a conservative number. H. Hayes asked what percentage of solids off of the belt press was used for the 180 days storage. A. Williams stated they are assuming 16%.

FINANCIAL REPORT

M. O'Neill, City of Marquette, presented the Financial Report. Please see Treasurer's Notes for a detailed explanation. If there are any questions, please contact Mary.

OPERATIONS REPORT

M. O'Neill, City of Marquette, presented the Operations Report.



PERMIT COMPLIANCE FOR THE MONTH(S):

- PERMIT COMPLIANCE: No violations occurred during the month of October nor November.

PLANT NOTES:

- Staff continues weekly COVID-19 tracing sampling for NMU from the WWTP's influent, our four major lift stations, and from the sewer leaving the Marquette Branch Prison.
- VanDamme Trucking completed the haul out of our biosolids cake the week of November 14th. Completion of this process leaves us in good shape for the coming winter.
- The media required to remove sulfides and siloxanes from our biogas to make it safer to use in our CoGen units has been replaced, with assistance from DPW's sewer crew and Fraco, Inc. Kraft was also on site to perform regular maintenance on both CoGen units.
- Staff replaced the water solenoid valve that feeds the wash water to the press belts on the BFP unit. Staff also repaired the seam on one of the two press belts.
- The new dissolved oxygen probes and controllers have arrived. Installation is pending.
- Repairs were completed on the largest of our three high-pressure air compressors. The compressors provide air for operating the air diaphragm pumps and the steering rams on the Belt Filter Press.
- JCI were on site to help get our two Admin Area boilers back into operation. They were both out of service with multiple failures. Without these boilers the Admin Area temperatures dropped to almost 50 degrees.
- We had another incident like in May of this year, where the plant lost one of its three phases of power due to high winds. The connection at the top of the telephone pole for the affected phase blew right off. The problem with this happening is that the plant cannot protect itself from this situation and it can result in damage to equipment that uses all three phases to operate. After the BLP completed repairs to the phase connection, our staff spent the next several days discovering and resetting motors and equipment that thankfully had managed to trip out to protect themselves. Nothing was damaged as a result.
- CoGen #2 would not start after the aforementioned power issues. Whenever such a thing occurs it never feels like a coincidence, but in this case, it appears to have been just that. Staff replaced both batteries and the starter motor to get it back into service.
- Staff continue to tackle safety improvement projects. The list is almost completely checked off.

INDUSTRIAL WASTEWATER ACCEPTANCE ACTIVITY FOR OCTOBER 2022

Source	Volume (gallons)	Total
Fabick/CAT	3,800	\$532.00
UPS	4,500	\$630.00
LS&I	9,000	\$1,260.00
Wisconsin Electric	38,000	\$1,520.00
Tunnel Vision	6 yd ³	\$810.00
Grand Totals	55,300	\$4,752.00



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INDUSTRIAL WASTEWATER ACCEPTANCE ACTIVITY FOR NOVEMBER 2022

Source	Volume (gallons)	Total
Fabick/CAT	1,600	\$250.00
UPS	11,000	\$1,540.00
LS&I	11,000	\$1,540.00
Wisconsin Electric	44,500	\$1,780.00
Grand Totals	68,100	\$5,110.00

MAINTENANCE MANAGEMENT

- Preventive Maintenance Work Orders: staff continues to perform routine maintenance tasks. Whenever time permits, I continue to create the work orders that have not been created since we began using Lucy.

OLD BUSINESS

- Fire Alarm Project: M. O'Neill stated at this time equipment is ordered.

NEW BUSINESS

- 2023 Meeting Schedule: The schedule was discussed but a motion was not made. It will be on the next meeting agenda to approve.

PUBLIC COMMENT

- No public comment.

BOARD COMMENT

- B. Johnson stated the station at the Casino reservation is ready to be turned over to the Township however the transfer switch for the generator will not be in until June, 2023. The Township is not going to accept it until then and they will not be tying everyone in until the switch is received.

ADJOURNMENT

The meeting was adjourned at 11:07 a.m.

Reviewed by:

Mark O'Neill

Director of Municipal Utilities

Prepared by:

Melissa Erkkila