# ELECTRONIC PACKET

## June 14, 2021 OPERATIONS COMMITTEE MEETING

## RELEASED: Monday, June 7, 2021

# Milwaukee Metropolitan Sewerage District

260 West Seeboth Street
Milwaukee, WI
53204

## Meeting Agenda

## Operations Committee

*John Swan, III, Chair*
*Bryan L. Kennedy, Ph.D., Vice Chair*
*Dan Bukiewicz, LaTonya Johnson, Kris Martinsek*
*Dan Devine, Ex-Officio*

**Monday, June 14, 2021** | **9:00 AM** | **Dennis M. Grzezinski Conference Room**

NOTICE IS HEREBY GIVEN, pursuant to Section 19.84, Wisconsin Statutes, that the Milwaukee Metropolitan Sewerage District's Operations Committee will hold its regularly scheduled public meeting on Monday, June 14, 2021, at 9:00 a.m. at the District's Headquarters, 260 W. Seeboth Street, Milwaukee, Wisconsin, in the Dennis M. Grzezinski Conference Room.

PURSUANT TO SECTION 19.85(1)(g), Wisconsin Statutes, the Committee reserves the right to go into Closed Session on any item on the public portion of the agenda to confer with Legal Counsel when it appears the matter may involve the District in litigation. If the Committee does convene in such a Closed Session, it is contemplated that the Committee will again, before adjourning the meeting, reconvene at the same place in Open Session at which time the Committee may act upon any item(s) considered in the Closed Session and upon any unfinished items from the regular agenda.

### CALL TO ORDER

### RECORD ROLL

### Approval of Proceedings of Regular Committee Meeting held May 10, 2021

### NEW BUSINESS

| | | |
|---|---|---|
| 1 | **21-077-6** | Change Order Request, Contract J04037C01, Thickened Activated Sludge Flow and Density Meters Upgrade at Jones Island Water Reclamation Facility |
| 2 | **21-078-6** | Award of Contract J04061C03, Programmable Logic Control 5 Upgrade in the Dewatering and Drying Facility (Rebid), and Approve Changes in Total Project Cost |
| 3 | **21-079-6** | Change Order Request, Contract J04064E01, Preliminary Engineering, Jones Island Water Reclamation Facility Chaff System Improvements |
| 4 | **21-080-6** | Award of Contract J06075C17, Bar Screen Nos. 1, 2, 4, 7, and 8 Rehabilitation and Bar Screen No. 6 Replacement at the Jones Island Water Reclamation Facility |

| | | |
|---|---|---|
| 5 | 21-081-6 | Award of Contract S06038C16, Waste Activated Sludge Pump Replacements at South Shore Water Reclamation Facility |
| 6 | 21-082-6 | Review of the 2020 Wisconsin Department of Natural Resources Compliance Maintenance Annual Reports for the Jones Island and South Shore Water Reclamation Facilities |
| 7 | 21-083-6 | Approval of 2021 Green Infrastructure Partnership Program Projects G98004P69, G98004P72, G98004P78, G98004P80, and G98004P81 |
| 8 | 21-084-6 | Award of Contract M03108P01, Impact of Water Levels on District Assets, Water Reclamation Facilities and District Headquarters |
| 9 | 21-085-6 | Award of Contract J06085P01, Jones Island Water Reclamation Facility Administrative and Maintenance Facilities Space Planning Analysis |
| 10 | 21-086-6 | Award of Contract C01006E02, Metropolitan Interceptor Sewer Condition Assessment Project, and Approve Changes in Total Project Cost |
| 11 | 21-087-6 | Approval of Funding Agreement M10005MI02 Under Project M10005, 2021 City of Milwaukee Private Property Infiltration and Inflow Reduction Project |

## ORGANIZATION & ADMINISTRATION

21-001-1 EXECUTIVE DIRECTOR'S REPORT

A. Monthly Reports

## ADJOURNMENT

PLEASE NOTE: Upon reasonable notice, efforts will be made to accommodate the needs of disabled individuals through sign language interpreters or other auxiliary aids. For additional information or to request these services, contact the Office of the Commission at 414.225.2264, (FAX) 414.277.6360 or write to Office of the Commission, 260 W. Seeboth Street, Milwaukee, Wisconsin, 53204-1446.

Anna Kettlewell, Commission Secretary
Milwaukee Metropolitan Sewerage District

# Milwaukee Metropolitan Sewerage District

260 West
Seeboth Street
Milwaukee, WI
53204

## Meeting Minutes

## Operations Committee

*John Swan, III, Chair*
*Bryan L. Kennedy, Ph.D., Vice Chair*
*Dan Bukiewicz, LaTonya Johnson, Kris Martinsek*
*Dan Devine, Ex-Officio*

**Monday, May 10, 2021** **9:00 AM** **Dennis M. Grzezinski Conference Room**

### CALL TO ORDER

*Committee Chair Commissioner Swan called the meeting to order at 9:00 a.m.*

### RECORD ROLL

**Present** 6 - Dan Bukiewicz, LaTonya Johnson, Bryan L. Kennedy Ph.D., Kris Martinsek, John Swan III, and Dan Devine

*Other Commissioners Present: Tim Carpenter, Eugene Manzanet, Jeff Stone, and Corey Zetts.*

### Approval of Proceedings of Regular Committee Meeting held April 12, 2021

**A motion was made by Commissioner Kennedy, seconded by Commissioner Johnson. The motion carried.**

### NEW BUSINESS

1 21-062-5 Contract TS-2684, On-call Engineering Services for Water Reclamation Facilities

*The Committee received a PowerPoint presentation from Michael Martin, Director of Technical Services.*

**A motion was made by Commissioner Kennedy, seconded by Commissioner Devine, that this matter be approved by a voice vote. The motion carried by a unanimous voice vote.**

2 21-063-5 Restore Executive Director's Original Delegated Authority, Contract J04067C01, Dewatering and Drying South Cake Loadout Addition at Jones Island Water Reclamation Facility

*The Committee received a PowerPoint presentation from Michael Martin, Director of Technical Services.*

**A motion was made by Commissioner Johnson, seconded by Commissioner Kennedy, that this matter be approved by a voice vote. The motion carried by a unanimous voice vote.**

**3** 21-064-5 Contract C06023D01, Engineering Services - Veterans Affairs Grounds Metropolitan Interceptor Sewer Relocation

*The Committee received a PowerPoint presentation from Michael Martin, Director of Technical Services, with comments by Kevin L. Shafer, P.E., Executive Director.*

**A motion was made by Commissioner Kennedy, seconded by Commissioner Johnson, that this matter be approved by a voice vote. The motion carried by a unanimous voice vote.**

**4** 21-065-5 Contract I05002D01, Engineering Services, Combined Sewer Outfall 195 Relocation

*The Committee received a PowerPoint presentation from Michael Martin, Director of Technical Services, with comments by Kevin L. Shafer, P.E., Executive Director.*

*Commissioner Johnson was out of the room for this item.*

**A motion was made by Commissioner Martinsek, seconded by Commissioner Devine, that this matter be approved by a voice vote. The motion carried by a unanimous voice vote.**

**5** 21-066-5 Restore Executive Director's Original Delegated Authority, Contract P01005C04, Pipeline Cleaning Phase 1 - Interplant Sludge System Improvements

*The Committee received a PowerPoint presentation from Michael Martin, Director of Technical Services.*

**A motion was made by Commissioner Johnson, seconded by Commissioner Kennedy, that this matter be approved by a voice vote. The motion carried by a unanimous voice vote.**

**6** 21-067-5 Change Order Request, Contract W45002D01, Engineering Services - Wilson Park Creek Reach 3 - Phase 1, and Restore the Executive Director's Original Delegated Authority

*The Committee received a PowerPoint presentation from Michael Martin, Director of Technical Services, with comments by Kevin L. Shafer, P.E., Executive Director.*

*Commissioner Carpenter asked if there would be additional waterway access provided under this contract.*

*Commissioner Carpenter questioned how many feet on either side of the river the District owned.*

**A motion was made by Commissioner Johnson, seconded by Commissioner Bukiewicz, that this matter be approved by a voice vote. The motion carried by a unanimous voice vote.**

7 21-068-5 Approve Change in Total Project Cost for Project C98044, Metropolitan Interceptor Sewer Abandonment in Various Locations, and Amend Total Project Cost for Project M99001, Allowance for Cost and Schedule Changes

*The Committee received a PowerPoint presentation from Micki Klappa-Sullivan, Manager of Engineering Planning.*

**A motion was made by Commissioner Martinsek, seconded by Commissioner Kennedy, that this matter be approved by a voice vote. The motion carried by a unanimous voice vote.**

## ORGANIZATION & ADMINISTRATION

21-001-1 EXECUTIVE DIRECTOR'S REPORT

A. Monthly Reports

*A. No report.*

## ADJOURNMENT

*It was moved by Commissioner Kennedy, seconded by Commissioner Devine, to adjourn. The motion carried.*

*As there was no further business, the meeting was adjourned at 9:47 a.m.*

Anna Kettlewell, Commission Secretary
Milwaukee Metropolitan Sewerage District

Item 1

**COMMISSION FILE NO:** 21-077-6 **DATE INTRODUCED:** June 14, 2021

**INTRODUCED BY:** Executive Director (Signature on File in the Office of the Commission)

**REFERRED BY COMMISSION CHAIRPERSON TO:** Operations Committee

**RELATING TO**: Change Order Request, Contract J04037C01, Thickened Activated Sludge Flow and Density Meters Upgrade at Jones Island Water Reclamation Facility

**SUMMARY:**

The Commission is requested to authorize the Executive Director to execute a change order to Contract J04037C01, Thickened Activated Sludge (TAS) Flow and Density Meters Upgrade at Jones Island Water Reclamation Facility (JIWRF), with Next Electric, LLC, (Next) in an amount not to exceed $53,581.

At JIWRF, different types of partially processed biosolids from both JIWRF and the South Shore Water Reclamation Facility are combined, further processed and heat dried to produce Milorganite®. To meet Milorganite® product quality specifications, the total mass and flow rates of the various biosolids must be controlled. The actual mass and flow rates are measured using density and flow meters. This data is then used to control the mass and flow rates.

In June 2020, the Executive Director executed Contract J04037C01 with Next in the amount of $137,978. The contract includes removing existing density and flow meters on TAS pipelines in the Equalization and Blend Facility and installing new, larger diameter density and flow meters. Larger diameter meters reduce discharge pressures at the thickened sludge pumps, thereby reducing pump discharge pressure, energy consumption and extending time between pump overhauls. In July 2020, the Commission delegated $50,000 in authority to the Executive Director for future change orders to Contract J04037C01.

**ATTACHMENTS:** **BACKGROUND** ☐ **KEY ISSUES** ☐ **RESOLUTION** ☒
**FISCAL NOTE** ☒ **S/W/MBE** ☐ **OTHER** ☐ ____



**COMMITTEE ACTION:** _____ **DATE:** _____

**COMMISSION ACTION:** _____ **DATE:** _____

## SUMMARY (Cont'd)

Change Order Request, Contract J04037C01, Thickened Activated Sludge Flow and Density Meters Upgrade at Jones Island Water Reclamation Facility

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Currently, TAS is conveyed into a large tank in the Equalization and Blend Facility where it combines with other sludges to become blended sludge (BSD). Two pipelines can convey BSD to the Dewatering and Drying Facility. Only one BSD pipeline has a density meter and has been designated as the primary pipeline. A secondary pipeline is used when the primary pipeline is out of service, but the secondary pipeline does not have a density meter. Controlling drying process variables when using the secondary pipeline without a density meter is difficult, causing fluctuations in dryer loadings that adversely affect product quality. A new density meter on the secondary pipeline would make the BSD pipelines redundant and would improve the consistency and quality of Milorganite® production when either pipeline is used. The requested change order will provide a new density meter on a BSD pipeline in the Equalization and Blend Facility.

Staff recommends implementing this change order under Contract J04037C01, based on the following reasons:

- The scope of the proposed change order is similar in character and closely related to the original scope of Contract J04037C01. The new density meter will be provided on a BSD pipeline, just downstream of density flow meters replaced on the TAS pipelines in the Equalization and Blend Facility.

- The change order cost is comparable to the cost of the density meter work in the original contract, which was competitively bid.

### CONTRACT COST CHANGES

| | AMOUNT | PERCENTAGE INCREASE OVER ORIGINAL CONTRACT | AUTHORIZED BY | SWMBE |
|---|---|---|---|---|
| Original Contract | $137,978 | | Executive Director | 18.8% |
| Previous Change Orders | $7,343 | 5.3% | Executive Director | 0% |
| Requested Change Order | $53,581 | 38.8% | Request of Commission | 17.9% |
| Total Change Orders | $60,924 | 44.1% | | 15.7% |
| TOTAL | $198,902 | | | 17.9% |

## RESOLUTION

Change Order Request, Contract J04037C01, Thickened Activated Sludge Flow and Density Meters Upgrade at Jones Island Water Reclamation Facility

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**RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that the Executive Director is authorized to execute a change order to Contract J04037C01, Thickened Activated Sludge Flow and Density Meters Upgrade at Jones Island Water Reclamation Facility, with Next Electric, LLC, in an amount not to exceed $53,581.

# Capital Budget Fiscal Note
# Total Project Cost

**RELATING TO:** Change Order Request, Contract J04037C01, Thickened Activated Sludge Flow and Density Meters Upgrade at Jones Island Water Reclamation Facility

| **Capital Project Number(s)** | **Impact of Requested Action on Total Project Cost:** |
|---|---|
| **J04037** | ☐ Increase ☐ Decrease ☐ New Project ☒ No Change |

| **Total Project Cost Analysis** | **Project Costs** |
|---|---|
| Adopted 2021 Total Project Cost | $2,918,000 |
| Previously Approved Changes | $0 |
| Approved Total Project Cost | $2,918,000 |
| Requested Total Project Cost | n/a |
| Requested (Increase)/Decrease | $0 |

**Action to be taken to Long-Range Financing Plan to address Total Project Cost change**

_____ Transfer from Allowance for Cost and Schedule Changes
_____ Transfer from another project (specify in comments)
_____ Delay Project(s) (specify in comments)
_____ Delete Project(s) (specify in comments)
_____ Other _____
_____ Transfer to Allowance for Cost and Schedule Changes

**Comments**

Budget Review by: Christine Durkin

Date: 5/12/2021

Item 2

**COMMISSION FILE NO:** 21-078-6 **DATE INTRODUCED:** June 14, 2021

**INTRODUCED BY:** Executive Director (Signature on File in the Office of the Commission)

**REFERRED BY COMMISSION CHAIRPERSON TO:** Operations Committee

**RELATING TO**: Award of Contract J04061C03, Programmable Logic Control 5 Upgrade in the Dewatering and Drying Facility (Rebid), and Approve Changes in Total Project Cost

**SUMMARY:**

The Commission is requested to award and to direct the Executive Director to execute on behalf of the District Contract J04061C03, Programmable Logic Control (PLC) 5 Upgrade in the Dewatering and Drying (D&D) Facility (Rebid), to Allan Integrated Control Systems, Inc., (AICS) in the amount of $2,744,900. AICS was the lowest responsible, responsive bidder between two bids received.

Further, the Commission is requested to decrease the total project cost (TPC) for Project J04061, D&D PLC 5 Upgrades, by $1,158,039 for an amended TPC of $6,740,000 and to make a corresponding change to the TPC for Project M99001, Allowance for Cost and Schedule Changes.

The District's D&D Facility houses equipment utilized to produce Milorganite®. Twenty-four belt filter presses dewater plant sludges, and 12 rotary dryers dry the dewatered sludge. Dried solids are classified using screens and mills to create a consistent Milorganite® product size. Product is cooled and placed into storage bins to await transport to the Milorganite® Storage Building. The D&D Facility also contains conveyors, bucket elevators, holding tanks, air emissions equipment, and other supporting systems. The D&D Facility has been in use since 1994.

**ATTACHMENTS:** **BACKGROUND** ☐ **KEY ISSUES** ☐ **RESOLUTION** ☒
**FISCAL NOTE** ☒ **S/W/MBE** ☒ **OTHER** ☐ ____

*OP_Award_J04061C03_Dewatering_and_Drying_PLC5_Upgrade_legislative_file.docx*
*05-26-21*

**COMMITTEE ACTION:** _____ **DATE:** _____

**COMMISSION ACTION:** _____ **DATE:** _____

## SUMMARY (Cont'd)

Award of Contract J04061C03, Programmable Logic Control 5 Upgrade in the Dewatering and Drying Facility (Rebid), and Approve Changes in Total Project Cost

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Approximately 66 PLC's distributed throughout the D&D Facility provide localized control of equipment. A PLC is an industrial computer designed specifically for the control of manufacturing processes in challenging environments. The existing set of PLC's (Allen Bradley PLC5) were installed in 1994. Rockwell Automation, the parent company of Allen Bradley, announced that the PLC5 product line has reached its end of life; they have discontinued manufacturing new parts, and equipment repair depends solely upon existing parts inventory. This creates a situation where, without replacement, the District's D&D control system will ultimately be unable to control the D&D Facility.

It is critical that PLC control equipment be functional and maintainable for the continued operation of the D&D Facility. The purpose of this project is to replace the existing PLC5 control platform and accompanying control equipment with a modern, serviceable control platform and equipment. The improved functionality of the new control equipment will provide enhanced performance, fault tolerance, and safety.

Under Contract J04061C03, the contractor will:

- Upgrade 60 PLC5s to Allen Bradley ControlLogix PLC's.
- Upgrade network switches and cabling to improve the capability of the existing PLC communication network.
- Replace existing alarm annunciators with human/machine interface panels.
- Provide hardware and programming enhancements to improve operator control, visibility, fault tolerance, and safety.
- Provide control system integration, testing, commissioning, startup, training, and documentation.

Upgrades to the remaining six PLC's in the D&D Facility are included with other contracts that are replacing their PLC controlled equipment.

The duration of this contract is 3.75 years.

The low bid received by the District is less than budgeted, and staff requests to decrease the TPC accordingly.

In March 2021, District staff requested the Operations Committee to award Contract J04061C01 to AICS. This contract consisted of generally the same scope of services as proposed contract J04061C03. After Committee approval, AICS notified District staff that they were unable to obtain a performance bond for J04061C01. Subsequently, the Commission did not award this contract, and, in April 2021, the Commission rejected all bids for this contract.

## SUMMARY (Cont'd)

Award of Contract J04061C03, Programmable Logic Control 5 Upgrade in the Dewatering and Drying Facility (Rebid), and Approve Changes in Total Project Cost

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Staff revised the J04061C01 bid documents to create the J04061C03 bid documents. After the J04061C03 bid opening, staff questioned AICS about their ability to obtain a performance bond for this proposed contract. AICS's bond surety has provided a written statement indicating that they will issue the required performance bond.

## RESOLUTION

Award of Contract J04061C03, Programmable Logic Control 5 Upgrade in the Dewatering and Drying Facility (Rebid), and Approve Changes in Total Project Cost

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**RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that Contract J04061C03, Programmable Logic Control 5 Upgrade in the Dewatering and Drying Facility (Rebid), is awarded to Allan Integrated Control Systems, Inc., in the amount of $2,744,900, and that the Executive Director is directed to execute a contract on behalf of the District.

**FURTHER RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that the total project cost for Project J04061, Dewatering and Drying Programmable Logic Control 5 Upgrades, is decreased by $1,158,039 for an amended total project cost of $6,740,000, and that a corresponding change is made to the total project cost for Project M99001, Allowance for Cost and Schedule Changes.

# Capital Budget Fiscal Note
# Total Project Cost

**RELATING TO:** Award of Contract J04061C03, Programmable Logic Control 5 Upgrade in the Dewatering and Drying Facility (Rebid), and Approve Changes in Total Project Cost

**Capital Project Number(s)**

J04061

**Impact of Requested Action on Total Project Cost:**

☐ Increase ☒ Decrease ☐ New Project ☐ No Change

| **Total Project Cost Analysis** | **Project Costs** |
|---|---|
| Adopted 2021 Total Project Cost | $7,898,039 |
| Previously Approved Changes | $0 |
| Approved Total Project Cost | $7,898,039 |
| Requested Total Project Cost | $6,740,000 |
| Requested (Increase)/Decrease | $1,158,039 |

**Action to be taken to Long-Range Financing Plan to address Total Project Cost change**

_____ Transfer from Allowance for Cost and Schedule Changes
_____ Transfer from another project (specify in comments)
_____ Delay Project(s) (specify in comments)
_____ Delete Project(s) (specify in comments)
_____ Other _____
X Transfer to Allowance for Cost and Schedule Changes

**Comments**

The low bid received is less than budgeted and staff are requesting a decrease in the total project cost.

Budget Review by: Christine Durkin

Date: 5/12/2021

**Award of Contract J04061C03, Programmable Logic Control 5 Upgrade in the Dewatering and Drying Facility (Rebid), and Approve Changes in Total Project Cost**

**Procurement & S/W/MBE Summary Information**

**Contract #** J04061C03 **Cost Center:** ENG

**Programmable Logic Control 5 Upgrade in the Dewatering and Drying Facility (Rebid), and Approve Changes in Total Project Cost**

## BID SUMMARY

Bid Opening Date: 4/28/2021

| | Total | SWMBE | Local |
|---|---|---|---|
| # of Bids | 2 | 1 | 0 |
| # of Responsive Bids | 2 | 1 | 0 |

| Bidders | Price | Responsive? | Responsible? | % Sub | % SWMBE |
|---|---|---|---|---|---|
| Allan Integrated Control Systems, Inc.<br>East Troy, WI 53120<br>(WBE) | $2,744,900.00 | Responsive | Responsible | 34.3% | 80.3% |
| Next Electric<br>Waukesha, WI 53186 | $4,525,700.00 | Responsive | Responsible | Not provided | 20.0% |

## SUBCONTRACTOR INFORMATION

| Type | Subcontractor Name | Type of Work | % | Amount |
|---|---|---|---|---|
| MBE | Globetrotters Engineering<br>Chicago, IL 60606 | Engineering services - creating CAD files | 14.6% | $400,000.00 |
| Non-SWMBE | Staff Electric<br>Menomonee Falls, WI 53051 | Electrical work | 19.7% | $540,150.00 |

## ECONOMIC DEVELOPMENT ELEMENTS

Workforce Requirements

Sanitary Sewer Service Area (SSSA) Employment: 20%

Target Area (TA) Employment: 10%

# Apprentices Required: *(2) Apprentices; (2) Interns

## OUTREACH INFORMATION

The Procurement team performed the following outreach: advertised in the Daily Reporter, sent an e-mail notification to all registered firms in the mechanical and electrical categories, sent targeted e-mails to potential prime bidders and notified the various local chambers of commerce. The bid opportunity is also publicly accessible from the MMSD website and Quest CDN. Quest CDN also performs outreach to its users when a bid is posted.

S/W/MBE Planholders:

Allan Integrated Control Systems, Inc., HPI Energy Services, SOAP Engineering, Enhanced Automation, MG Automation, Inc.

If no or low S/W/MBE participation, explain why:

NA

Additional Comments:

Apprentices: (2) apprentices shall be employed when journeymen are employed; Interns: (2) interns working 400 hours each shall be employed from within the Target Area

## AWARDEE INFORMATION

| | |
|---|---|
| Company: | Allan Integrated Control Systems Inc. |
| Contact Person: | Ted Zess |
| Phone Number: | (262) 642-7800 |
| E-mail Address: | tzess@allan-ics.com |

## EEO DATA

Location: 2021 Beulah Avenue, East Troy, WI 53120

Total # of Employees: 13

| | Total | % | | Total | % |
|---|---|---|---|---|---|
| **Minorities** | 0 | 0.0% | **Females** | 2 | 15.4% |
| African American | 0 | 0.0% | African American | 0 | 0.0% |
| Asian | 0 | 0.0% | Asian | 0 | 0.0% |
| Hispanic | 0 | 0.0% | Hispanic | 0 | 0.0% |
| Native American | 0 | 0.0% | Native American | 0 | 0.0% |

*Labor Market Availability - Minorities* 22.0%

*Labor Market Availability - Females* 49.0%

Item 3

**COMMISSION FILE NO:** 21-079-6 **DATE INTRODUCED:** June 14, 2021

**INTRODUCED BY:** Executive Director (Signature on File in the Office of the Commission)

**REFERRED BY COMMISSION CHAIRPERSON TO:** Operations Committee

**RELATING TO**: Change Order Request, Contract J04064E01, Preliminary Engineering, Jones Island Water Reclamation Facility Chaff System Improvements

**SUMMARY:**

The Commission is requested to authorize the Executive Director to execute a change order to Contract J04064E01, Preliminary Engineering, Jones Island Water Reclamation Facility (JIWRF) Chaff System Improvements, with Applied Technologies, Inc., (ATI) in an amount not to exceed $127,000.

At JIWRF, the Dewatering and Drying (D&D) Facility processes biosolids from both JIWRF and the South Shore Water Reclamation Facility and produces Milorganite®. The Milorganite® production process utilizes up to 12 rotary dryers to heat-dry dewatered biosolids. The dryers use hot gases from either turbines fueled by natural or landfill gas or natural gas or landfill gas fired directly in the dryers. As the hot gases dry the sludge via direct contact, they accumulate particulate matter in the gas stream, which can result in air pollution if the particulate matter is not removed. To capture this particulate matter, each dryer discharges exhaust gases through an air pollution control system consisting of a dedicated cyclone separator, quench chamber, wet electrastic precipitator (WESP), and induced draft fan.

In addition, Milorganite® production and transport creates significant dust, chaff, and particulate matter that must be captured and disposed. This material must be managed, as otherwise it can create explosion and health risks and is a source of air pollution. There are several collection, containment, and transfer systems within the D&D facility that both interact with the air pollution control system to remove particulate matter and also transport the collected dust and chaff to luggers for disposal at a landfill.

**ATTACHMENTS:** **BACKGROUND** ☐ **KEY ISSUES** ☐ **RESOLUTION** ☒
**FISCAL NOTE** ☒ **S/W/MBE** ☐ **OTHER** ☐ ____

*OP_J04064E01_CO_Chaff_System_Improvements_legislative_file.docx*
*05-21-21*

**COMMITTEE ACTION:** _____ **DATE:** _____

**COMMISSION ACTION:** _____ **DATE:** _____

These systems originally went into operation in 1994. Some of the equipment has never been replaced and is nearing the end of its useful service life. Some of the equipment has had performance issues, resulting in downstream operation and maintenance issues. Unplanned operation and maintenance issues can result in reduced capacity to process biosolids. The performance of the air pollution control systems are regulated by the Wisconsin Department of Natural Resources via air permits. Reliable and proper operation is critical to ensure continued air permit compliance.

District staff created Project J04064, Chaff System Improvements, with the purpose of ensuring reliable biosolids processing and Milorganite® production capabilities and reliable air permit compliance. In April 2020, the Executive Director executed a preliminary engineering contract (J04064E01) with ATI in an amount of $249,268. This contract was to perform preliminary engineering services related to the following systems within the D&D Facility:

- Dryer and Screener (Classification) Area Dust Containment System
- WESP System
- Cyclone Waste Processing System
- Dryer Exhaust System

The scope of this contract included assessing current conditions and functions and identifying means to improve performance, reduce unplanned maintenance, increase reliability, and reduce the risk of air permit noncompliance, all related to the above systems.

ATI has completed the original preliminary engineering scope of services. The preliminary engineering phase identified about 20 separate recommendations to improve the performance, reliability, and safety of these systems. Staff recommends that the District begin design of three of those improvements, as they address higher priority safety related issues. Following are descriptions of these three improvements:

1. Replace the horizonal inlet ductwork to all 12 cyclone waste processing and exhaust systems with smaller diameter ducts. The current ductwork is oversized, reducing air velocity in the ductwork and resulting in dust settlement in the ductwork. Buildup of dust within this ductwork was identified as a possible cause to a recent fire within the Dryer #10 WESP system.

2. Modify the quench chamber drains on all 12 WESP systems to prevent plugging. This improvement will reduce the likelihood of dust combustion in the WESP system.

3. Replace the existing grated flooring with solid flooring on the mezzanine level over the chaff storage room. Grated flooring allows air movement from the chaff storage room throughout the entire D&D Facility, leading to elevated safety risks because of fugitive dust. Solid flooring will contain the dust within the chaff storage room.

The requested change order under Contract J04064E01 includes additional project management services and the following new tasks, all related to engineering design services for the above three improvements:

- Design services
- Bid and award services
- Engineering services during construction
- Operations and maintenance manual updates, training, and startup services
- Applications engineering

After the design work is complete, the District will publicly bid this construction contract.

District staff will develop a request for proposal for the engineering design services for the remainder of the improvements identified as part of the preliminary engineering phase.

This change order request will increase the duration for this contract by approximately 66 weeks.

**CHANGE ORDER SUMMARY**

| PURCHASE ORDER | AMOUNT | PERCENT INCREASE OVER ORIGINAL PURCHASE ORDER | AUTHORIZED BY | SWMBE |
|---|---|---|---|---|
| Original | $249,268 | | Executive Director | 78% |
| Requested Change Order | $127,000 | 49% | Request of Commission | 79% |
| **TOTAL** | **$376,268** | | | 79% |

## RESOLUTION

Change Order Request, Contract J04064E01, Preliminary Engineering, Jones Island Water Reclamation Facility Chaff System Improvements

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**RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that the Executive Director is authorized to execute a change order to Contract J04064E01, Preliminary Engineering, Jones Island Water Reclamation Facility Chaff System Improvements, with Applied Technologies, Inc., in an amount not to exceed $127,000.

# Capital Budget Fiscal Note
# Total Project Cost

**RELATING TO:** Change Order Request, Contract J04064E01, Preliminary Engineering Jones Island Water Reclamation Facility Chaff System Improvements

| **Capital Project Number(s)** | **Impact of Requested Action on Total Project Cost:** |
|---|---|
| **J04064** | ☐ Increase ☐ Decrease ☐ New Project ☒ No Change |

| **Total Project Cost Analysis** | **Project Costs** |
|---|---|
| Adopted 2021 Total Project Cost | $14,269,244 |
| Previously Approved Changes | $0 |
| Approved Total Project Cost | $14,269,244 |
| Requested Total Project Cost | n/a |
| Requested (Increase)/Decrease | $0 |

**Action to be taken to Long-Range Financing Plan to address Total Project Cost change**

_____ Transfer from Allowance for Cost and Schedule Changes
_____ Transfer from another project (specify in comments)
_____ Delay Project(s) (specify in comments)
_____ Delete Project(s) (specify in comments)
_____ Other _____
_____ Transfer to Allowance for Cost and Schedule Changes

**Comments**

Budget Review by: Christine Durkin

Date: 5/12/2021

Item 4

**COMMISSION FILE NO:** 21-080-6 **DATE INTRODUCED:** June 14, 2021

**INTRODUCED BY:** Executive Director (Signature on File in the Office of the Commission)

**REFERRED BY COMMISSION CHAIRPERSON TO:** Operations Committee

**RELATING TO**: Award of Contract J06075C17, Bar Screen Nos. 1, 2, 4, 7, and 8 Rehabilitation and Bar Screen No. 6 Replacement at the Jones Island Water Reclamation Facility

**SUMMARY:**

The Commission is requested to award and to direct the Executive Director to execute on behalf of the District Contract J06075C17, Bar Screen Nos. 1, 2, 4, 7, and 8 Rehabilitation and Bar Screen No. 6 Replacement at the Jones Island Water Reclamation Facility (JIWRF), with J.F. Ahern Company (Ahern) in an amount of $231,000. Ahern was the lowest responsible, responsive bidder among three bids received.

At JIWRF, eight bar screens are used to screen rags, large solids, and other debris from plant influent. Depending upon flows and influent solids loads, six (and at times seven) screens are in service to maintain full plant capacity of 330 million gallons per day (MGD). Each bar screen is a series of vertical bars spaced one quarter inch apart, mounted to a stationary frame. The bars are mounted to the frame in groups or racks. To remove screenings, each bar screen uses a series of chain driven rakes that travel vertically upward along the front face of the bar screen. The rakes carry the screenings out of the wastewater and discharge them into a wash press. The wash press cleans the screenings, then squeezes them dry before discharging to screw conveyors. These conveyers carry the compressed screenings to roll off containers, which are then hauled to a landfill.

The existing bar screen equipment, which was supplied by Huber Technology, Inc., (Huber) as part of a District construction contract, has been in service since 2013. The equipment has experienced significant wear, and large debris has damaged some of these screens. Due to this wear and damage, over the past several months, three bar screens (#3, #5, and #6) have been taken out of service. In addition, bar screen #8 is in very poor condition and is only available on a limited, emergency basis. During this time, Veolia Water Milwaukee (VWM) has had to reduce JIWRF wet weather capacity.

**ATTACHMENTS:** **BACKGROUND** ☐ **KEY ISSUES** ☐ **RESOLUTION** ☒

**FISCAL NOTE** ☒ **S/W/MBE** ☒ **OTHER** ☐ ____



**COMMITTEE ACTION:** _____ **DATE:** _____

**COMMISSION ACTION:** _____ **DATE:** _____

## SUMMARY (Cont'd)

Award of Contract J06075C17, Bar Screen Nos. 1, 2, 4, 7, and 8 Rehabilitation and Bar Screen No. 6 Replacement at the Jones Island Water Reclamation Facility

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Two of these three units (#3 and #5) have recently been repaired and restored to service. While this provides nominal screening capacity of 330 MGD, there is now no redundancy. Bar screen #6 needs to be replaced and remains out of service.

Rehabilitation and repair of screens #1, #2, #4, #7, and #8 consist of replacing multiple parts on each screen.

As the bar screen parts are long lead items, in April 2021, the Commission authorized purchase of the bar screen parts directly from Huber. Staff has since advertised a separate construction contract (J06075C17) that will replace the existing worn bar screen parts on screens #1, #2, #4, #7, and #8 and replace screen #6 in its entirety, using the parts supplied separately by Huber. This proposed Commission request is the award of that publicly bid contract.

Each bar screen repair or replacement is considered a Material Capital Repair or Replacement (MCRR) project under the terms of the Operations and Maintenance agreement with VWM. Following are the MCRR numbers associated with each screen.

| Bar Screen # | MCRR # | Repair or Replace | Estimated Return to Service Date |
|---|---|---|---|
| 1 | 1441 | Repair | September 2021 |
| 2 | 1442 | Repair | September 2021 |
| 4 | 1443 | Repair | October 2021 |
| 6 | 1425 | Replace | January 2022 |
| 7 | 1444 | Repair | October 2021 |
| 8 | 1438 | Repair | November 2021 |

## RESOLUTION

Award of Contract J06075C17, Bar Screen Nos. 1, 2, 4, 7, and 8 Rehabilitation and Bar Screen No. 6 Replacement at the Jones Island Water Reclamation Facility

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**RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that Contract J06075C17, Bar Screen Nos. 1, 2, 4, 7, and 8 Rehabilitation and Bar Screen No. 6 Replacement at the Jones Island Water Reclamation Facility, is awarded to J.F. Ahern Company in the amount of $231,000, and that the Executive Director is directed to execute a contract on behalf of the District.

# Capital Budget Fiscal Note
# Total Project Cost

**RELATING TO:** Award of Contract J06075C17 for Bar Screen Nos. 1, 2, 4, 7, and 8 Rehabilitation and Bar Screen No. 6 Replacement at the Jones Island Water Reclamation Facility

| **Capital Project Number(s)** | **Impact of Requested Action on Total Project Cost:** |
|---|---|
| **J06075** | ☐ Increase ☐ Decrease ☐ New Project ☒ No Change |

| **Total Project Cost Analysis** | **Project Costs** |
|---|---|
| Adopted 2021 Total Project Cost | $15,628,145 |
| Previously Approved Changes | $0 |
| Approved Total Project Cost | $15,628,145 |
| Requested Total Project Cost | n/a |
| Requested (Increase)/Decrease | $0 |

**Action to be taken to Long-Range Financing Plan to address Total Project Cost change**

_____ Transfer from Allowance for Cost and Schedule Changes
_____ Transfer from another project (specify in comments)
_____ Delay Project(s) (specify in comments)
_____ Delete Project(s) (specify in comments)
_____ Other _____
_____ Transfer to Allowance for Cost and Schedule Changes

**Comments**

Budget Review by: Christine Durkin

Date: 5/11/2021

**Award of Contract J06075C17 for Bar Screen Nos. 1, 2, 4, 7, and 8 Rehabilitation and Bar Screen No. 6 Replacement at the Jones Island Water Reclamation Facility**

**Procurement & S/W/MBE Summary Information**

**Contract #** **J06075C17** **Cost Center:** **OCC**

**Bar Screen Nos. 1, 2, 4, 7 and 8 Rehabilitation and Bar Screen No. 6 Replacement at the Jones Island Water Reclamation Facility**

## BID SUMMARY

Bid Opening Date: 5/6/2021

| | Total | SWMBE | Local |
|---|---|---|---|
| # of Bids | 3 | 1 | 2 |
| # of Responsive Bids | 3 | 1 | 2 |

| Bidders | Price | Responsive? | Responsible? | % Sub | % SWMBE |
|---|---|---|---|---|---|
| J.F. Ahern Co.<br>Fond du Lac, WI 54935 | $231,000.00 | Responsive | Responsible | 39.3% | 38.8% |
| Doral Corporation<br>Milwaukee, WI 53207 | $276,995.00 | Responsive | Responsible | Not provided | 32.0% |
| Price Erecting Co., Inc.<br>Milwaukee, WI 53214<br>(WBE) | $285,524.00 | Responsive | Responsible | 32.3% | 99.1% |

## SUBCONTRACTOR INFORMATION

| Type | Subcontractor Name | Type of Work | % | Amount |
|---|---|---|---|---|
| SBE | Energenecs<br>Saukville, WI 53080 | Huber inspection, start-up, and training | 38.8% | $89,632.00 |
| Non-SWMBE | Next Electric<br>Waukesha, WI 53186 | Electrical | 0.5% | $1,100.00 |

## ECONOMIC DEVELOPMENT ELEMENTS

Workforce Requirements

Sanitary Sewer Service Area (SSSA) Employment: 45%

Target Area (TA) Employment: 20%

# Apprentices Required: 0

## OUTREACH INFORMATION

The Procurement team performed the following outreach: advertised in the Daily Reporter and sent an e-mail notification to all registered firms in the Construction category. The bid opportunity is also publicly accessible from the MMSD website and Quest CDN. Quest CDN also performs outreach to its users when a bid is posted.

S/W/MBE Planholders:
Energenecs; Integrated Process Solutions; Price Erecting Co., Inc.

If no or low S/W/MBE participation, explain why:
n/a

Additional Comments:
n/a

## AWARDEE INFORMATION

| | |
|---|---|
| Company: | J.F. Ahern Co. |
| Contact Person: | John Paap |
| Phone Number: | (920) 907-5536 |
| E-mail Address: | jpaap@jfahern.com |

## EEO DATA

Location: 855 Morris Street Fond du Lac, WI 54935

Total # of Employees: 1,318

| | Total | % | | Total | % |
|---|---|---|---|---|---|
| **Minorities** | 54 | 4.1% | **Females** | 194 | 14.7% |
| Asian | 6 | 0.5% | Asian | 1 | 0.1% |
| Black or African American | 9 | 0.7% | Black or African American | 0 | 0.0% |
| Hispanic or Latino | 25 | 1.9% | Hispanic or Latino | 2 | 0.2% |
| Native American | 5 | 0.4% | Native American | 0 | 0.0% |
| Other Minority | 9 | 0.7% | Other Minority | 0 | 0.0% |

*Labor Market Availability - Minorities* 22.0%

*Labor Market Availability - Females* 49.0%

Item 5

**COMMISSION FILE NO:** 21-081-6 **DATE INTRODUCED:** June 14, 2021

**INTRODUCED BY:** Executive Director (Signature on File in the Office of the Commission)

**REFERRED BY COMMISSION CHAIRPERSON TO:** Operations Committee

**RELATING TO**: Award of Contract S06038C16, Waste Activated Sludge Pump Replacements at South Shore Water Reclamation Facility

**SUMMARY:**

The Commission is requested to award and to direct the Executive Director to execute on behalf of the District Contract S06038C16, Waste Activated Sludge (WAS) Pump Replacements at South Shore Water Reclamation Facility (SSWRF), to Lee Plumbing Mechanical Contractors, Inc., (Lee Mechanical) in the amount of $224,765. Lee Mechanical was the lowest responsible, responsive bidder among three bids received.

The activated sludge process is one of the fundamental steps in the water reclamation process. The process involves growing microorganisms in large aeration basins, where the microorganisms consume the organic material in wastewater. The source of the microorganisms is return activated sludge (RAS) from secondary clarifiers, which combine with primary clarifier effluent at the beginning of the aeration basins to form mixed liquor. The mixed liquor is continuously supplied with oxygen for several hours, which allows and promotes the microorganisms to consume the organic material in the wastewater.

The mixed liquor travels through the aeration basins to the secondary clarifiers. In the secondary clarifiers, the mixed liquor settles by gravity, creating activated sludge. The activated sludge is collected at the bottom of each secondary clarifier. Most of this activated sludge is returned as RAS and combined again with the primary clarifer effluent at the beginning of the aeration basins. With the continuous supply of new organic material, excess activated sludge is produced in the secondary clarifiers, which then must be “wasted”, creating WAS. WAS pumps remove the WAS from the SSWRF secondary clarifiers by either sending the WAS to the digesters for storage or pumping the WAS to the Jones Island Water Reclamation Facility for Milorganite® production.

**ATTACHMENTS:** **BACKGROUND** ☐ **KEY ISSUES** ☐ **RESOLUTION** ☒
**FISCAL NOTE** ☒ **S/W/MBE** ☒ **OTHER** ☐ ____

*OP_Award_S06038C16_WasteActivatedSludgePumps_legislative_file.docx*
*05-17-21*

**COMMITTEE ACTION:** _____ **DATE:** _____

**COMMISSION ACTION:** _____ **DATE:** _____

## SUMMARY (Cont'd)

Award of Contract S06038C16, Waste Activated Sludge Pump Replacements at South Shore Water Reclamation Facility

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At SSWRF, there are four WAS pumps (WAS Pumps 1, 2, 3, and 4). The four WAS pumps were installed in 1984 and have exceeded their useful service lives. Rotating parts show signs of severe wear, metallic parts are corroded beyond repair, and the pump seals leak activated sludge on the floor. This results in pumps frequently requiring repairs, and, if multiple pumps are out at the same time, could result in reduced plant capacity. The purpose of this project is to help ensure a reliable means to withdraw WAS from the system and keep the plant at full capacity.

Under this contract, the contractor will:

- Remove the existing pump motors, motor stands, pumps, suction elbows, and pump pedestals.
- Blast clean and epoxy coat the existing motor stands, suction elbows, and pump pedestals.
- Install new pumps and pump motors.
- Connect, align, and balance the four new pumps and motors.
- Perform pump startup and testing.

The contract duration is 240 days.

## RESOLUTION

Award of Contract S06038C16, Waste Activated Sludge Pump Replacements at South Shore Water Reclamation Facility

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**RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that Contract S06038C16, Waste Activated Sludge Pump Replacements at South Shore Water Reclamation Facility, is awarded to Lee Plumbing Mechanical Contractors, Inc., in the amount of $224,765, and that the Executive Director is directed to execute a contract on behalf of the District.

# Capital Budget Fiscal Note
# Total Project Cost

**RELATING TO:** Award of Contract S06038C16, Waste Activated Sludge Pump Replacements at South Shore Water Reclamation Facility

**Capital Project Number(s)**

S06038

**Impact of Requested Action on Total Project Cost:**

☐ Increase ☐ Decrease ☐ New Project ☒ No Change

| **Total Project Cost Analysis** | **Project Costs** |
|---|---|
| Adopted 2021 Total Project Cost | $18,199,556 |
| Previously Approved Changes | $0 |
| Approved Total Project Cost | $18,199,556 |
| Requested Total Project Cost | n/a |
| Requested (Increase)/Decrease | $0 |

**Action to be taken to Long-Range Financing Plan to address Total Project Cost change**

_____ Transfer from Allowance for Cost and Schedule Changes
_____ Transfer from another project (specify in comments)
_____ Delay Project(s) (specify in comments)
_____ Delete Project(s) (specify in comments)
_____ Other _____
_____ Transfer to Allowance for Cost and Schedule Changes

**Comments**

Budget Review by: Christine Durkin

Date: 5/12/2021

**Award of Contract S06038C16, Waste Activated Sludge Pump Replacements at South Shore Water Reclamation Facility**

**Procurement & S/W/MBE Summary Information**

**Contract #** S06038C16 **Cost Center:** OCC

**Waste Activated Sludge Pump Replacements at South Shore Water Reclamation Facility**

## BID SUMMARY

Bid Opening Date: 4/9/2021

| | Total | SWMBE | Local |
|---|---|---|---|
| # of Bids | 3 | 0 | 1 |
| # of Responsive Bids | 3 | 0 | 1 |

| Bidders | Price | Responsive? | Responsible? | % Sub | % SWMBE |
|---|---|---|---|---|---|
| Lee Plumbing Mechanical Contractors, Inc. Kenosha, WI 53140 | $224,765.00 | Responsive | Responsible | 75.4% | 73.0% |
| J.F. Ahern Co. Fond du Lac, WI 54935 | $229,475.00 | Responsive | Responsible | 73.4% | 71.5% |
| Butters-Fetting Co. Milwaukee, WI 53204 | $237,750.00 | Responsive | Responsible | 77.2% | 77.2% |

## SUBCONTRACTOR INFORMATION

| Type | Subcontractor Name | Type of Work | % | Amount |
|---|---|---|---|---|
| MBE | Thomas A. Mason Co., Inc. Milwaukee, WI 53203 | Painting | 5.3% | $11,998.00 |
| SBE | Crane Engineering Sales Kimberly, WI 54136 | Pump supplier | 67.6% | $152,000.00 |
| Non-SWMBE | Pieper Electric, Inc. New Berlin, WI 53151 | Electrical | 2.4% | $5,500.00 |

## ECONOMIC DEVELOPMENT ELEMENTS

Workforce Requirements

Sanitary Sewer Service Area (SSSA) Employment: 45%

Target Area (TA) Employment: 20%

# Apprentices Required: 0

## OUTREACH INFORMATION

The Procurement team performed the following outreach: advertised in the Daily Reporter and sent an e-mail notification to all registered firms in the Construction category. The bid opportunity is also publicly accessible from the MMSD website and Quest CDN. Quest CDN also performs outreach to its users when a bid is posted.

S/W/MBE Planholders:
Crane Engineering Sales

If no or low S/W/MBE participation, explain why:
n/a

Additional Comments:
n/a

## AWARDEE INFORMATION

| | |
|---|---|
| Company: | Lee Plumbing Mechanical Contractors, Inc. |
| Contact Person: | Dave Ruffalo |
| Phone Number: | (262) 771-5214 |
| E-mail Address: | druffalo@selectlee.com |

## EEO DATA

Location: 2915 60th Street Kenosha, WI 53140

Total # of Employees 208

| | Total | % | | Total | % |
|---|---|---|---|---|---|
| **Minorities** | 10 | 4.8% | **Females** | 16 | 7.7% |
| African American | 4 | 1.9% | African American | 1 | 0.5% |
| Asian | 1 | 0.5% | Asian | 0 | 0.0% |
| Hispanic | 5 | 2.4% | Hispanic | 1 | 0.5% |
| Native American | 0 | 0.0% | Native American | 0 | 0.0% |

*Labor Market Availability - Minorities* 22.0%

*Labor Market Availability - Females* 49.0%

Item 6

**COMMISSION FILE NO:** 21-082-6 **DATE INTRODUCED:** June 14, 2021

**INTRODUCED BY:** Executive Director (Signature on File in the Office of the Commission)

**REFERRED BY COMMISSION CHAIRPERSON TO:** Operations Committee

**RELATING TO**: Review of the 2020 Wisconsin Department of Natural Resources Compliance Maintenance Annual Reports for the Jones Island and South Shore Water Reclamation Facilities

**SUMMARY:**

The Commission is requested to review the Jones Island Water Reclamation Facility (JIWRF) 2020 Compliance Maintenance Annual Report (CMAR) and to authorize the Executive Director to transmit the JIWRF CMAR to the Wisconsin Department of Natural Resources (WDNR) by June 30, 2021.

Further, the Commission is requested to review the South Shore Water Reclamation Facility (SSWRF) 2020 CMAR and to authorize the Executive Director to transmit the SSWRF CMAR to WDNR by June 30, 2021.

Chapters NR-208 and NR-210 of the Wisconsin Administrative Code require that a CMAR be submitted annually for each wastewater treatment plant. The Wisconsin Administrative Code also requires that the governing body of each publicly owned treatment works review the CMAR for the facilities under its jurisdiction and authorize staff to transmit the report to WDNR. Under the rules, submission to WDNR is required by June 30 of each year for the prior year's report.

**ATTACHMENTS:** **BACKGROUND** ☐ **KEY ISSUES** ☐ **RESOLUTION** ☒

**FISCAL NOTE** ☐ **S/W/MBE** ☐ **OTHER** ☒ 2020 JI and SS CMAR's

*OP_Review_2020_WDNR_CMARs_legislative_file.docx*
*05-21-21*

**COMMITTEE ACTION:** _____ **DATE:** _____

**COMMISSION ACTION:** _____ **DATE:** _____

## SUMMARY (Cont'd)

Review of the 2020 Wisconsin Department of Natural Resources Compliance Maintenance Annual Reports for the Jones Island and South Shore Water Reclamation Facilities

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The CMAR is essentially a score card that evaluates collection and treatment system performance in different categories. Each category is scored and graded. The results from each category are then combined into an overall grade. The categories and their results for 2020, as currently shown in the WDNR electronic database, are as follows:

| CMAR CATEGORY | JIWRF | SSWRF |
|---|---|---|
| Influent Flow and Loadings | A | A |
| Effluent Quality: Biochemical Oxygen Demand (BOD) | A | A |
| Effluent Quality: Total Suspended Solids | A | A |
| Effluent Quality: Ammonia | N/A | A |
| Effluent Quality: Phosphorus | A | A |
| Biosolids Management | A | A |
| Staffing and Preventive Maintenance | A | A |
| Operator Certification | A | A |
| Financial Management | A | A |
| Collection Systems | A | A |
| **OVERALL GRADE** | **4.00** | **4.00** |

A history of overall grade point averages for 2010 through 2020 for both facilities is shown in the table below.

| | 2020 | 2019 | 2018 | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **JIWRF** | 4.00 | 4.00 | 3.91 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 3.91 |
| **SSWRF** | 4.00 | 4.00 | 3.59 | 3.79 | 3.75 | 4.00 | 3.90 | 3.79 | 3.84 | 3.84 | 3.46 |

## RESOLUTION

Review of the 2020 Wisconsin Department of Natural Resources Compliance Maintenance Annual Reports for the Jones Island and South Shore Water Reclamation Facilities

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**RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that the Commission has reviewed the 2020 Compliance Maintenance Annual Report for the Jones Island Water Reclamation Facility and authorizes the Executive Director to submit the 2020 Jones Island Water Reclamation Facility Compliance Maintenance Annual Report and this resolution to the Wisconsin Department of Natural Resources by June 30, 2021.

**FURTHER RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that the Commission has reviewed the 2020 Compliance Maintenance Annual Report for the South Shore Water Reclamation Facility and authorizes the Executive Director to submit the 2020 South Shore Water Reclamation Facility Compliance Maintenance Annual Report and this resolution to the Wisconsin Department of Natural Resources by June 30, 2021.

# Compliance Maintenance Annual Report

JONES ISLAND

**Milwaukee Metro Sew Dist Combined**

Last Updated: 5/7/2021 Reporting For: **2020**

## Influent Flow and Loading

1. Monthly Average Flows and BOD Loadings

1.1 Verify the following monthly flows and BOD loadings to your facility.

| Influent No. 701 | Influent Monthly Average Flow, MGD | x | Influent Monthly Average BOD Concentration mg/L | x | 8.34 | = | Influent Monthly Average BOD Loading, lbs/day |
|---|---|---|---|---|---|---|---|
| January | 94.8387 | x | 224 | x | 8.34 | = | 177,225 |
| February | 85.2759 | x | 231 | x | 8.34 | = | 164,067 |
| March | 116.4194 | x | 217 | x | 8.34 | = | 210,881 |
| April | 99.8333 | x | 205 | x | 8.34 | = | 170,824 |
| May | 157.2258 | x | 158 | x | 8.34 | = | 207,814 |
| June | 102.7333 | x | 180 | x | 8.34 | = | 153,909 |
| July | 133.7742 | x | 164 | x | 8.34 | = | 182,971 |
| August | 107.9032 | x | 216 | x | 8.34 | = | 194,526 |
| September | 83.3000 | x | 270 | x | 8.34 | = | 187,575 |
| October | 75.5806 | x | 293 | x | 8.34 | = | 184,833 |
| November | 81.6000 | x | 272 | x | 8.34 | = | 185,335 |
| December | 89.3226 | x | 240 | x | 8.34 | = | 178,668 |

2. Maximum Monthly Design Flow and Design BOD Loading

2.1 Verify the design flow and loading for your facility.

| Design | Design Factor | x | % | = | % of Design |
|---|---|---|---|---|---|
| Max Month Design Flow, MGD | 160 | x | 90 | = | 144 |
| | | x | 100 | = | 160 |
| Design BOD, lbs/day | 388000 | x | 90 | = | 349200 |
| | | x | 100 | = | 388000 |

2.2 Verify the number of times the flow and BOD exceeded 90% or 100% of design, points earned, and score:

| | Months of Influent | Number of times flow was greater than 90% of | Number of times flow was greater than 100% of | Number of times BOD was greater than 90% of design | Number of times BOD was greater than 100% of design |
|---|---|---|---|---|---|
| January | 1 | 0 | 0 | 0 | 0 |
| February | 1 | 0 | 0 | 0 | 0 |
| March | 1 | 0 | 0 | 0 | 0 |
| April | 1 | 0 | 0 | 0 | 0 |
| May | 1 | 1 | 0 | 0 | 0 |
| June | 1 | 0 | 0 | 0 | 0 |
| July | 1 | 0 | 0 | 0 | 0 |
| August | 1 | 0 | 0 | 0 | 0 |
| September | 1 | 0 | 0 | 0 | 0 |
| October | 1 | 0 | 0 | 0 | 0 |
| November | 1 | 0 | 0 | 0 | 0 |
| December | 1 | 0 | 0 | 0 | 0 |
| Points per each | | 2 | 1 | 3 | 2 |
| Exceedances | | 1 | 0 | 0 | 0 |
| Points | | 2 | 0 | 0 | 0 |
| **Total Number of Points** | | | | | **2** |

**2**

# Compliance Maintenance Annual Report

**Milwaukee Metro Sew Dist Combined**

Last Updated: 5/7/2021 Reporting For: **2020**

3. Flow Meter

3.1 Was the influent flow meter calibrated in the last year?

● Yes Enter last calibration date (MM/DD/YYYY)
2020-11-24

○ No

If No, please explain:

Jones Island influent flow meters were calibrated with the schedule below. High Level influent meter: 2/26/2020, 5/13/2020
Low Level influent meter: 2/26/2020, 5/14/2020
Inline Storage System meters: 2/26/2020, 5/7/2020, 5/13/2020, 11/24/2020 Diversion meter: 5/7/2020, 8/8/2020, 8/15/2020, 10/9/2020

4. Sewer Use Ordinance

4.1 Did your community have a sewer use ordinance that limited or prohibited the discharge of excessive conventional pollutants ((C)BOD, SS, or pH) or toxic substances to the sewer from industries, commercial users, hauled waste, or residences?

● Yes

○ No

If No, please explain:

4.2 Was it necessary to enforce the ordinance?

● Yes

○ No

If Yes, please explain:

Various violations occurred. The District responds to violations according to the Enforcement Response Plan. The semi-annual and annual Pretreatment Program reports summarize the violations and the MMSD response.

5. Septage Receiving

5.1 Did you have requests to receive septage at your facility?

| Septic Tanks | Holding Tanks | Grease Traps |
|---|---|---|
| ○ Yes | ○ Yes | ○ Yes |
| ● No | ● No | ● No |

5.2 Did you receive septage at your faclity? If yes, indicate volume in gallons.

Septic Tanks
○ Yes gallons
● No

Holding Tanks
○ Yes gallons
● No

Grease Traps
○ Yes gallons
● No

5.2.1 If yes to any of the above, please explain if plant performance is affected when receiving any of these wastes.

6. Pretreatment

6.1 Did your facility experience operational problems, permit violations, biosolids quality concerns, or hazardous situations in the sewer system or treatment plant that were attributable to commercial or industrial discharges in the last year?

# Compliance Maintenance Annual Report

**Milwaukee Metro Sew Dist Combined**

Last Updated: 5/7/2021

Reporting For: **2020**

○ Yes
● No

If yes, describe the situation and your community's response.

6.2 Did your facility accept hauled industrial wastes, landfill leachate, etc.?

○ Yes
● No

If yes, describe the types of wastes received and any procedures or other restrictions that were in place to protect the facility from the discharge of hauled industrial wastes.

| | |
|---|---|
| **Total Points Generated** | 2 |
| **Score (100 - Total Points Generated)** | 98 |
| **Section Grade** | **A** |

# Compliance Maintenance Annual Report

**Milwaukee Metro Sew Dist Combined**

Last Updated: 5/7/2021 Reporting For: **2020**

## Effluent Quality and Plant Performance (BOD/CBOD)

1. Effluent (C)BOD Results

1.1 Verify the following monthly average effluent values, exceedances, and points for BOD or CBOD

| Outfall No. 002 | Monthly Average Limit (mg/L) | 90% of Permit Limit > 10 (mg/L) | Effluent Monthly Average (mg/L) | Months of Discharge with a Limit | Permit Limit Exceedance | 90% Permit Limit Exceedance |
|---|---|---|---|---|---|---|
| January | 30 | 27 | 9 | 1 | 0 | 0 |
| February | 30 | 27 | 6 | 1 | 0 | 0 |
| March | 30 | 27 | 10 | 1 | 0 | 0 |
| April | 30 | 27 | 6 | 1 | 0 | 0 |
| May | 30 | 27 | 6 | 1 | 0 | 0 |
| June | 30 | 27 | 5 | 1 | 0 | 0 |
| July | 30 | 27 | 6 | 1 | 0 | 0 |
| August | 30 | 27 | 6 | 1 | 0 | 0 |
| September | 30 | 27 | 6 | 1 | 0 | 0 |
| October | 30 | 27 | 6 | 1 | 0 | 0 |
| November | 30 | 27 | 9 | 1 | 0 | 0 |
| December | 30 | 27 | 10 | 1 | 0 | 0 |
| * Equals limit if limit is <= 10 | | | | | | |
| Months of discharge/yr | | | | 12 | | |
| Points per each exceedance with 12 months of discharge | | | | | 7 | 3 |
| Exceedances | | | | | 0 | 0 |
| Points | | | | | 0 | 0 |
| **Total number of points** | | | | | | **0** |

**0**

NOTE: For systems that discharge intermittently to state waters, the points per monthly exceedance for this section shall be based upon a multiplication factor of 12 months divided by the number of months of discharge. Example: For a wastewater facility discharging only 6 months of the year, the multiplication factor is 12/6 = 2.0

1.2 If any violations occurred, what action was taken to regain compliance?

2. Flow Meter Calibration

2.1 Was the effluent flow meter calibrated in the last year?

● Yes Enter last calibration date (MM/DD/YYYY)

2020-08-19

○ No

If No, please explain:

3. Treatment Problems

3.1 What problems, if any, were experienced over the last year that threatened treatment?

None

4. Other Monitoring and Limits

4.1 At any time in the past year was there an exceedance of a permit limit for any other pollutants such as chlorides, pH, residual chlorine, fecal coliform, or metals?

○ Yes

● No

If Yes, please explain:

4.2 At any time in the past year was there a failure of an effluent acute or chronic whole effluent toxicity (WET) test?

- ○ Yes
- ● No

If Yes, please explain:

4.3 If the biomonitoring (WET) test did not pass, were steps taken to identify and/or reduce source(s) of toxicity?

- ○ Yes
- ○ No
- ● N/A

Please explain unless not applicable:

| | |
|---|---|
| **Total Points Generated** | 0 |
| **Score (100 - Total Points Generated)** | 100 |
| **Section Grade** | **A** |

# Compliance Maintenance Annual Report

**Milwaukee Metro Sew Dist Combined**

Last Updated: 5/7/2021 Reporting For: **2020**

## Effluent Quality and Plant Performance (Total Suspended Solids)

1. Effluent Total Suspended Solids Results

1.1 Verify the following monthly average effluent values, exceedances, and points for TSS:

| Outfall No. 002 | Monthly Average Limit (mg/L) | 90% of Permit Limit >10 (mg/L) | Effluent Monthly Average (mg/L) | Months of Discharge with a Limit | Permit Limit Exceedance | 90% Permit Limit Exceedance |
|---|---|---|---|---|---|---|
| January | 30 | 27 | 7 | 1 | 0 | 0 |
| February | 30 | 27 | 5 | 1 | 0 | 0 |
| March | 30 | 27 | 8 | 1 | 0 | 0 |
| April | 30 | 27 | 5 | 1 | 0 | 0 |
| May | 30 | 27 | 6 | 1 | 0 | 0 |
| June | 30 | 27 | 4 | 1 | 0 | 0 |
| July | 30 | 27 | 5 | 1 | 0 | 0 |
| August | 30 | 27 | 6 | 1 | 0 | 0 |
| September | 30 | 27 | 5 | 1 | 0 | 0 |
| October | 30 | 27 | 5 | 1 | 0 | 0 |
| November | 30 | 27 | 6 | 1 | 0 | 0 |
| December | 30 | 27 | 6 | 1 | 0 | 0 |
| * Equals limit if limit is <= 10 | | | | | | |
| Months of Discharge/yr | | | | 12 | | |
| **Points per each exceedance with 12 months of discharge:** | | | | | **7** | **3** |
| Exceedances | | | | | 0 | 0 |
| Points | | | | | 0 | 0 |
| **Total Number of Points** | | | | | | **0** |

**0**

NOTE: For systems that discharge intermittently to state waters, the points per monthly exceedance for this section shall be based upon a multiplication factor of 12 months divided by the number of months of discharge.

Example: For a wastewater facility discharging only 6 months of the year, the multiplication factor is 12/6 = 2.0

1.2 If any violations occurred, what action was taken to regain compliance?

| | |
|---|---|
| **Total Points Generated** | 0 |
| **Score (100 - Total Points Generated)** | 100 |
| **Section Grade** | **A** |

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Last Updated: 5/7/2021

Reporting For: **2020**

## Effluent Quality and Plant Performance (Phosphorus)

1. Effluent Phosphorus Results

1.1 Verify the following monthly average effluent values, exceedances, and points for Phosphorus

| Outfall No. 002 | Monthly Average phosphorus Limit (mg/L) | Effluent Monthly Average phosphorus (mg/L) | Months of Discharge with a Limit | Permit Limit Exceedance | |
|---|---|---|---|---|---|
| January | .66 | 0.154 | 1 | 0 | |
| February | .66 | 0.136 | 1 | 0 | |
| March | .66 | 0.168 | 1 | 0 | |
| April | .66 | 0.117 | 1 | 0 | |
| May | .66 | 0.125 | 1 | 0 | |
| June | .66 | 0.135 | 1 | 0 | |
| July | .66 | 0.144 | 1 | 0 | |
| August | .66 | 0.210 | 1 | 0 | |
| September | .66 | 0.212 | 1 | 0 | |
| October | .66 | 0.147 | 1 | 0 | **0** |
| November | .66 | 0.226 | 1 | 0 | |
| December | .66 | 0.204 | 1 | 0 | |
| Months of Discharge/yr | | | 12 | | |
| **Points per each exceedance with 12 months of discharge:** | | | | **10** | |
| Exceedances | | | | 0 | |
| **Total Number of Points** | | | | **0** | |

NOTE: For systems that discharge intermittently to waters of the state, the points per monthly exceedance for this section shall be based upon a multiplication factor of 12 months divided by the number of months of discharge.

Example: For a wastewater facility discharging only 6 months of the year, the multiplication factor is 12/6 = 2.0

1.2 If any violations occurred, what action was taken to regain compliance?

| | |
|---|---|
| **Total Points Generated** | 0 |
| **Score (100 - Total Points Generated)** | 100 |
| **Section Grade** | **A** |

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## Biosolids Quality and Management

1. Biosolids Use/Disposal

1.1 How did you use or dispose of your biosolids? (Check all that apply)

- ☐ Land applied under your permit
- ☒ Publicly Distributed Exceptional Quality Biosolids
- ☐ Hauled to another permitted facility
- ☒ Landfilled
- ☐ Incinerated
- ☐ Other

NOTE: If you did not remove biosolids from your system, please describe your system type such as lagoons, reed beds, recirculating sand filters, etc.

1.1.1 If you checked Other, please describe:

About 46,417 dry tons from Outfall 006 were commercially distributed. 602 dry tons from Outfall 006 were agriculturally distributed in 2020 Nothing from Outfall 006 was landfilled. In addition, nothing from Outfall 010 was landfilled in 2020.

2. Land Application Site

2.1 Last Year's Approved and Active Land Application Sites

2.1.1 How many acres did you have?

25578.80 acres

2.1.2 How many acres did you use?

0 acres

2.2 If you did not have enough acres for your land application needs, what action was taken?

2.3 Did you overapply nitrogen on any of your approved land application sites you used last year? **0**

- ○ Yes (30 points)
- ● No

2.4 Have all the sites you used last year for land application been soil tested in the previous 4 years?

- ○ Yes
- ○ No (10 points)
- ● N/A

3. Biosolids Metals

Number of biosolids outfalls in your WPDES permit:

3.1 For each outfall tested, verify the biosolids metal quality values for your facility during the last calendar year.

Outfall No. 010 - JI Cake - LANDFILLED

| Parameter | 80% of Limit | H.Q. Limit | Ceiling Limit | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | 80% Value | High Quality | Ceiling |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | | 41 | 75 | | | | | | | | | | | | | | 0 | 0 |
| Cadmium | | 39 | 85 | | | | | | | | | | | | | | 0 | 0 |
| Copper | | 1500 | 4300 | | | | | | | | | | | | | | 0 | 0 |
| Lead | | 300 | 840 | | | | | | | | | | | | | | 0 | 0 |
| Mercury | | 17 | 57 | | | | | | | | | | | | | | 0 | 0 |
| Molybdenum | 60 | | 75 | | | | | | | | | | | | | 0 | | 0 |
| Nickel | 336 | | 420 | | | | | | | | | | | | | 0 | | 0 |
| Selenium | 80 | | 100 | | | | | | | | | | | | | 0 | | 0 |
| Zinc | | 2800 | 7500 | | | | | | | | | | | | | | 0 | 0 |

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**Outfall No. 006 - Jones Island EQ Sludge - PRODU**

| Parameter | 80% of Limit | H.Q. Limit | Ceiling Limit | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | 80% Value | High Quality | Ceiling |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | | 41 | | <18 | <18 | <18 | <17 | <17 | <17 | <17 | <17 | <17 | <17 | <17 | <17 | | 0 | 0 |
| Cadmium | | 39 | | <.95 | <.95 | <.97 | <.94 | <.95 | <.94 | <.93 | <.94 | <.93 | <.92 | <.93 | <.93 | | 0 | 0 |
| Copper | | 1500 | | 230 | 230 | 220 | 230 | 250 | 240 | 230 | 230 | 230 | 240 | 240 | 240 | | 0 | 0 |
| Lead | | 300 | | 28 | 21 | 21 | 26 | 30 | 32 | 43 | 45 | 38 | 27 | 27 | 22 | | 0 | 0 |
| Mercury | | 17 | | .23 | .18 | .13 | .24 | .21 | .16 | .28 | .16 | .26 | .24 | .21 | .21 | | 0 | 0 |
| Molybdenum | 60 | | 75 | 9 | 8.5 | 8 | 7.8 | 7.7 | 7.6 | 7.6 | 8.2 | 8.6 | 9.3 | 9.3 | 9.5 | 0 | | 0 |
| Nickel | | | | 21 | 22 | 22 | 23 | 26 | 23 | 22 | 20 | 23 | 26 | 25 | 24 | 0 | | 0 |
| Selenium | | | | <4.3 | <4.3 | <4.4 | <4.2 | <4.2 | <4.2 | <4.2 | 4.4 | <4.2 | <4.1 | <4.2 | <4.2 | 0 | | 0 |
| Zinc | | 2800 | | 420 | 370 | 360 | 370 | 380 | 370 | 400 | 380 | 380 | 360 | 370 | 360 | | 0 | 0 |

3.1.1 Number of times any of the metals exceeded the high quality limits OR 80% of the limit for molybdenum, nickel, or selenium = 0

Exceedence Points

- ● 0 (0 Points)
- ○ 1-2 (10 Points)
- ○ > 2 (15 Points)

3.1.2 If you exceeded the high quality limits, did you cumulatively track the metals loading at each land application site? (check applicable box)

- ○ Yes
- ○ No (10 points)
- ○ N/A - Did not exceed limits or no HQ limit applies (0 points)
- ● N/A - Did not land apply biosolids until limit was met (0 points)

3.1.3 Number of times any of the metals exceeded the ceiling limits = 0

Exceedence Points

- ● 0 (0 Points)
- ○ 1 (10 Points)
- ○ > 1 (15 Points)

3.1.4 Were biosolids land applied which exceeded the ceiling limit?

- ○ Yes (20 Points)
- ● No (0 Points)

3.1.5 If any metal limit (high quality or ceiling) was exceeded at any time, what action was taken? Has the source of the metals been identified?

**0**

4. Pathogen Control (per outfall):

4.1 Verify the following information. If any information is incorrect, use the Report Issue button under the Options header in the left-side menu.

| | |
|---|---|
| Outfall Number: | **006** |
| Biosolids Class: | A |
| Bacteria Type and Limit: | Fecal Coliform |
| Sample Dates: | 01/01/2020 - 06/30/2020 |
| Density: | 38 |
| Sample Concentration Amount: | MPN/G TS |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Process: | Heat Drying |
| Process Description: | All product complied with either the heat drying requirement or time-temperature requirement. With either method, moisture content is 10% or lower. |

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| Outfall Number: | **006** |
|---|---|
| Biosolids Class: | A |
| Bacteria Type and Limit: | Fecal Coliform |
| Sample Dates: | 01/01/2020 - 01/31/2020 |
| Density: | 38 |
| Sample Concentration Amount: | MPN/G TS |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Process: | Heat Drying |
| Process Description: | All product complied with either the heat drying requirement or time-temperature requirement. With either method, moisture content is 10% or lower. |

| Outfall Number: | **006** |
|---|---|
| Biosolids Class: | A |
| Bacteria Type and Limit: | Fecal Coliform |
| Sample Dates: | 02/01/2020 - 02/29/2020 |
| Density: | 0 |
| Sample Concentration Amount: | MPN/G TS |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Process: | Heat Drying |
| Process Description: | All product complied with either the heat drying requirement or time-temperature requirement. With either method, moisture content is 10% or lower. |

| Outfall Number: | **006** |
|---|---|
| Biosolids Class: | A |
| Bacteria Type and Limit: | Fecal Coliform |
| Sample Dates: | 03/01/2020 - 03/31/2020 |
| Density: | 11 |
| Sample Concentration Amount: | MPN/G TS |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Process: | Heat Drying |
| Process Description: | All product complied with either the heat drying requirement or time-temperature requirement. With either method, moisture content is 10% or lower. |

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| Outfall Number: | **006** |
|---|---|
| Biosolids Class: | A |
| Bacteria Type and Limit: | Fecal Coliform |
| Sample Dates: | 04/01/2020 - 04/30/2020 |
| Density: | 0 |
| Sample Concentration Amount: | MPN/G TS |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Process: | Heat Drying |
| Process Description: | All product complied with either the heat drying requirement or time-temperature requirement. With either method, moisture content is 10% or lower. |

| Outfall Number: | **006** |
|---|---|
| Biosolids Class: | A |
| Bacteria Type and Limit: | Fecal Coliform |
| Sample Dates: | 05/01/2020 - 05/31/2020 |
| Density: | 0 |
| Sample Concentration Amount: | MPN/G TS |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Process: | Heat Drying |
| Process Description: | All product complied with either the heat drying requirement or time-temperature requirement. With either method, moisture content is 10% or lower. |

| Outfall Number: | **006** |
|---|---|
| Biosolids Class: | A |
| Bacteria Type and Limit: | Fecal Coliform |
| Sample Dates: | 06/01/2020 - 06/30/2020 |
| Density: | 0 |
| Sample Concentration Amount: | MPN/G TS |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Process: | Heat Drying |
| Process Description: | All product complied with either the heat drying requirement or time-temperature requirement. With either method, moisture content is 10% or lower. |

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| Outfall Number: | **006** |
|---|---|
| Biosolids Class: | A |
| Bacteria Type and Limit: | Fecal Coliform |
| Sample Dates: | 07/01/2020 - 12/31/2020 |
| Density: | 3 |
| Sample Concentration Amount: | MPN/G TS |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Process: | Heat Drying |
| Process Description: | All product complied with either the heat drying requirement or time-temperature requirement. With either method, moisture content is 10% or lower. |

| Outfall Number: | **006** |
|---|---|
| Biosolids Class: | A |
| Bacteria Type and Limit: | Fecal Coliform |
| Sample Dates: | 07/01/2020 - 07/31/2020 |
| Density: | 0 |
| Sample Concentration Amount: | MPN/G TS |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Process: | Heat Drying |
| Process Description: | All product complied with either the heat drying requirement or time-temperature requirement. With either method, moisture content is 10% or lower. |

| Outfall Number: | **006** |
|---|---|
| Biosolids Class: | A |
| Bacteria Type and Limit: | Fecal Coliform |
| Sample Dates: | 08/01/2020 - 08/31/2020 |
| Density: | 0 |
| Sample Concentration Amount: | MPN/G TS |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Process: | Heat Drying |
| Process Description: | All product complied with either the heat drying requirement or time-temperature requirement. With either method, moisture content is 10% or lower. |

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| Outfall Number: | **006** |
|---|---|
| Biosolids Class: | A |
| Bacteria Type and Limit: | Fecal Coliform |
| Sample Dates: | 09/01/2020 - 09/30/2020 |
| Density: | 1 |
| Sample Concentration Amount: | MPN/G TS |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Process: | Heat Drying |
| Process Description: | All product complied with either the heat drying requirement or time-temperature requirement. With either method, moisture content is 10% or lower. |

| Outfall Number: | **006** |
|---|---|
| Biosolids Class: | A |
| Bacteria Type and Limit: | Fecal Coliform |
| Sample Dates: | 10/01/2020 - 10/31/2020 |
| Density: | 0 |
| Sample Concentration Amount: | MPN/G TS |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Process: | Heat Drying |
| Process Description: | All product complied with either the heat drying requirement or time-temperature requirement. With either method, moisture content is 10% or lower. |

| Outfall Number: | **006** |
|---|---|
| Biosolids Class: | A |
| Bacteria Type and Limit: | Fecal Coliform |
| Sample Dates: | 11/01/2020 - 11/30/2020 |
| Density: | 3 |
| Sample Concentration Amount: | MPN/G TS |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Process: | Heat Drying |
| Process Description: | All product complied with either the heat drying requirement or time-temperature requirement. With either method, moisture content is 10% or lower. |

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| | |
|---|---|
| Outfall Number: | **006** |
| Biosolids Class: | A |
| Bacteria Type and Limit: | Fecal Coliform |
| Sample Dates: | 12/01/2020 - 12/31/2020 |
| Density: | 0 |
| Sample Concentration Amount: | MPN/G TS |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Process: | Heat Drying |
| Process Description: | All product complied with either the heat drying requirement or time-temperature requirement. With either method, moisture content is 10% or lower. |

**0**

4.2 If exceeded Class B limit or did not meet the process criteria at the time of land application.

4.2.1 Was the limit exceeded or the process criteria not met at the time of land application?

○ Yes (40 Points)

● No

If yes, what action was taken?

5. Vector Attraction Reduction (per outfall):

5.1 Verify the following information. If any of the information is incorrect, use the Report Issue button under the Options header in the left-side menu.

| | |
|---|---|
| Outfall Number: | **006** |
| Method Date: | 03/25/2020 |
| Option Used To Satisfy Requirement: | Drying With Unstabilized Solids |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Limit (if applicable): | >90 |
| Results (if applicable): | 90 |

| | |
|---|---|
| Outfall Number: | **006** |
| Method Date: | 01/29/2020 |
| Option Used To Satisfy Requirement: | Drying With Unstabilized Solids |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Limit (if applicable): | >90 |
| Results (if applicable): | 91.10 |

| | |
|---|---|
| Outfall Number: | **006** |
| Method Date: | 02/18/2020 |
| Option Used To Satisfy Requirement: | Drying With Unstabilized Solids |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Limit (if applicable): | >90 |
| Results (if applicable): | 91.40 |

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| Outfall Number: | **006** |
|---|---|
| Method Date: | 03/25/2020 |
| Option Used To Satisfy Requirement: | Drying With Unstabilized Solids |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Limit (if applicable): | >90 |
| Results (if applicable): | 90 |

| Outfall Number: | **006** |
|---|---|
| Method Date: | 04/24/2020 |
| Option Used To Satisfy Requirement: | Drying With Unstabilized Solids |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Limit (if applicable): | >90 |
| Results (if applicable): | 92.20 |

| Outfall Number: | **006** |
|---|---|
| Method Date: | 05/26/2020 |
| Option Used To Satisfy Requirement: | Drying With Unstabilized Solids |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Limit (if applicable): | >90 |
| Results (if applicable): | 91.70 |

| Outfall Number: | **006** |
|---|---|
| Method Date: | 06/13/2020 |
| Option Used To Satisfy Requirement: | Drying With Unstabilized Solids |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Limit (if applicable): | >90 |
| Results (if applicable): | 92.80 |

| Outfall Number: | **006** |
|---|---|
| Method Date: | 03/25/2020 |
| Option Used To Satisfy Requirement: | Drying With Unstabilized Solids |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Limit (if applicable): | >90 |
| Results (if applicable): | 90 |

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| Outfall Number: | **006** |
|---|---|
| Method Date: | 07/08/2020 |
| Option Used To Satisfy Requirement: | Drying With Unstabilized Solids |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Limit (if applicable): | >90 |
| Results (if applicable): | 93.20 |

| Outfall Number: | **006** |
|---|---|
| Method Date: | 08/10/2020 |
| Option Used To Satisfy Requirement: | Drying With Unstabilized Solids |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Limit (if applicable): | >90 |
| Results (if applicable): | 92 |

| Outfall Number: | **006** |
|---|---|
| Method Date: | 09/12/2020 |
| Option Used To Satisfy Requirement: | Drying With Unstabilized Solids |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Limit (if applicable): | >90 |
| Results (if applicable): | 93.30 |

| Outfall Number: | **006** |
|---|---|
| Method Date: | 10/10/2020 |
| Option Used To Satisfy Requirement: | Drying With Unstabilized Solids |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Limit (if applicable): | >90 |
| Results (if applicable): | 94.20 |

| Outfall Number: | **006** |
|---|---|
| Method Date: | 11/22/2020 |
| Option Used To Satisfy Requirement: | Drying With Unstabilized Solids |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Limit (if applicable): | >90 |
| Results (if applicable): | 93.80 |

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| | |
|---|---|
| Outfall Number: | **006** |
| Method Date: | 12/30/2020 |
| Option Used To Satisfy Requirement: | Drying With Unstabilized Solids |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Limit (if applicable): | >90 |
| Results (if applicable): | 92.80 |

**0**

5.2 Was the limit exceeded or the process criteria not met at the time of land application?

- ○ Yes (40 Points)
- ● No

If yes, what action was taken?

6. Biosolids Storage

6.1 How many days of actual, current biosolids storage capacity did your wastewater treatment facility have either on-site or off-site?

- ● >= 180 days (0 Points)
- ○ 150 - 179 days (10 Points)
- ○ 120 - 149 days (20 Points)
- ○ 90 - 119 days (30 Points)
- ○ < 90 days (40 Points)
- ○ N/A (0 Points)

**0**

6.2 If you checked N/A above, explain why.

7. Issues

7.1 Describe any outstanding biosolids issues with treatment, use or overall management:

| | |
|---|---|
| **Total Points Generated** | 0 |
| **Score (100 - Total Points Generated)** | 100 |
| **Section Grade** | **A** |

# Compliance Maintenance Annual Report

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## Staffing and Preventative Maintenance (All Treatment Plants)

1. Plant Staffing

1.1 Was your wastewater treatment plant adequately staffed last year?

- ● Yes
- ○ No

If No, please explain:

Could use more help/staff for:

1.2 Did your wastewater staff have adequate time to properly operate and maintain the plant and fulfill all wastewater management tasks including recordkeeping?

- ● Yes
- ○ No

If No, please explain:

2. Preventative Maintenance

2.1 Did your plant have a documented AND implemented plan for preventative maintenance on major equipment items?

- ● Yes (Continue with question 2) ☐☐
- ○ No (40 points)☐☐

If No, please explain, then go to question 3:

2.2 Did this preventative maintenance program depict frequency of intervals, types of lubrication, and other tasks necessary for each piece of equipment?

- ● Yes
- ○ No (10 points)

2.3 Were these preventative maintenance tasks, as well as major equipment repairs, recorded and filed so future maintenance problems can be assessed properly?

- ● Yes
  - ○ Paper file system
  - ● Computer system
  - ○ Both paper and computer system
- ○ No (10 points)

**0**

3. O&M Manual

3.1 Does your plant have a detailed O&M and Manufacturer Equipment Manuals that can be used as a reference when needed?

- ● Yes
- ○ No

4. Overall Maintenance /Repairs

4.1 Rate the overall maintenance of your wastewater plant.

- ○ Excellent
- ● Very good
- ○ Good
- ○ Fair
- ○ Poor

Describe your rating:

Maintenance work is addressed on a priority system in a timely manner.

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| | |
|---|---|
| **Total Points Generated** | 0 |
| **Score (100 - Total Points Generated)** | 100 |
| **Section Grade** | **A** |

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## Operator Certification and Education

1. Operator-In-Charge

1.1 Did you have a designated operator-in-charge during the report year?

● Yes (0 points)

○ No (20 points)

Name: BRETT P KELLY

Certification No: 34528

**0**

2. Certification Requirements

2.1 In accordance with Chapter NR 114.56 and 114.57, Wisconsin Administrative Code, what level and subclass(es) were required for the operator-in-charge (OIC) to operate the wastewater treatment plant and what level and subclass(es) were held by the operator-in-charge?

| Sub Class | SubClass Description | WWTP | OIC | | |
|---|---|---|---|---|---|
| | | **Advanced** | OIT | Basic | Advanced |
| A1 | Suspended Growth Processes | X | | | X |
| A2 | Attached Growth Processes | | | | |
| A3 | Recirculating Media Filters | | | | |
| A4 | Ponds, Lagoons and Natural | | X | | |
| A5 | Anaerobic Treatment Of Liquid | | | | |
| B | Solids Separation | X | | | X |
| C | Biological Solids/Sludges | X | | | X |
| P | Total Phosphorus | X | | | X |
| N | Total Nitrogen | | | | |
| D | Disinfection | X | | | X |
| L | Laboratory | | | | |
| U | Unique Treatment Systems | | | | |
| SS | Sanitary Sewage Collection | X | NA | NA | NA |

2.2 Was the operator-in-charge certified at the appropriate level and subclass(es) to operate this plant? (Note: Certification in subclass SS is required 5 years after permit reissuance and is basic level only.)

● Yes (0 points)

○ No (20 points)

**0**

3. Succession Planning

3.1 In the event of the loss of your designated operator-in-charge, did you have a contingency plan to ensure the continued proper operation and maintenance of the plant that includes one or more of the following options (check all that apply)?

☒ One or more additional certified operators on staff

☐ An arrangement with another certified operator

☐ An arrangement with another community with a certified operator

☐ An operator on staff who has an operator-in-training certificate for your plant and is expected to be certified within one year

☐ A consultant to serve as your certified operator

☐ None of the above (20 points)

If "None of the above" is selected, please explain:

**0**

4. Continuing Education Credits

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4.1 If you had a designated operator-in-charge, was the operator-in-charge earning Continuing Education Credits at the following rates?

OIT and Basic Certification:

- ○ Averaging 6 or more CECs per year.
- ○ Averaging less than 6 CECs per year.

Advanced Certification:

- ● Averaging 8 or more CECs per year.
- ○ Averaging less than 8 CECs per year.

| | |
|---|---|
| **Total Points Generated** | 0 |
| **Score (100 - Total Points Generated)** | 100 |
| **Section Grade** | **A** |

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## Financial Management

1. Provider of Financial Information

Name: David Deiringer

Telephone: (414) 225-2254 (XXX) XXX-XXXX

E-Mail Address (optional): ddeiringer@mmsd.com

2. Treatment Works Operating Revenues

2.1 Are User Charges or other revenues sufficient to cover O&M expenses for your wastewater treatment plant AND/OR collection system ?

- ● Yes (0 points) ☐☐
- ○ No (40 points)

If No, please explain:

2.2 When was the User Charge System or other revenue source(s) last reviewed and/or revised?

Year: 2020

- ● 0-2 years ago (0 points) ☐☐
- ○ 3 or more years ago (20 points)☐☐
- ○ N/A (private facility)

2.3 Did you have a special account (e.g., CWFP required segregated Replacement Fund, etc.) or financial resources available for repairing or replacing equipment for your wastewater treatment plant and/or collection system?

- ● Yes (0 points)
- ○ No (40 points)

**0**

REPLACEMENT FUNDS [PUBLIC MUNICIPAL FACILITIES SHALL COMPLETE QUESTION 3]

3. Equipment Replacement Funds

3.1 When was the Equipment Replacement Fund last reviewed and/or revised?

Year: 2020

- ● 1-2 years ago (0 points)☐☐
- ○ 3 or more years ago (20 points)☐☐
- ○ N/A

If N/A, please explain:

3.2 Equipment Replacement Fund Activity

| | | |
|---|---|---|
| **3.2.1 Ending Balance Reported on Last Year's CMAR** | | $ 15,442,080.00 |
| 3.2.2 Adjustments - if necessary (e.g. earned interest, audit correction, withdrawal of excess funds, increase making up previous shortfall, etc.) | | $ 0.00 |
| 3.2.3 Adjusted January 1st Beginning Balance | | $ 15,442,080.00 |
| 3.2.4 Additions to Fund (e.g. portion of User Fee, earned interest, etc.) | + | $ 413,486.00 |

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3.2.5 Subtractions from Fund (e.g., equipment replacement, major repairs - use description box 3.2.6.1 below*) - $ 0.00

3.2.6 Ending Balance as of December 31st for CMAR Reporting Year $ 15,855,566.00

All Sources: This ending balance should include all Equipment Replacement Funds whether held in a bank account(s), certificate(s) of deposit, etc.

3.2.6.1 Indicate adjustments, equipment purchases, and/or major repairs from 3.2.5 above.

3.3 What amount should be in your Replacement Fund? $ 15,855,566.00

**0**

Please note: If you had a CWFP loan, this amount was originally based on the Financial Assistance Agreement (FAA) and should be regularly updated as needed. Further calculation instructions and an example can be found by clicking the SectionInstructions link under Info header in the left-side menu.

3.3.1 Is the December 31 Ending Balance in your Replacement Fund above, (#3.2.6) equal to, or greater than the amount that should be in it (#3.3)?

- ● Yes
- ○ No

If No, please explain.

4. Future Planning

4.1 During the next ten years, will you be involved in formal planning for upgrading, rehabilitating, or new construction of your treatment facility or collection system?

- ● Yes - If Yes, please provide major project information, if not already listed below.☐☐
- ○ No

| Project # | Project Description | Estimated Cost | Approximate Construction Year |
|---|---|---|---|
| 1 | South Shore Water Reclamation Facility: See South Shore CMAR, Financial Management, Item 4.1 | | |
| 2 | Conveyance Projects: 31 Projects | 148,306,444 | 2026 |
| 3 | Jones Island Water Reclamation Facility and Pipelines: 48 Projects | 193,783,659 | 2026 |

5. Financial Management General Comments

Response #4 above represents planned spending for Conveyance (Collection System) and Water Reclamation Facility (Jones Island, Pipelines, and South Shore) projects for the District's 6-year planning cycle beginning in 2021. Jones Island and Pipeline project counts and costs have been combined. Additional projects, i.e. Watercourse Improvement and other projects, as well as debt service during the same 6-year period will total $1.5 billion. For a complete listing of all projects and expenditures planned for the period 2021 to 2026, refer to the MMSD 2021 Capital Budget.

ENERGY EFFICIENCY AND USE

6. Collection System

6.1 Energy Usage

6.1.1 Enter the monthly energy usage from the different energy sources:

**COLLECTION SYSTEM PUMPAGE: Total Power Consumed**

Number of Municipally Owned Pump/Lift Stations: 19

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| | Electricity Consumed (kWh) | Natural Gas Consumed (therms) |
|---|---|---|
| **January** | 614,950 | 40,477 |
| **February** | 507,185 | 22,644 |
| **March** | 474,534 | 50,211 |
| **April** | 453,182 | 20,131 |
| **May** | 443,725 | 7,246 |
| **June** | 480,247 | 16,076 |
| **July** | 652,207 | 4,681 |
| **August** | 432,253 | 5,123 |
| **September** | 411,266 | 6,909 |
| **October** | 350,687 | 15,032 |
| **November** | 212,265 | 20,414 |
| **December** | 440,164 | 4,824 |
| **Total** | **5,472,665** | **213,768** |
| **Average** | **456,055** | **17,814** |

6.1.2 Comments:

6.2 Energy Related Processes and Equipment

6.2.1 Indicate equipment and practices utilized at your pump/lift stations (Check all that apply):

- ☒ Comminution or Screening
- ☒ Extended Shaft Pumps
- ☒ Flow Metering and Recording
- ☐ Pneumatic Pumping
- ☒ SCADA System
- ☒ Self-Priming Pumps
- ☒ Submersible Pumps
- ☒ Variable Speed Drives
- ☒ Other:

Gate control motors, heaters

6.2.2 Comments:

6.3 Has an Energy Study been performed for your pump/lift stations?

- ○ No
- ● Yes

Year: 2018

By Whom: WE Energies

Describe and Comment:

A level 1 energy assessment was done in 2018 for the Port Washington Pumping Station. The assessment delivered a report that outlined opportunities for reducing energy.

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6.4 Future Energy Related Equipment

6.4.1 What energy efficient equipment or practices do you have planned for the future for your pump/lift stations?

In 2021 the District will evaluate the various sites for opportunities to improve our energy efficiency and renewable energy profile through Energy Plan in addition to evaluating energy efficiency during rehabilitation projects. Improved power monitor monitoring, controls, and the installation of energy efficient devices such as VFDs continue to be practiced by the District.

7. Treatment Facility

7.1 Energy Usage

7.1.1 Enter the monthly energy usage from the different energy sources:

**TREATMENT PLANT: Total Power Consumed/Month**

| | Electricity Consumed (kWh) | Total Influent Flow (MG) | Electricity Consumed/ Flow (kWh/MG) | Total Influent BOD (1000 lbs) | Electricity Consumed/ Total Influent BOD (kWh/1000lbs) | Natural Gas Consumed (therms) |
|---|---|---|---|---|---|---|
| **January** | 9,198,942 | 2,940.00 | 3,129 | 5,493.98 | 1,674 | 1,386,458 |
| **February** | 8,737,274 | 2,473.00 | 3,533 | 4,757.94 | 1,836 | 1,232,772 |
| **March** | 9,300,153 | 3,609.00 | 2,577 | 6,537.31 | 1,423 | 1,358,543 |
| **April** | 8,410,034 | 2,995.00 | 2,808 | 5,124.72 | 1,641 | 1,281,039 |
| **May** | 10,442,693 | 4,874.00 | 2,143 | 6,442.23 | 1,621 | 1,620,060 |
| **June** | 8,803,038 | 3,082.00 | 2,856 | 4,617.27 | 1,907 | 1,140,787 |
| **July** | 10,492,049 | 4,147.00 | 2,530 | 5,672.10 | 1,850 | 1,445,018 |
| **August** | 9,709,446 | 3,345.00 | 2,903 | 6,030.31 | 1,610 | 1,323,123 |
| **September** | 8,553,825 | 2,499.00 | 3,423 | 5,627.25 | 1,520 | 1,165,588 |
| **October** | 7,444,592 | 2,343.00 | 3,177 | 5,729.82 | 1,299 | 1,118,406 |
| **November** | 8,056,820 | 2,448.00 | 3,291 | 5,560.05 | 1,449 | 1,694,860 |
| **December** | 8,672,081 | 2,769.00 | 3,132 | 5,538.71 | 1,566 | 1,705,440 |
| **Total** | **107,820,947** | **37,524.00** | | **67,131.69** | | **16,472,094** |
| **Average** | **8,985,079** | **3,127.00** | **2,959** | **5,594.31** | **1,616** | **1,372,675** |

7.1.2 Comments:

7.2 Energy Related Processes and Equipment

7.2.1 Indicate equipment and practices utilized at your treatment facility (Check all that apply):

- ☐ Aerobic Digestion
- ☐ Anaerobic Digestion
- ☐ Biological Phosphorus Removal
- ☒ Coarse Bubble Diffusers
- ☒ Dissolved O2 Monitoring and Aeration Control
- ☒ Effluent Pumping
- ☒ Fine Bubble Diffusers
- ☒ Influent Pumping
- ☒ Mechanical Sludge Processing
- ☒ Nitrification
- ☒ SCADA System

☐ UV Disinfection
☒ Variable Speed Drives
☒ Other:

Gravity belt thickeners, belt filter presses, biosolids dryers

7.2.2 Comments:

7.3 Future Energy Related Equipment

7.3.1 What energy efficient equipment or practices do you have planned for the future for your treatment facility?

The 2035 Vision, adopted in 2010, has two elements: integrated watershed management and climate change adaptation with an emphasis on energy efficiency. The District aligns capital improvement projects with the Vision to meet a net of 100% of MMSD's energy needs with renewable energy sources and 80% produced with internal, renewable sources. The Energy Plan was finalized in January 2015 and is being implemented to attain the District's long-term goals embodied in the 2035 Vision available here: https://www.mmsd.com/about-us/2035-vision. The recommendations in the Energy Plan are all either in progress or were studied in the 2050 Facilities Plan that was finalized in 2020. The Energy Plan will be renewed in 2021. For the treatment plants, we recommend the following examples of energy efficiency projects at the Jones Island Water Reclamation Facility:
J01013 – Preliminary Facility Electrical Upgrade
J01025 – High & Low Level Screw Pump Replacement
J01027 – Primary Clarifier, Sludge, and Scum Piping
J02012 – Aeration System Improvements
J04035 – Greens Grade Train Replacement and Redundant Train Evaluation
J04037 – Thickened Sludge Improvements
J04046 – D&D Induced Draft Fan Energy Conservation
J06061 – Dryer Conversion for Additional LFG
P02004 – Landfill Gas System – Metro Landfill
M03102 – Biosolids Advanced Facilities Planning
M03051 – Alternative Energy Planning (Air Compressors Evaluation)

8. Biogas Generation

8.1 Do you generate/produce biogas at your facility?
● No
○ Yes

If Yes, how is the biogas used (Check all that apply):
☐ Flared Off
☐ Building Heat
☐ Process Heat
☐ Generate Electricity
☐ Other:

9. Energy Efficiency Study

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9.1 Has an Energy Study been performed for your treatment facility?

- ○ No
- ● Yes
  - ☒ Entire facility
    - Year: 2017
    - By Whom: University of Wisconsin - Milwaukee Industrial Assessment Center
    - Describe and Comment: Assessment covered equipment drives, lighting, and lubricant use throughout the entire facility.
  - ☒ Part of the facility
    - Year: 2020
    - By Whom: Short Elliot Hendrickson and Poyry (2015), Brabazon and Focus on Energy (2020)
    - Describe and Comment: MACT assessment was completed of the boilers in 2015. High pressure air compressor study was completed in 2020. Many other processes throughout the facility have been assessed and are monitored for efficiency internally.

| | |
|---|---|
| **Total Points Generated** | 0 |
| **Score (100 - Total Points Generated)** | 100 |
| **Section Grade** | **A** |

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## Sanitary Sewer Collection Systems

1. Capacity, Management, Operation, and Maintenance (CMOM) Program

1.1 Do you have a CMOM program that is being implemented?

- ● Yes
- ○ No

If No, explain:

1.2 Do you have a CMOM program that contains all the applicable components and items according to Wisc. Adm Code NR 210.23 (4)?

- ● Yes
- ○ No (30 points)
- ○ N/A

If No or N/A, explain:

1.3 Does your CMOM program contain the following components and items? (check the components and items that apply)

☒ Goals [NR 210.23 (4)(a)]

Describe the major goals you had for your collection system last year:

The MMSD CMOM goals related to the conveyance and storage system as presented in the CMOM Program Annual Report for 2020 are:
1. Continue the support of the CMOM Program within the District organizational structure.
2. Communicate the goals and objectives of the CMOM Program to internal and external stakeholders, monitor the CMOM Program, and institute program modifications.
3. Continue to maintain adequate financial planning.
4. Continue to comply with regulatory requirements.
5. Continue to support and monitor the regional CMOM program.
6. Continue to maintain a safe work environment and facilities and also sustain a competent workforce.
7. Establish CMOM program elements specific to minimizing the number and volume of CSOs.
8. Continue to implement and support the Wet Weather Peak Flow Management Program.
9. Where possible, establish additional practices to prevent sanitary sewer overflows (SSOs), maintain or improve system performance, and avoid preventable failures.
10. Continue to establish and document level of protection, design, and performance standards for new conveyance assets constructed in the District service area, and consider documented and predicted changes in climate.
11. Minimize the cost of conveyance asset ownership while maintaining necessary stewardship of assets and achieving defined protection levels.
12. Enhance District level of knowledge and understanding of wet weather flows and system response to precipitation and other factors.
13. Promptly and accurately respond to customer inquiries.

Did you accomplish them?

- ● Yes
- ○ No

If No, explain:

☒ Organization [NR 210.23 (4) (b)]☐☐

Does this chapter of your CMOM include:

- ☒ Organizational structure and positions (eg. organizational chart and position descriptions)
- ☒ Internal and external lines of communication responsibilities
- ☒ Person(s) responsible for reporting overflow events to the department and the public

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☒ Legal Authority [NR 210.23 (4) (c)]

What is the legally binding document that regulates the use of your sewer system?

MMSD Rules

If you have a Sewer Use Ordinance or other similar document, when was it last reviewed and revised? (MM/DD/YYYY) 2018-01-22

Does your sewer use ordinance or other legally binding document address the following:

- ☒ Private property inflow and infiltration
- ☒ New sewer and building sewer design, construction, installation, testing and inspection
- ☒ Rehabilitated sewer and lift station installation, testing and inspection
- ☒ Sewage flows satellite system and large private users are monitored and controlled, as necessary
- ☒ Fat, oil and grease control
- ☒ Enforcement procedures for sewer use non-compliance

☒ Operation and Maintenance [NR 210.23 (4) (d)]

Does your operation and maintenance program and equipment include the following:

- ☒ Equipment and replacement part inventories
- ☒ Up-to-date sewer system map
- ☒ A management system (computer database and/or file system) for collection system information for O&M activities, investigation and rehabilitation
- ☒ A description of routine operation and maintenance activities (see question 2 below)
- ☒ Capacity assessment program
- ☒ Basement back assessment and correction
- ☒ Regular O&M training

☒ Design and Performance Provisions [NR 210.23 (4) (e)]☐☐

What standards and procedures are established for the design, construction, and inspection of the sewer collection system, including building sewers and interceptor sewers on private property?

- ☒ State Plumbing Code, DNR NR 110 Standards and/or local Municipal Code Requirements
- ☒ Construction, Inspection, and Testing
- ☐ Others:

☒ Overflow Emergency Response Plan [NR 210.23 (4) (f)]☐☐

Does your emergency response capability include:

- ☒ Responsible personnel communication procedures
- ☒ Response order, timing and clean-up
- ☒ Public notification protocols
- ☒ Training
- ☒ Emergency operation protocols and implementation procedures

☒ Annual Self-Auditing of your CMOM Program [NR 210.23 (5)]☐☐

☐ Special Studies Last Year (check only those that apply):

- ☐ Infiltration/Inflow (I/I) Analysis
- ☐ Sewer System Evaluation Survey (SSES)
- ☐ Sewer Evaluation and Capacity Managment Plan (SECAP)
- ☐ Lift Station Evaluation Report
- ☐ Others:

**0**

2. Operation and Maintenance

2.1 Did your sanitary sewer collection system maintenance program include the following maintenance activities? Complete all that apply and indicate the amount maintained.

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| | | |
|---|---|---|
| Cleaning | 0.33 | % of system/year |
| Root removal | 0 | % of system/year |
| Flow monitoring | 85 | % of system/year |
| Smoke testing | 0 | % of system/year |
| Sewer line televising | 4.36 | % of system/year |
| Manhole inspections | 0 | % of system/year |
| Lift station O&M | 19 | # per L.S./year |
| Manhole rehabilitation | 0 | % of manholes rehabbed |
| Mainline rehabilitation | 0 | % of sewer lines rehabbed |
| Private sewer inspections | 0.09 | % of system/year |
| Private sewer I/I removal | 0.39 | % of private services |
| River or water crossings | 0 | % of pipe crossings evaluated or maintained |

Please include additional comments about your sanitary sewer collection system below:

3. Performance Indicators

3.1 Provide the following collection system and flow information for the past year.

| | |
|---|---|
| 41.01 | Total actual amount of precipitation last year in inches |
| 34.76 | Annual average precipitation (for your location) |
| 302 | Miles of sanitary sewer |
| 19 | Number of lift stations |
| 0 | Number of lift station failures |
| 0 | Number of sewer pipe failures |
| 0 | Number of basement backup occurrences |
| 0 | Number of complaints |
| 102 | Average daily flow in MGD (if available) |
| 157 | Peak monthly flow in MGD (if available) |
| 386 | Peak hourly flow in MGD (if available) |

3.2 Performance ratios for the past year:

| | |
|---|---|
| 0.00 | Lift station failures (failures/year) |
| 0.00 | Sewer pipe failures (pipe failures/sewer mile/yr) |
| 0.03 | Sanitary sewer overflows (number/sewer mile/yr) |
| 0.00 | Basement backups (number/sewer mile) |
| 0.00 | Complaints (number/sewer mile) |
| 1.5 | Peaking factor ratio (Peak Monthly:Annual Daily Avg) |
| 3.8 | Peaking factor ratio (Peak Hourly:Annual Daily Avg) |

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4. Overflows

LIST OF SANITARY SEWER (SSO) AND TREATMENT FACILITY (TFO) OVERFLOWS REPORTED **

| | Date | Location | Cause | Estimated Volume |
|---|---|---|---|---|
| 0 | 5/17/2020 5:00:00 PM - 5/17/2020 8:00:00 PM | North Broadmoor Road | Rain | 0.666 |
| 1 | 5/17/2020 4:40:00 PM - 5/17/2020 10:40:00 PM | North River Road and W Green Tree Road | Rain | 9.065 |
| 2 | 5/17/2020 4:59:00 PM - 5/17/2020 6:41:00 PM | West Manitoba Street and south 35th Street | Rain | 1.335 |
| 3 | 5/17/2020 4:46:00 PM - 5/17/2020 8:32:00 PM | West Roosevelt Drive and North 35th Street | Rain | 3.06 |
| 4 | 5/17/2020 4:30:00 PM - 5/17/2020 5:15:00 PM | S 79th St extended at W Dickinson State Fair Parking Lot | Rain | 0.005 |
| 5 | 5/17/2020 4:53:00 PM - 5/17/2020 5:30:00 PM | S 74th St and W Oklahoma Ave | Rain | 0.04 |
| 6 | 5/17/2020 5:20:00 PM - 5/17/2020 6:20:00 PM | North Lake Drive, North of East Ravine Lane | Rain | 0.022 |
| 7 | 5/17/2020 4:00:00 PM - 5/19/2020 9:00:00 PM | Please see attached table for locations of discharges | Rain | 2100 |
| 8 | 7/10/2020 12:52:00 AM - 7/10/2020 4:35:00 AM | Please see attached table for location of discharges | Rain | 7.1 |
| 9 | 8/2/2020 9:47:00 PM - 8/2/2020 11:47:00 PM | S 74th St and W Oklahoma Ave | Rain | 0.175 |

** If there were any SSOs or TFOs that are not listed above, please contact the DNR and stop work on this section until corrected.

What actions were taken, or are underway, to reduce or eliminate SSO or TFO occurences in the future?

The District and Veolia Water Milwaukee will continue to operate the conveyance system, storage system, and the water reclamation facilities in a manner to prevent separate sewer overflows and to maximum the capture of combined sewer overflows. The District's Wet Weather Peak Flow Management Program evaluates infiltration and inflow in our service area to identify areas to target for improvements. To further reduce the risk of basement backups and separate sewer overflows, the District has funded $31M of infiltration and inflow reduction projects throughout our service area over the last ten years. In 2020 the Private Property Inflow and Infiltration Reduction Program was made a permanent component of the annual budget. The District has started design on a project to reduce overflows from the Mill Road Relief Sewer at the North Broadmoor Road and North River Road/W Green Tree Road sites. Design continues to address overflows from the Roosevelt MIS at Roosevelt Drive and North 35th Street. The District also has a SSO Elimination Study underway to determine what could be done to reduce or eliminate overflows at each SSO site.

5. Infiltration / Inflow (I/I)

5.1 Was infiltration/inflow (I/I) significant in your community last year?

- ● Yes
- ○ No

If Yes, please describe:

Yes; Infiltration and inflow (I/I) in satellite municipal collection systems is the primary contributor of peak flows from the separate sewer area of the MMSD conveyance system and is one of the primary causes of separate sewer overflows from the MMSD system.

5.2 Has infiltration/inflow and resultant high flows affected performance or created problems in your collection system, lift stations, or treatment plant at any time in the past year?

- ○ Yes
- ● No

If Yes, please describe:

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5.3 Explain any infiltration/inflow (I/I) changes this year from previous years:

MMSD believes that I/I has been reduced over the past year. Twenty-five of the twenty-eight member municipalities have PPI/I reduction projects completed or in progress in the first 11 years of the PPI/I Program. Many of the municipalities also completed public sector I/I reduction projects. MMSD has adopted peak flow performance standards in its Chapter 3 revisions which require tributary municipalities to reduce I/I. There were no new metersheds identified as noncompliant in 2020.

5.4 What is being done to address infiltration/inflow in your collection system?

MMSD continues sewer rehab through Operation and Maintenance, and Capital programs. MMSD is continuing to work with satellite municipalities to reduce inflow and infiltration with the wet weather peak flow management program. Throughout 2020 the District collected data from 194 permanent meters and 153 portable meters and also 150 surcharge level indicators in strategically selected sanitary sewers within its service area to more accurately measure wastewater flows under both dry and wet weather conditions. The measured peak flows are compared to the allowable peak flows listed in Chapter 3 of the District's rules. Action will be taken for any metersheds that are identified as exceeding the allowable peak flows. MMSD has implemented the Private Property Inflow and Infiltration (PPI/I) Reduction Program in 2011 to support municipal work in reducing I/I from local private property sources. Twenty-five of the twenty-eight member municipalities have PPI/I reduction projects completed or in progress in the 11th year of the PPI/I Program. Additionally, MMSD installed 36 Micrometers to enhance I/I data collection. MMSD completed and implemented the MMSD CMOM program in 2007 and has continued implementation annually. MMSD completed and implemented the MMSD CMOM program in 2007 and has continued implementation annually. In addition, all municipalities have developed and implemented CMOM and Asset Management programs. MMSD also has a Green Infrastructure (GI) initiative program that is aimed at capturing 740 million gallons of water every time it rains by the year 2035. In 2020 MMSD started a $20M strategic green infrastructure installation program, called the Fresh Coast Protection Partnership (FCPP). This program is a public private partnership with Corvias; its goals center on ramping up the pace at which GI is installed within our GI Service area. The FCPP will work towards the goal of driving down the per-gallon total cost of GI, while cost effectively building local capacity and expertise in GI practices and producing the greatest impact on the District’s local community and conveyance system. In 2020 alone, MMSD built 3,000,000 gallons worth of green infrastructure capture and by the end of 2020, the MMSD had built enough projects to total 37 MG of GI storage capacity each time it rains.

| | |
|---|---|
| **Total Points Generated** | 0 |
| **Score (100 - Total Points Generated)** | 100 |
| **Section Grade** | **A** |

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## Grading Summary

WPDES No: 0036820

| SECTIONS | LETTER GRADE | GRADE POINTS | WEIGHTING FACTORS | SECTION POINTS |
|---|---|---|---|---|
| Influent | A | 4 | 3 | 12 |
| BOD/CBOD | A | 4 | 10 | 40 |
| TSS | A | 4 | 5 | 20 |
| Phosphorus | A | 4 | 3 | 12 |
| Biosolids | A | 4 | 5 | 20 |
| Staffing/PM | A | 4 | 1 | 4 |
| OpCert | A | 4 | 1 | 4 |
| Financial | A | 4 | 1 | 4 |
| Collection | A | 4 | 3 | 12 |
| **TOTALS** | | | **32** | **128** |
| **GRADE POINT AVERAGE (GPA) = 4.00** | | | | |

Notes:
A = Voluntary Range (Response Optional)
B = Voluntary Range (Response Optional)
C = Recommendation Range (Response Required)
D = Action Range (Response Required)
F = Action Range (Response Required)

# Compliance Maintenance Annual Report

**Milwaukee Metro Sew Dist Combined**

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Reporting For: **2020**

## Resolution or Owner's Statement

Name of Governing Body or Owner: MMSD Commission

Date of Resolution or Action Taken: 2021-06-28

Resolution Number:

Date of Submittal:

**ACTIONS SET FORTH BY THE GOVERNING BODY OR OWNER RELATING TO SPECIFIC CMAR SECTIONS (Optional for grade A or B. Required for grade C, D, or F):**

Influent Flow and Loadings: Grade = A

Effluent Quality: BOD: Grade = A

Effluent Quality: TSS: Grade = A

Effluent Quality: Phosphorus: Grade = A

Biosolids Quality and Management: Grade = A

Staffing: Grade = A

Operator Certification: Grade = A

Financial Management: Grade = A

Collection Systems: Grade = A

(Regardless of grade, response required for Collection Systems if SSOs were reported)

The District continues to consistently meet CSO Performance Standards for water quality based requirements as outlined in our permit. As stated in the current WPDES Permit (Section 4.3.3 (10): "The permittee has submitted the documentation that demonstrated implementation of each of the nine minimum controls in accordance with Section IIB of the U.S. EPA CSO Control Policy. The permittee submitted this documentation to the Department as an element of its 2020 Facilities Plan, approved by the Department on December 26, 2007." Not content with just maintaining status quo, however, the District has a goal of 0 CSOs as targeted in our 2035 Vision Statement. The District's 6-year Long Range Financing Plan includes $1.5 billion ($858 million in projects and $633 million in debt service) to maintain and improve the regional capital infrastructure that helps protect public health, homes, businesses and waterways. This includes spending to fix private property sources of excess water that can overwhelm sanitary sewer systems. Having already committed $4 billion for clean water infrastructure in previous years, MMSD's asset management is vital for optimizing reliability and performance of new and aging resources for our treatment plants, sewers, and flood management facilities.

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**ACTIONS SET FORTH BY THE GOVERNING BODY OR OWNER RELATING TO THE OVERALL GRADE POINT AVERAGE AND ANY GENERAL COMMENTS**

(Optional for G.P.A. greater than or equal to 3.00, required for G.P.A. less than 3.00)

**G.P.A. = 4.00**

# Compliance Maintenance Annual Report

SOUTH SHORE

**Milwaukee Metro Sew Dist Combined**

Last Updated: 5/7/2021 Reporting For: **2020**

## Influent Flow and Loading

1. Monthly Average Flows and BOD Loadings

1.1 Verify the following monthly flows and BOD loadings to your facility.

| Influent No. 702 | Influent Monthly Average Flow, MGD | x | Influent Monthly Average BOD Concentration mg/L | x | 8.34 | = | Influent Monthly Average BOD Loading, lbs/day |
|---|---|---|---|---|---|---|---|
| January | 114.7097 | x | 222 | x | 8.34 | = | 212,012 |
| February | 102.4828 | x | 239 | x | 8.34 | = | 203,951 |
| March | 114.9677 | x | 224 | x | 8.34 | = | 214,345 |
| April | 99.2000 | x | 262 | x | 8.34 | = | 216,484 |
| May | 146.6452 | x | 180 | x | 8.34 | = | 220,578 |
| June | 90.9000 | x | 272 | x | 8.34 | = | 206,205 |
| July | 90.0645 | x | 358 | x | 8.34 | = | 269,198 |
| August | 82.7742 | x | 381 | x | 8.34 | = | 262,996 |
| September | 79.4333 | x | 348 | x | 8.34 | = | 230,762 |
| October | 76.0968 | x | 372 | x | 8.34 | = | 236,048 |
| November | 63.8667 | x | 400 | x | 8.34 | = | 212,882 |
| December | 71.7097 | x | 368 | x | 8.34 | = | 220,317 |

2. Maximum Monthly Design Flow and Design BOD Loading

2.1 Verify the design flow and loading for your facility.

| Design | Design Factor | x | % | = | % of Design |
|---|---|---|---|---|---|
| Max Month Design Flow, MGD | 170 | x | 90 | = | 153 |
| | | x | 100 | = | 170 |
| Design BOD, lbs/day | 291000 | x | 90 | = | 261900 |
| | | x | 100 | = | 291000 |

2.2 Verify the number of times the flow and BOD exceeded 90% or 100% of design, points earned, and score:

| | Months of Influent | Number of times flow was greater than 90% of | Number of times flow was greater than 100% of | Number of times BOD was greater than 90% of design | Number of times BOD was greater than 100% of design |
|---|---|---|---|---|---|
| January | 1 | 0 | 0 | 0 | 0 |
| February | 1 | 0 | 0 | 0 | 0 |
| March | 1 | 0 | 0 | 0 | 0 |
| April | 1 | 0 | 0 | 0 | 0 |
| May | 1 | 0 | 0 | 0 | 0 |
| June | 1 | 0 | 0 | 0 | 0 |
| July | 1 | 0 | 0 | 1 | 0 |
| August | 1 | 0 | 0 | 1 | 0 |
| September | 1 | 0 | 0 | 0 | 0 |
| October | 1 | 0 | 0 | 0 | 0 |
| November | 1 | 0 | 0 | 0 | 0 |
| December | 1 | 0 | 0 | 0 | 0 |
| Points per each | | 2 | 1 | 3 | 2 |
| Exceedances | | 0 | 0 | 2 | 0 |
| Points | | 0 | 0 | 6 | 0 |
| **Total Number of Points** | | | | | **6** |

**6**

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3. Flow Meter

3.1 Was the influent flow meter calibrated in the last year?

● Yes Enter last calibration date (MM/DD/YYYY)
2020-04-25

○ No

If No, please explain:

4. Sewer Use Ordinance

4.1 Did your community have a sewer use ordinance that limited or prohibited the discharge of excessive conventional pollutants ((C)BOD, SS, or pH) or toxic substances to the sewer from industries, commercial users, hauled waste, or residences?

● Yes

○ No

If No, please explain:

4.2 Was it necessary to enforce the ordinance?

● Yes

○ No

If Yes, please explain:

Various violations occurred. The District responds to violations according to the Enforcement Response Plan. The semi-annual and annual Pretreatment Program reports summarize the violations and the MMSD response.

5. Septage Receiving

5.1 Did you have requests to receive septage at your facility?

| Septic Tanks | Holding Tanks | Grease Traps |
|---|---|---|
| ○ Yes | ○ Yes | ○ Yes |
| ● No | ● No | ● No |

5.2 Did you receive septage at your faclity? If yes, indicate volume in gallons.

Septic Tanks
○ Yes gallons
● No

Holding Tanks
○ Yes gallons
● No

Grease Traps
○ Yes gallons
● No

5.2.1 If yes to any of the above, please explain if plant performance is affected when receiving any of these wastes.

6. Pretreatment

6.1 Did your facility experience operational problems, permit violations, biosolids quality concerns, or hazardous situations in the sewer system or treatment plant that were attributable to commercial or industrial discharges in the last year?

○ Yes

● No

If yes, describe the situation and your community's response.

# Compliance Maintenance Annual Report

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6.2 Did your facility accept hauled industrial wastes, landfill leachate, etc.?

○ Yes

● No

If yes, describe the types of wastes received and any procedures or other restrictions that were in place to protect the facility from the discharge of hauled industrial wastes.

| | |
|---|---|
| **Total Points Generated** | 6 |
| **Score (100 - Total Points Generated)** | 94 |
| **Section Grade** | **A** |

# Compliance Maintenance Annual Report

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## Effluent Quality and Plant Performance (BOD/CBOD)

1. Effluent (C)BOD Results

1.1 Verify the following monthly average effluent values, exceedances, and points for BOD or CBOD

| Outfall No. 001 | Monthly Average Limit (mg/L) | 90% of Permit Limit > 10 (mg/L) | Effluent Monthly Average (mg/L) | Months of Discharge with a Limit | Permit Limit Exceedance | 90% Permit Limit Exceedance |
|---|---|---|---|---|---|---|
| January | 30 | 27 | 13 | 1 | 0 | 0 |
| February | 30 | 27 | 13 | 1 | 0 | 0 |
| March | 30 | 27 | 14 | 1 | 0 | 0 |
| April | 30 | 27 | 13 | 1 | 0 | 0 |
| May | 30 | 27 | 11 | 1 | 0 | 0 |
| June | 30 | 27 | 13 | 1 | 0 | 0 |
| July | 30 | 27 | 14 | 1 | 0 | 0 |
| August | 30 | 27 | 12 | 1 | 0 | 0 |
| September | 30 | 27 | 11 | 1 | 0 | 0 |
| October | 30 | 27 | 13 | 1 | 0 | 0 |
| November | 30 | 27 | 13 | 1 | 0 | 0 |
| December | 30 | 27 | 15 | 1 | 0 | 0 |
| * Equals limit if limit is <= 10 | | | | | | |
| Months of discharge/yr | | | | 12 | | |
| Points per each exceedance with 12 months of discharge | | | | | 7 | 3 |
| Exceedances | | | | | 0 | 0 |
| Points | | | | | 0 | 0 |
| **Total number of points** | | | | | | **0** |

**0**

NOTE: For systems that discharge intermittently to state waters, the points per monthly exceedance for this section shall be based upon a multiplication factor of 12 months divided by the number of months of discharge. Example: For a wastewater facility discharging only 6 months of the year, the multiplication factor is 12/6 = 2.0

1.2 If any violations occurred, what action was taken to regain compliance?

2. Flow Meter Calibration

2.1 Was the effluent flow meter calibrated in the last year?

● Yes Enter last calibration date (MM/DD/YYYY)

2020-10-19

○ No

If No, please explain:

3. Treatment Problems

3.1 What problems, if any, were experienced over the last year that threatened treatment?

Evidence of industrial discharges existed (foam, DO depressions, etc.) that impacted treatment.

4. Other Monitoring and Limits

4.1 At any time in the past year was there an exceedance of a permit limit for any other pollutants such as chlorides, pH, residual chlorine, fecal coliform, or metals?

○ Yes

● No

If Yes, please explain:

4.2 At any time in the past year was there a failure of an effluent acute or chronic whole effluent toxicity (WET) test?

- ○ Yes
- ● No

If Yes, please explain:

4.3 If the biomonitoring (WET) test did not pass, were steps taken to identify and/or reduce source(s) of toxicity?

- ○ Yes
- ○ No
- ● N/A

Please explain unless not applicable:

| | |
|---|---|
| **Total Points Generated** | 0 |
| **Score (100 - Total Points Generated)** | 100 |
| **Section Grade** | **A** |

# Compliance Maintenance Annual Report

**Milwaukee Metro Sew Dist Combined**

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## Effluent Quality and Plant Performance (Total Suspended Solids)

1. Effluent Total Suspended Solids Results

1.1 Verify the following monthly average effluent values, exceedances, and points for TSS:

| Outfall No. 001 | Monthly Average Limit (mg/L) | 90% of Permit Limit >10 (mg/L) | Effluent Monthly Average (mg/L) | Months of Discharge with a Limit | Permit Limit Exceedance | 90% Permit Limit Exceedance |
|---|---|---|---|---|---|---|
| January | 30 | 27 | 9 | 1 | 0 | 0 |
| February | 30 | 27 | 8 | 1 | 0 | 0 |
| March | 30 | 27 | 9 | 1 | 0 | 0 |
| April | 30 | 27 | 7 | 1 | 0 | 0 |
| May | 30 | 27 | 8 | 1 | 0 | 0 |
| June | 30 | 27 | 8 | 1 | 0 | 0 |
| July | 30 | 27 | 12 | 1 | 0 | 0 |
| August | 30 | 27 | 11 | 1 | 0 | 0 |
| September | 30 | 27 | 9 | 1 | 0 | 0 |
| October | 30 | 27 | 11 | 1 | 0 | 0 |
| November | 30 | 27 | 10 | 1 | 0 | 0 |
| December | 30 | 27 | 10 | 1 | 0 | 0 |
| * Equals limit if limit is <= 10 | | | | | | |
| Months of Discharge/yr | | | | 12 | | |
| **Points per each exceedance with 12 months of discharge:** | | | | | **7** | **3** |
| Exceedances | | | | | 0 | 0 |
| Points | | | | | 0 | 0 |
| **Total Number of Points** | | | | | | **0** |

**0**

NOTE: For systems that discharge intermittently to state waters, the points per monthly exceedance for this section shall be based upon a multiplication factor of 12 months divided by the number of months of discharge.

Example: For a wastewater facility discharging only 6 months of the year, the multiplication factor is 12/6 = 2.0

1.2 If any violations occurred, what action was taken to regain compliance?

| | |
|---|---|
| **Total Points Generated** | 0 |
| **Score (100 - Total Points Generated)** | 100 |
| **Section Grade** | **A** |

# Compliance Maintenance Annual Report

**Milwaukee Metro Sew Dist Combined**

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Reporting For: **2020**

## Effluent Quality and Plant Performance (Ammonia - NH3)

1. Effluent Ammonia Results

1.1 Verify the following monthly and weekly average effluent values, exceedances and points for ammonia

| Outfall No. 001 | Monthly Average NH3 Limit (mg/L) | Weekly Average NH3 Limit (mg/L) | Effluent Monthly Average NH3 (mg/L) | Monthly Permit Limit Exceedance | Effluent Weekly Average for Week 1 | Effluent Weekly Average for Week 2 | Effluent Weekly Average for Week 3 | Effluent Weekly Average for Week 4 | Weekly Permit Limit Exceedance |
|---|---|---|---|---|---|---|---|---|---|
| January | 27 | | .36316129 | 0 | | | | | |
| February | 27 | | .650310345 | 0 | | | | | |
| March | 27 | | .826258065 | 0 | | | | | |
| April | 27 | | .594766667 | 0 | | | | | |
| May | | | | | | | | | |
| June | | | | | | | | | |
| July | | | | | | | | | |
| August | | | | | | | | | |
| September | | | | | | | | | |
| October | | | | | | | | | |
| November | 27 | | 2.024233333 | 0 | | | | | |
| December | 27 | | .54716129 | 0 | | | | | |

| | |
|---|---|
| Points per each exceedance of Monthly average: | 10 |
| Exceedances, Monthly: | 0 |
| Points: | 0 |
| Points per each exceedance of weekly average (when there is no monthly average): | 2.5 |
| Exceedances, Weekly: | 0 |
| Points: | 0 |
| **Total Number of Points** | **0** |

**0**

NOTE: Limit exceedances are considered for monthly OR weekly averages but not both. When a monthly average limit exists it will be used to determine exceedances and generate points. This will be true even if a weekly limit also exists. When a weekly average limit exists and a monthly limit does not exist, the weekly limit will be used to determine exceedances and generate points.

1.2 If any violations occurred, what action was taken to regain compliance?

| | |
|---|---|
| **Total Points Generated** | 0 |
| **Score (100 - Total Points Generated)** | 100 |
| **Section Grade** | **A** |

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## Effluent Quality and Plant Performance (Phosphorus)

1. Effluent Phosphorus Results

1.1 Verify the following monthly average effluent values, exceedances, and points for Phosphorus

| Outfall No. 001 | Monthly Average phosphorus Limit (mg/L) | Effluent Monthly Average phosphorus (mg/L) | Months of Discharge with a Limit | Permit Limit Exceedance | |
|---|---|---|---|---|---|
| January | 1 | 0.262 | 1 | 0 | |
| February | 1 | 0.314 | 1 | 0 | |
| March | 1 | 0.569 | 1 | 0 | |
| April | 1 | 0.259 | 1 | 0 | |
| May | 1 | 0.243 | 1 | 0 | |
| June | 1 | 0.528 | 1 | 0 | |
| July | 1 | 0.509 | 1 | 0 | |
| August | 1 | 0.588 | 1 | 0 | |
| September | 1 | 0.721 | 1 | 0 | |
| October | 1 | 0.643 | 1 | 0 | **0** |
| November | 1 | 0.542 | 1 | 0 | |
| December | 1 | 0.462 | 1 | 0 | |
| Months of Discharge/yr | | | 12 | | |
| **Points per each exceedance with 12 months of discharge:** | | | | **10** | |
| Exceedances | | | | 0 | |
| **Total Number of Points** | | | | **0** | |

NOTE: For systems that discharge intermittently to waters of the state, the points per monthly exceedance for this section shall be based upon a multiplication factor of 12 months divided by the number of months of discharge.

Example: For a wastewater facility discharging only 6 months of the year, the multiplication factor is 12/6 = 2.0

1.2 If any violations occurred, what action was taken to regain compliance?

| | |
|---|---|
| **Total Points Generated** | 0 |
| **Score (100 - Total Points Generated)** | 100 |
| **Section Grade** | **A** |

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## Biosolids Quality and Management

1. Biosolids Use/Disposal

1.1 How did you use or dispose of your biosolids? (Check all that apply)

- ☒ Land applied under your permit
- ☒ Publicly Distributed Exceptional Quality Biosolids
- ☐ Hauled to another permitted facility
- ☒ Landfilled
- ☐ Incinerated
- ☐ Other

NOTE: If you did not remove biosolids from your system, please describe your system type such as lagoons, reed beds, recirculating sand filters, etc.

1.1.1 If you checked Other, please describe:

Biosolids from South Shore WRF Outfall 004 are pumped to Jones Island WRF, blended with biosolids from Jones Island WRF, heat dried, and publicly distributed as EQ biosolids. No land application from Outfall 004 in 2020. 755 dry tons of cake from Outfall 005 were land applied in 2020. 561 dry tons of cake from Outfall 005 were landfilled in 2020.

2. Land Application Site

2.1 Last Year's Approved and Active Land Application Sites

2.1.1 How many acres did you have?

25578.80 acres

2.1.2 How many acres did you use?

160.4 acres

2.2 If you did not have enough acres for your land application needs, what action was taken?

2.3 Did you overapply nitrogen on any of your approved land application sites you used last year? **0**

- ○ Yes (30 points)
- ● No

2.4 Have all the sites you used last year for land application been soil tested in the previous 4 years?

- ● Yes
- ○ No (10 points)
- ○ N/A

3. Biosolids Metals

Number of biosolids outfalls in your WPDES permit:

3.1 For each outfall tested, verify the biosolids metal quality values for your facility during the last calendar year.

Outfall No. 005 - South Shore Cake Sludge

| Parameter | 80% of Limit | H.Q. Limit | Ceiling Limit | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | 80% Value | High Quality | Ceiling |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | | 41 | 75 | | | | | | | | 0 | | | | | | 0 | 0 |
| Cadmium | | 39 | 85 | | | | | | | | 1.65 | | | | | | 0 | 0 |
| Copper | | 1500 | 4300 | | | | | | | | 445 | | | | | | 0 | 0 |
| Lead | | 300 | 840 | | | | | | | | 54.5 | | | | | | 0 | 0 |
| Mercury | | 17 | 57 | | | | | | | | .415 | | | | | | 0 | 0 |
| Molybdenum | 60 | | 75 | | | | | | | | 16 | | | | | 0 | | 0 |
| Nickel | 336 | | 420 | | | | | | | | 41 | | | | | 0 | | 0 |
| Selenium | 80 | | 100 | | | | | | | | 2.55 | | | | | 0 | | 0 |
| Zinc | | 2800 | 7500 | | | | | | | | 865 | | | | | | 0 | 0 |

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3.1.1 Number of times any of the metals exceeded the high quality limits OR 80% of the limit for molybdenum, nickel, or selenium = 0

Exceedence Points

- ● 0 (0 Points)
- ○ 1-2 (10 Points)
- ○ > 2 (15 Points)

3.1.2 If you exceeded the high quality limits, did you cumulatively track the metals loading at each land application site? (check applicable box)

- ○ Yes
- ○ No (10 points)
- ● N/A - Did not exceed limits or no HQ limit applies (0 points)
- ○ N/A - Did not land apply biosolids until limit was met (0 points)

3.1.3 Number of times any of the metals exceeded the ceiling limits = 0 **0**

Exceedence Points

- ● 0 (0 Points)
- ○ 1 (10 Points)
- ○ > 1 (15 Points)

3.1.4 Were biosolids land applied which exceeded the ceiling limit?

- ○ Yes (20 Points)
- ● No (0 Points)

3.1.5 If any metal limit (high quality or ceiling) was exceeded at any time, what action was taken? Has the source of the metals been identified?

4. Pathogen Control (per outfall):

4.1 Verify the following information. If any information is incorrect, use the Report Issue button under the Options header in the left-side menu.

| | |
|---|---|
| Outfall Number: | **005** |
| Biosolids Class: | B |
| Bacteria Type and Limit: | Fecal Coliform |
| Sample Dates: | 11/01/2020 - 12/31/2020 |
| Density: | 4,600 |
| Sample Concentration Amount: | CFU/G TS |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Process: | Aerobic Digestion |
| Process Description: | The geometric mean 1370 MPN/gTS, of 7 discrete samples is less than 2,000,000 MPN/gTS. |

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| | |
|---|---|
| Outfall Number: | **005** |
| Biosolids Class: | B |
| Bacteria Type and Limit: | Fecal Coliform |
| Sample Dates: | 11/01/2020 - 12/31/2020 |
| Density: | 4,500 |
| Sample Concentration Amount: | CFU/G TS |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Process: | Anaerobic Digestion |
| Process Description: | The geometric mean 652 MPN/gTS, of 7 discrete samples is less than 2,000,000 MPN/gTS. |

**0**

4.2 If exceeded Class B limit or did not meet the process criteria at the time of land application.

4.2.1 Was the limit exceeded or the process criteria not met at the time of land application?

- ○ Yes (40 Points)
- ● No

If yes, what action was taken?

5. Vector Attraction Reduction (per outfall):

5.1 Verify the following information. If any of the information is incorrect, use the Report Issue button under the Options header in the left-side menu.

| | |
|---|---|
| Outfall Number: | **005** |
| Method Date: | 08/10/2020 |
| Option Used To Satisfy Requirement: | Volatile Solids Reduction |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Limit (if applicable): | >=38 |
| Results (if applicable): | 62.50 |

| | |
|---|---|
| Outfall Number: | **005** |
| Method Date: | 08/10/2020 |
| Option Used To Satisfy Requirement: | Volatile Solids Reduction |
| Requirement Met: | Yes |
| Land Applied: | Yes |
| Limit (if applicable): | >=38 |
| Results (if applicable): | 57 |

**0**

5.2 Was the limit exceeded or the process criteria not met at the time of land application?

- ○ Yes (40 Points)
- ● No

If yes, what action was taken?

6. Biosolids Storage

6.1 How many days of actual, current biosolids storage capacity did your wastewater treatment facility have either on-site or off-site?

- ● >= 180 days (0 Points)
- ○ 150 - 179 days (10 Points)

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| | |
|---|---|
| ○ 120 - 149 days (20 Points)<br>○ 90 - 119 days (30 Points)<br>○ < 90 days (40 Points)<br>○ N/A (0 Points)<br>6.2 If you checked N/A above, explain why. | **0** |
| 7. Issues<br>7.1 Describe any outstanding biosolids issues with treatment, use or overall management: | |

| | |
|---|---|
| **Total Points Generated** | 0 |
| **Score (100 - Total Points Generated)** | 100 |
| **Section Grade** | **A** |

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## Staffing and Preventative Maintenance (All Treatment Plants)

1. Plant Staffing

1.1 Was your wastewater treatment plant adequately staffed last year?

- ● Yes
- ○ No

If No, please explain:

Could use more help/staff for:

1.2 Did your wastewater staff have adequate time to properly operate and maintain the plant and fulfill all wastewater management tasks including recordkeeping?

- ● Yes
- ○ No

If No, please explain:

2. Preventative Maintenance

2.1 Did your plant have a documented AND implemented plan for preventative maintenance on major equipment items?

- ● Yes (Continue with question 2) ☐☐
- ○ No (40 points)☐☐

If No, please explain, then go to question 3:

2.2 Did this preventative maintenance program depict frequency of intervals, types of lubrication, and other tasks necessary for each piece of equipment?

- ● Yes
- ○ No (10 points)

2.3 Were these preventative maintenance tasks, as well as major equipment repairs, recorded and filed so future maintenance problems can be assessed properly?

- ● Yes
  - ○ Paper file system
  - ● Computer system
  - ○ Both paper and computer system
- ○ No (10 points)

**0**

3. O&M Manual

3.1 Does your plant have a detailed O&M and Manufacturer Equipment Manuals that can be used as a reference when needed?

- ● Yes
- ○ No

4. Overall Maintenance /Repairs

4.1 Rate the overall maintenance of your wastewater plant.

- ○ Excellent
- ● Very good
- ○ Good
- ○ Fair
- ○ Poor

Describe your rating:

Maintenance work is addressed on a priority system in a timely manner.

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| | |
|---|---|
| **Total Points Generated** | 0 |
| **Score (100 - Total Points Generated)** | 100 |
| **Section Grade** | **A** |

# Compliance Maintenance Annual Report

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## Operator Certification and Education

1. Operator-In-Charge

1.1 Did you have a designated operator-in-charge during the report year?

● Yes (0 points)

○ No (20 points)

Name: BRETT P KELLY

Certification No: 34528

**0**

2. Certification Requirements

2.1 In accordance with Chapter NR 114.56 and 114.57, Wisconsin Administrative Code, what level and subclass(es) were required for the operator-in-charge (OIC) to operate the wastewater treatment plant and what level and subclass(es) were held by the operator-in-charge?

| Sub Class | SubClass Description | WWTP | OIC | | |
|---|---|---|---|---|---|
| | | **Advanced** | OIT | Basic | Advanced |
| A1 | Suspended Growth Processes | X | | | X |
| A2 | Attached Growth Processes | | | | |
| A3 | Recirculating Media Filters | | | | |
| A4 | Ponds, Lagoons and Natural | | X | | |
| A5 | Anaerobic Treatment Of Liquid | | | | |
| B | Solids Separation | X | | | X |
| C | Biological Solids/Sludges | X | | | X |
| P | Total Phosphorus | X | | | X |
| N | Total Nitrogen | | | | |
| D | Disinfection | X | | | X |
| L | Laboratory | | | | |
| U | Unique Treatment Systems | | | | |
| SS | Sanitary Sewage Collection | X | NA | NA | NA |

2.2 Was the operator-in-charge certified at the appropriate level and subclass(es) to operate this plant? (Note: Certification in subclass SS is required 5 years after permit reissuance and is basic level only.)

● Yes (0 points)

○ No (20 points)

**0**

3. Succession Planning

3.1 In the event of the loss of your designated operator-in-charge, did you have a contingency plan to ensure the continued proper operation and maintenance of the plant that includes one or more of the following options (check all that apply)?

☒ One or more additional certified operators on staff

☐ An arrangement with another certified operator

☐ An arrangement with another community with a certified operator

☐ An operator on staff who has an operator-in-training certificate for your plant and is expected to be certified within one year

☐ A consultant to serve as your certified operator

☐ None of the above (20 points)

If "None of the above" is selected, please explain:

**0**

4. Continuing Education Credits

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4.1 If you had a designated operator-in-charge, was the operator-in-charge earning Continuing Education Credits at the following rates?

OIT and Basic Certification:

- ○ Averaging 6 or more CECs per year.
- ○ Averaging less than 6 CECs per year.

Advanced Certification:

- ● Averaging 8 or more CECs per year.
- ○ Averaging less than 8 CECs per year.

| | |
|---|---|
| **Total Points Generated** | 0 |
| **Score (100 - Total Points Generated)** | 100 |
| **Section Grade** | **A** |

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## Financial Management

1. Provider of Financial Information

Name: David Deiringer

Telephone: (414) 225-2254 (XXX) XXX-XXXX

E-Mail Address (optional): ddeiringer@mmsd.com

2. Treatment Works Operating Revenues

2.1 Are User Charges or other revenues sufficient to cover O&M expenses for your wastewater treatment plant AND/OR collection system ?

- ● Yes (0 points) ☐☐
- ○ No (40 points)

If No, please explain:

2.2 When was the User Charge System or other revenue source(s) last reviewed and/or revised?

Year: 2020

- ● 0-2 years ago (0 points) ☐☐
- ○ 3 or more years ago (20 points)☐☐
- ○ N/A (private facility)

2.3 Did you have a special account (e.g., CWFP required segregated Replacement Fund, etc.) or financial resources available for repairing or replacing equipment for your wastewater treatment plant and/or collection system?

- ● Yes (0 points)
- ○ No (40 points)

**0**

REPLACEMENT FUNDS [PUBLIC MUNICIPAL FACILITIES SHALL COMPLETE QUESTION 3]

3. Equipment Replacement Funds

3.1 When was the Equipment Replacement Fund last reviewed and/or revised?

Year: 2020

- ● 1-2 years ago (0 points)☐☐
- ○ 3 or more years ago (20 points)☐☐
- ○ N/A

If N/A, please explain:

3.2 Equipment Replacement Fund Activity

| | | |
|---|---|---|
| **3.2.1 Ending Balance Reported on Last Year's CMAR** | | $ 15,442,080.00 |
| 3.2.2 Adjustments - if necessary (e.g. earned interest, audit correction, withdrawal of excess funds, increase making up previous shortfall, etc.) | | $ 0.00 |
| 3.2.3 Adjusted January 1st Beginning Balance | | $ 15,442,080.00 |
| 3.2.4 Additions to Fund (e.g. portion of User Fee, earned interest, etc.) | + | $ 413,486.00 |

3.2.5 Subtractions from Fund (e.g., equipment replacement, major repairs - use description box 3.2.6.1 below*) - $ 0.00

3.2.6 Ending Balance as of December 31st for CMAR Reporting Year $ 15,855,566.00

All Sources: This ending balance should include all Equipment Replacement Funds whether held in a bank account(s), certificate(s) of deposit, etc.

3.2.6.1 Indicate adjustments, equipment purchases, and/or major repairs from 3.2.5 above.

3.3 What amount should be in your Replacement Fund? $ 15,855,566.00

**0**

Please note: If you had a CWFP loan, this amount was originally based on the Financial Assistance Agreement (FAA) and should be regularly updated as needed. Further calculation instructions and an example can be found by clicking the SectionInstructions link under Info header in the left-side menu.

3.3.1 Is the December 31 Ending Balance in your Replacement Fund above, (#3.2.6) equal to, or greater than the amount that should be in it (#3.3)?

- ● Yes
- ○ No

If No, please explain.

4. Future Planning

4.1 During the next ten years, will you be involved in formal planning for upgrading, rehabilitating, or new construction of your treatment facility or collection system?

- ● Yes - If Yes, please provide major project information, if not already listed below.☐☐
- ○ No

| Project # | Project Description | Estimated Cost | Approximate Construction Year |
|---|---|---|---|
| 1 | South Shore Water Reclamation Facility: 30 Projects | 123,523,013 | 2026 |
| 2 | Conveyance Projects: See Jones Island CMAR, Financial Management, Item 4.1 | | |
| 3 | Jones Island Water Reclamation Facility and Pipelines: See Jones Island CMAR, Financial Management, Item 4.1 | | |

5. Financial Management General Comments

Response #4 above represents planned spending for Conveyance (Collection System) and Water Reclamation Facility (Jones Island, Pipelines, and South Shore) projects for the District's 6-year planning cycle beginning in 2021. Jones Island and Pipeline project counts and costs have been combined. Additional projects, i.e. Watercourse Improvement and other projects, as well as debt service during the same 6-year period will total $1.5 billion. For a complete listing of all projects and expenditures planned for the period 2021 to 2026, refer to the MMSD 2021 Capital Budget.

ENERGY EFFICIENCY AND USE

6. Collection System

6.1 Energy Usage

6.1.1 Enter the monthly energy usage from the different energy sources:

**COLLECTION SYSTEM PUMPAGE: Total Power Consumed**

Number of Municipally Owned Pump/Lift Stations: 19

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| | Electricity Consumed (kWh) | Natural Gas Consumed (therms) |
|---|---|---|
| **January** | 614,950 | 40,477 |
| **February** | 507,185 | 22,644 |
| **March** | 474,534 | 50,211 |
| **April** | 453,182 | 20,131 |
| **May** | 443,725 | 7,246 |
| **June** | 480,247 | 16,076 |
| **July** | 652,207 | 4,681 |
| **August** | 432,253 | 5,123 |
| **September** | 411,266 | 6,909 |
| **October** | 350,687 | 15,032 |
| **November** | 212,265 | 20,414 |
| **December** | 440,164 | 4,824 |
| **Total** | **5,472,665** | **213,768** |
| **Average** | **456,055** | **17,814** |

6.1.2 Comments:

6.2 Energy Related Processes and Equipment

6.2.1 Indicate equipment and practices utilized at your pump/lift stations (Check all that apply):

- ☒ Comminution or Screening
- ☒ Extended Shaft Pumps
- ☒ Flow Metering and Recording
- ☐ Pneumatic Pumping
- ☒ SCADA System
- ☒ Self-Priming Pumps
- ☒ Submersible Pumps
- ☒ Variable Speed Drives
- ☒ Other:

Gate control motors, heaters

6.2.2 Comments:

6.3 Has an Energy Study been performed for your pump/lift stations?

- ○ No
- ● Yes

Year: 2018

By Whom: We Energies

Describe and Comment:

A level 1 energy assessment was done in 2018 for the Port Washington Pumping Station. The assessment delivered a report that outlined opportunities for reducing energy.

6.4 Future Energy Related Equipment

6.4.1 What energy efficient equipment or practices do you have planned for the future for your pump/lift stations?

In 2021 the District will evaluate the various sites for opportunities to improve our energy efficiency and renewable energy profile through Energy Plan in addition to evaluating energy efficiency during rehabilitation projects. Improved power monitor monitoring, controls, and the installation of energy efficient devices such as VFDs continue to be practiced by the District.

7. Treatment Facility

7.1 Energy Usage

7.1.1 Enter the monthly energy usage from the different energy sources:

**TREATMENT PLANT: Total Power Consumed/Month**

| | Electricity Consumed (kWh) | Total Influent Flow (MG) | Electricity Consumed/ Flow (kWh/MG) | Total Influent BOD (1000 lbs) | Electricity Consumed/ Total Influent BOD (kWh/1000lbs) | Natural Gas Consumed (therms) |
|---|---|---|---|---|---|---|
| **January** | 3,822,149 | 3,556.00 | 1,075 | 6,572.37 | 582 | 71,585 |
| **February** | 3,447,480 | 2,972.00 | 1,160 | 5,914.58 | 583 | 78,018 |
| **March** | 3,578,623 | 3,564.00 | 1,004 | 6,644.70 | 539 | 74,866 |
| **April** | 3,425,481 | 2,976.00 | 1,151 | 6,494.52 | 527 | 85,896 |
| **May** | 3,525,414 | 4,546.00 | 775 | 6,837.92 | 516 | 84,344 |
| **June** | 3,441,879 | 2,727.00 | 1,262 | 6,186.15 | 556 | 63,387 |
| **July** | 3,684,221 | 2,792.00 | 1,320 | 8,345.14 | 441 | 56,448 |
| **August** | 4,030,206 | 2,566.00 | 1,571 | 8,152.88 | 494 | 63,234 |
| **September** | 3,806,126 | 2,383.00 | 1,597 | 6,922.86 | 550 | 61,183 |
| **October** | 3,799,235 | 2,359.00 | 1,611 | 7,317.49 | 519 | 20,025 |
| **November** | 3,616,143 | 1,916.00 | 1,887 | 6,386.46 | 566 | 46,492 |
| **December** | 3,742,463 | 2,223.00 | 1,684 | 6,829.83 | 548 | 66,565 |
| **Total** | **43,919,420** | **34,580.00** | | **82,604.90** | | **772,043** |
| **Average** | **3,659,952** | **2,881.67** | **1,341** | **6,883.74** | **535** | **64,337** |

7.1.2 Comments:

7.2 Energy Related Processes and Equipment

7.2.1 Indicate equipment and practices utilized at your treatment facility (Check all that apply):

- ☐ Aerobic Digestion
- ☒ Anaerobic Digestion
- ☒ Biological Phosphorus Removal
- ☒ Coarse Bubble Diffusers
- ☒ Dissolved O2 Monitoring and Aeration Control
- ☒ Effluent Pumping
- ☒ Fine Bubble Diffusers
- ☒ Influent Pumping
- ☒ Mechanical Sludge Processing
- ☒ Nitrification
- ☒ SCADA System

☐ UV Disinfection
☒ Variable Speed Drives
☒ Other:

Gravity belt thickeners, plate and frame presses

7.2.2 Comments:

7.3 Future Energy Related Equipment

7.3.1 What energy efficient equipment or practices do you have planned for the future for your treatment facility?

The 2035 Vision, adopted in 2010, has two elements: integrated watershed management and climate change adaptation with an emphasis on energy efficiency. The District aligns capital improvement projects with the Vision to meet a net of 100% of MMSD's energy needs with renewable energy sources and 80% produced with internal, renewable sources. The Energy Plan was finalized in January 2015 and is being implemented to attain the District's long-term goals embodied in the 2035 Vision available here: https://www.mmsd.com/about-us/2035-vision. The recommendations in the Energy Plan are all either in progress or were studied in the 2050 Facilities Plan that was finalized in 2020. The Energy Plan will be renewed in 2021. For the treatment plants, we recommend the following examples of energy efficiency projects at the South Shore Water Reclamation Facility:
S01013 – Primary Clarifier Overhaul
S02015 – Aeration Basin Diffuser Replacement
S04034 – High Strength Waste Mixing Improvements
S04035 – Digester 6 & 8 Mixer Replacement
S04036 – Bldg 383 HVAC Replacement

8. Biogas Generation

8.1 Do you generate/produce biogas at your facility?
○ No
● Yes

If Yes, how is the biogas used (Check all that apply):
☒ Flared Off
☒ Building Heat
☒ Process Heat
☒ Generate Electricity
☐ Other:

9. Energy Efficiency Study

9.1 Has an Energy Study been performed for your treatment facility?
○ No
● Yes

☒ Entire facility

Year: 2017

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By Whom:

University of Wisconsin - Milwaukee Industrial Assessment Center

Describe and Comment:

Assessment covered equipment drives, lighting, and lubricant use throughout the entire facility.

☒ Part of the facility

Year:

2015

By Whom:

Short Elliot Hendrickson and Poyry

Describe and Comment:

MACT assessment was completed of the boilers. Many other processes throughout the facility have been assessed and are monitored for efficiency internally.

| | |
|---|---|
| **Total Points Generated** | 0 |
| **Score (100 - Total Points Generated)** | 100 |
| **Section Grade** | **A** |

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## Sanitary Sewer Collection Systems

1. Capacity, Management, Operation, and Maintenance (CMOM) Program

1.1 Do you have a CMOM program that is being implemented?

- ● Yes
- ○ No

If No, explain:

1.2 Do you have a CMOM program that contains all the applicable components and items according to Wisc. Adm Code NR 210.23 (4)?

- ● Yes
- ○ No (30 points)
- ○ N/A

If No or N/A, explain:

1.3 Does your CMOM program contain the following components and items? (check the components and items that apply)

☒ Goals [NR 210.23 (4)(a)]

Describe the major goals you had for your collection system last year:

The MMSD CMOM goals related to the conveyance and storage system as presented in the CMOM Program Annual Report for 2020 are:
1. Continue the support of the CMOM Program within the District organizational structure.
2. Communicate the goals and objectives of the CMOM Program to internal and external stakeholders, monitor the CMOM Program, and institute program modifications.
3. Continue to maintain adequate financial planning.
4. Continue to comply with regulatory requirements.
5. Continue to support and monitor the regional CMOM program.
6. Continue to maintain a safe work environment and facilities and also sustain a competent workforce.
7. Establish CMOM program elements specific to minimizing the number and volume of CSOs.
8. Continue to implement and support the Wet Weather Peak Flow Management Program.
9. Where possible, establish additional practices to prevent sanitary sewer overflows (SSOs), maintain or improve system performance, and avoid preventable failures.
10. Continue to establish and document level of protection, design, and performance standards for new conveyance assets constructed in the District service area, and consider documented and predicted changes in climate.
11. Minimize the cost of conveyance asset ownership while maintaining necessary stewardship of assets and achieving defined protection levels.
12. Enhance District level of knowledge and understanding of wet weather flows and system response to precipitation and other factors.
13. Promptly and accurately respond to customer inquiries.

Did you accomplish them?

- ● Yes
- ○ No

If No, explain:

☒ Organization [NR 210.23 (4) (b)]☐☐

Does this chapter of your CMOM include:

- ☒ Organizational structure and positions (eg. organizational chart and position descriptions)
- ☒ Internal and external lines of communication responsibilities
- ☒ Person(s) responsible for reporting overflow events to the department and the public

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☒ Legal Authority [NR 210.23 (4) (c)]

What is the legally binding document that regulates the use of your sewer system?

MMSD Rules

If you have a Sewer Use Ordinance or other similar document, when was it last reviewed and revised? (MM/DD/YYYY) 2018-01-22

Does your sewer use ordinance or other legally binding document address the following:

- ☒ Private property inflow and infiltration
- ☒ New sewer and building sewer design, construction, installation, testing and inspection
- ☒ Rehabilitated sewer and lift station installation, testing and inspection
- ☒ Sewage flows satellite system and large private users are monitored and controlled, as necessary
- ☒ Fat, oil and grease control
- ☒ Enforcement procedures for sewer use non-compliance

☒ Operation and Maintenance [NR 210.23 (4) (d)]

Does your operation and maintenance program and equipment include the following:

- ☒ Equipment and replacement part inventories
- ☒ Up-to-date sewer system map
- ☒ A management system (computer database and/or file system) for collection system information for O&M activities, investigation and rehabilitation
- ☒ A description of routine operation and maintenance activities (see question 2 below)
- ☒ Capacity assessment program
- ☒ Basement back assessment and correction
- ☒ Regular O&M training

☒ Design and Performance Provisions [NR 210.23 (4) (e)]☐☐

What standards and procedures are established for the design, construction, and inspection of the sewer collection system, including building sewers and interceptor sewers on private property?

- ☒ State Plumbing Code, DNR NR 110 Standards and/or local Municipal Code Requirements
- ☒ Construction, Inspection, and Testing
- ☐ Others:

☒ Overflow Emergency Response Plan [NR 210.23 (4) (f)]☐☐

Does your emergency response capability include:

- ☒ Responsible personnel communication procedures
- ☒ Response order, timing and clean-up
- ☒ Public notification protocols
- ☒ Training
- ☒ Emergency operation protocols and implementation procedures

☒ Annual Self-Auditing of your CMOM Program [NR 210.23 (5)]☐☐

☐ Special Studies Last Year (check only those that apply):

- ☐ Infiltration/Inflow (I/I) Analysis
- ☐ Sewer System Evaluation Survey (SSES)
- ☐ Sewer Evaluation and Capacity Managment Plan (SECAP)
- ☐ Lift Station Evaluation Report
- ☐ Others:

**0**

2. Operation and Maintenance

2.1 Did your sanitary sewer collection system maintenance program include the following maintenance activities? Complete all that apply and indicate the amount maintained.

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| | | |
|---|---|---|
| Cleaning | 0.33 | % of system/year |
| Root removal | 0 | % of system/year |
| Flow monitoring | 85 | % of system/year |
| Smoke testing | 0 | % of system/year |
| Sewer line televising | 4.36 | % of system/year |
| Manhole inspections | 0 | % of system/year |
| Lift station O&M | 19 | # per L.S./year |
| Manhole rehabilitation | 0 | % of manholes rehabbed |
| Mainline rehabilitation | 0 | % of sewer lines rehabbed |
| Private sewer inspections | 0.09 | % of system/year |
| Private sewer I/I removal | 0.39 | % of private services |
| River or water crossings | 0 | % of pipe crossings evaluated or maintained |

Please include additional comments about your sanitary sewer collection system below:

3. Performance Indicators

3.1 Provide the following collection system and flow information for the past year.

| | |
|---|---|
| 41.01 | Total actual amount of precipitation last year in inches |
| 34.76 | Annual average precipitation (for your location) |
| 302 | Miles of sanitary sewer |
| 19 | Number of lift stations |
| 0 | Number of lift station failures |
| 0 | Number of sewer pipe failures |
| 0 | Number of basement backup occurrences |
| 0 | Number of complaints |
| 93 | Average daily flow in MGD (if available) |
| 146 | Peak monthly flow in MGD (if available) |
| 286 | Peak hourly flow in MGD (if available) |

3.2 Performance ratios for the past year:

| | |
|---|---|
| 0.00 | Lift station failures (failures/year) |
| 0.00 | Sewer pipe failures (pipe failures/sewer mile/yr) |
| 0.00 | Sanitary sewer overflows (number/sewer mile/yr) |
| 0.00 | Basement backups (number/sewer mile) |
| 0.00 | Complaints (number/sewer mile) |
| 1.6 | Peaking factor ratio (Peak Monthly:Annual Daily Avg) |
| 3.1 | Peaking factor ratio (Peak Hourly:Annual Daily Avg) |

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4. Overflows

| LIST OF SANITARY SEWER (SSO) AND TREATMENT FACILITY (TFO) OVERFLOWS REPORTED ** | | | | |
|---|---|---|---|---|
| | Date | Location | Cause | Estimated Volume |
| 0 | 5/17/2020 5:30:00 PM - 5/17/2020 7:00:00 PM | South Howell Avenue, South of East Grange Avenue | Rain | 0.03 |

** If there were any SSOs or TFOs that are not listed above, please contact the DNR and stop work on this section until corrected.

What actions were taken, or are underway, to reduce or eliminate SSO or TFO occurences in the future?

The District and Veolia Water Milwaukee will continue to operate the conveyance system, storage system, and the water reclamation facilities in a manner to prevent separate sewer overflows and to maximum the capture of combined sewer overflows. The District's Wet Weather Peak Flow Management Program evaluates infiltration and inflow in our service area to identify areas to target for improvements. To further reduce the risk of basement backups and separate sewer overflows, the District has funded $31M of infiltration and inflow reduction projects throughout our service area over the last ten years. In 2020 the Private Property Inflow and Infiltration Reduction Program was made a permanent component of the annual budget. The District has started design on a project to reduce overflows from the Mill Road Relief Sewer at the North Broadmoor Road and North River Road/W Green Tree Road sites. Design continues to address overflows from the Roosevelt MIS at Roosevelt Drive and North 35th Street. The District also has a SSO Elimination Study underway to determine what could be done to reduce or eliminate overflows at each SSO site.

5. Infiltration / Inflow (I/I)

5.1 Was infiltration/inflow (I/I) significant in your community last year?

- ● Yes
- ○ No

If Yes, please describe:

Yes; Infiltration and inflow (I/I) in satellite municipal collection systems is the primary contributor of peak flows from the separate sewer area of the MMSD conveyance system and is one of the primary causes of separate sewer overflows from the MMSD system.

5.2 Has infiltration/inflow and resultant high flows affected performance or created problems in your collection system, lift stations, or treatment plant at any time in the past year?

- ○ Yes
- ● No

If Yes, please describe:

5.3 Explain any infiltration/inflow (I/I) changes this year from previous years:

MMSD believes that I/I has been reduced over the past year. Twenty-five of the twenty-eight member municipalities have PPI/I reduction projects completed or in progress in the first 11 years of the PPI/I Program. Many of the municipalities also completed public sector I/I reduction projects. MMSD has adopted peak flow performance standards in its Chapter 3 revisions which require tributary municipalities to reduce I/I. There were no new metersheds identified as noncompliant in 2020.

5.4 What is being done to address infiltration/inflow in your collection system?

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MMSD continues sewer rehab through Operation and Maintenance, and Capital programs. MMSD is continuing to work with satellite municipalities to reduce inflow and infiltration with the wet weather peak flow management program. Throughout 2020 the District collected data from 194 permanent meters and 153 portable meters and also 150 surcharge level indicators in strategically selected sanitary sewers within its service area to more accurately measure wastewater flows under both dry and wet weather conditions. The measured peak flows are compared to the allowable peak flows listed in Chapter 3 of the District's rules. Action will be taken for any metersheds that are identified as exceeding the allowable peak flows. MMSD has implemented the Private Property Inflow and Infiltration (PPI/I) Reduction Program in 2011 to support municipal work in reducing I/I from local private property sources. Twenty-five of the twenty-eight member municipalities have PPI/I reduction projects completed or in progress in the 11th year of the PPI/I Program. Additionally, MMSD installed 36 Micrometers to enhance I/I data collection. MMSD completed and implemented the MMSD CMOM program in 2007 and has continued implementation annually. MMSD completed and implemented the MMSD CMOM program in 2007 and has continued implementation annually. In addition, all municipalities have developed and implemented CMOM and Asset Management programs. MMSD also has a Green Infrastructure (GI) initiative program that is aimed at capturing 740 million gallons of water every time it rains by the year 2035. In 2020 MMSD started a $20M strategic green infrastructure installation program, called the Fresh Coast Protection Partnership (FCPP). This program is a public private partnership with Corvias; its goals center on ramping up the pace at which GI is installed within our GI Service area. The FCPP will work towards the goal of driving down the per-gallon total cost of GI, while cost effectively building local capacity and expertise in GI practices and producing the greatest impact on the District’s local community and conveyance system. In 2020 alone, MMSD built 3,000,000 gallons worth of green infrastructure capture and by the end of 2020, the MMSD had built enough projects to total 37 MG of GI storage capacity each time it rains.

| | |
|---|---|
| **Total Points Generated** | 0 |
| **Score (100 - Total Points Generated)** | 100 |
| **Section Grade** | **A** |

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## Grading Summary

WPDES No: 0036820

| SECTIONS | LETTER GRADE | GRADE POINTS | WEIGHTING FACTORS | SECTION POINTS |
|---|---|---|---|---|
| Influent | A | 4 | 3 | 12 |
| BOD/CBOD | A | 4 | 10 | 40 |
| TSS | A | 4 | 5 | 20 |
| Ammonia | A | 4 | 5 | 20 |
| Phosphorus | A | 4 | 3 | 12 |
| Biosolids | A | 4 | 5 | 20 |
| Staffing/PM | A | 4 | 1 | 4 |
| OpCert | A | 4 | 1 | 4 |
| Financial | A | 4 | 1 | 4 |
| Collection | A | 4 | 3 | 12 |
| **TOTALS** | | | **37** | **148** |
| **GRADE POINT AVERAGE (GPA) = 4.00** | | | | |

Notes:
A = Voluntary Range (Response Optional)
B = Voluntary Range (Response Optional)
C = Recommendation Range (Response Required)
D = Action Range (Response Required)
F = Action Range (Response Required)

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## Resolution or Owner's Statement

Name of Governing Body or Owner: MMSD Commission

Date of Resolution or Action Taken: 2021-06-28

Resolution Number:

Date of Submittal:

**ACTIONS SET FORTH BY THE GOVERNING BODY OR OWNER RELATING TO SPECIFIC CMAR SECTIONS (Optional for grade A or B. Required for grade C, D, or F):**

Influent Flow and Loadings: Grade = A

Effluent Quality: BOD: Grade = A

Effluent Quality: TSS: Grade = A

Effluent Quality: Ammonia: Grade = A

Effluent Quality: Phosphorus: Grade = A

Biosolids Quality and Management: Grade = A

Staffing: Grade = A

Operator Certification: Grade = A

Financial Management: Grade = A

Collection Systems: Grade = A
(Regardless of grade, response required for Collection Systems if SSOs were reported)

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Last Updated: 5/7/2021

Reporting For: **2020**

The District continues to consistently meet CSO Performance Standards for water quality based requirements as outlined in our permit. As stated in the current WPDES Permit (Section 4.3.3 (10): "The permittee has submitted the documentation that demonstrated implementation of each of the nine minimum controls in accordance with Section IIB of the U.S. EPA CSO Control Policy. The permittee submitted this documentation to the Department as an element of its 2020 Facilities Plan, approved by the Department on December 26, 2007." Not content with just maintaining status quo, however, the District has a goal of 0 CSOs as targeted in our 2035 Vision Statement. The District's 6-year Long Range Financing Plan includes $1.5 billion ($858 million in projects and $633 million in debt service) to maintain and improve the regional capital infrastructure that helps protect public health, homes, businesses and waterways. This includes spending to fix private property sources of excess water that can overwhelm sanitary sewer systems. Having already committed $4 billion for clean water infrastructure in previous years, MMSD's asset management is vital for optimizing reliability and performance of new and aging resources for our treatment plants, sewers, and flood management facilities.

**ACTIONS SET FORTH BY THE GOVERNING BODY OR OWNER RELATING TO THE OVERALL GRADE POINT AVERAGE AND ANY GENERAL COMMENTS**

(Optional for G.P.A. greater than or equal to 3.00, required for G.P.A. less than 3.00)

**G.P.A. = 4.00**

Item 7

**COMMISSION FILE NO:** 21-083-6 **DATE INTRODUCED:** June 14, 2021

**INTRODUCED BY:** Executive Director (Signature on File in the Office of the Commission)

**REFERRED BY COMMISSION CHAIRPERSON TO:** Operations Committee

**RELATING TO**: Approval of 2021 Green Infrastructure Partnership Program Projects G98004P69, G98004P72, G98004P78, G98004P80, and G98004P81

**SUMMARY:**

The Commission is requested to authorize the Executive Director to approve five projects, G98004P69, G98004P72, G98004P78, G98004P80, and G98004P81, under the 2021 Green Infrastructure Partnership Program (GIPP) in a total amount not to exceed $1,863,260. The 2021 GIPP funding was allocated in the approved 2021 Capital and Operations and Maintenance budgets. Thirteen additional project awards, G98004P65, G98004P66, G98004P67, G98004P68, G98004P70, G98004P71, G98004P73, G98004P74, G98004P75, G98004P76, G98004P77, G98004P79, and G98004P82, are within the Executive Director's authority and, therefore, are not requested for Commission approval. They are included in this document for reference only.

The primary goals of this program are to meet the 50-million-gallon green infrastructure (GI) goal in the five-year Wisconsin Pollutant Discharge Elimination System permit, support the District's 2035 Vision, implement the Regional Green Infrastructure Plan, and continue progress toward the goal of providing 740 million gallons of stormwater capture capacity in any given storm by 2035. Additionally, this program helps to form mutually beneficial partnerships to generate quantitative data on the effectiveness of GI in managing stormwater runoff in the District's service area and qualitative data on the implementation and feasibility of various GI practices.

The District received 23 applications from private property owners, municipalities, and developers in response to the District's notice and application.

**ATTACHMENTS:** **BACKGROUND** ☒ **KEY ISSUES** ☐ **RESOLUTION** ☒
**FISCAL NOTE** ☒ **S/W/MBE** ☐ **OTHER** ☐ ____

*OP_2021_Green_Infrastructure_Partnership_Program_Projects_legislative_file.docx*
*05-21-21*

**COMMITTEE ACTION:** _____ **DATE:** _____

**COMMISSION ACTION:** _____ **DATE:** _____

## SUMMARY (Cont'd)

Approval of 2021 Green Infrastructure Partnership Program Projects G98004P69, G98004P72, G98004P78, G98004P80, and G98004P81

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The following projects and partners are recommended for funding and are requested for Commission approval:

| Project Name | Applicant | Award Amount | Project Number |
|---|---|---|---|
| University of Wisconsin-Milwaukee (UWM) Innovation Campus | Innovation Park Development Partners, LLC | $243,794 | G98004P69 |
| Oak Creek Athletic Field Turf Conversion | Milwaukee Area Technical College (MATC) | $ 636,063 | G98004P72 |
| Brown Deer Road and Stormwater Management/Phase Three | Milwaukee County Department of Parks, Recreation, and Culture | $168,047 | G98004P78 |
| St. Anthony School Green Space Initiative | St. Anthony School Milwaukee | $635,806 | G98004P80 |
| 1300 Glenview Place, Wauwatosa, WI | General Capital Group and Joseph Property Development | $179,550 | G98004P81 |
| | **Total** | **$1,863,260** | |

These projects are summarized below:

**UWM Innovation Campus – submitted by Innovation Park Development Partners, LLC (G98004P69)**

UWM Innovation Campus is a mixed-use development located on approximately 89 acres in the City of Wauwatosa's Life Sciences District. The proposed development will be an environmentally and economically sustainable office, technology, and high value employment-oriented campus. The project includes a large, 69,000-square-foot green roof along with native landscaping that will augment existing stormwater management features as part of a treatment train.

Location: 9401 Watertown Plank Road, Wauwatosa, WI 53226
Gallons Captured: 125,022
GI Strategies: Native landscaping and green roof.

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**Oak Creek Athletic Field Turf Conversion – submitted by MATC (G98004P72)**

MATC is embarking on a multiphase upgrade of the athletic field at the Oak Creek Campus. The project will greatly improve the playability of the field used by the school's softball and baseball teams, while providing a significant volume of stormwater runoff storage. The project is in alignment with MATC's commitment to promoting sustainability, resilience, and carbon neutrality in their academic programs and facilities.

Location: 6665 S. Howell Avenue, Oak Creek, WI 53154
Gallons Captured: 326,186
GI Strategies: Athletic turf field with subsurface cistern storage.

**Brown Deer Road and Stormwater Management/Phase Three – submitted by Milwaukee County Department of Parks, Recreation, and Culture (G98004P78)**

This proposed project is part of a $6.5 million, three-phase capital development effort to completely reconstruct the interior loop roadway, the clubhouse circular drive and parking lot, and the boathouse loop road at Brown Deer Park. The project will also improve the service yard to provide better drainage and incorporate environmental and safety upgrades. Stormwater best management practices, GI, plantings of native trees and shrubs, and vegetation management are incorporated into the site plan.

Location: 7835 N. Green Bay Road, Milwaukee, WI 53209
Gallons Captured: 86,178
GI Strategies: Native landscaping, porous pavement, stormwater trees, and bioswales.

**St. Anthony School Green Space Initiative – submitted by St. Anthony School Milwaukee (G98004P80)**

Located in a largely industrial neighborhood next to Mitchell International Airport, St. Anthony High School seeks to develop the surrounding parking lot to create a green space for their students and the nearby neighborhoods. The school currently serves 504 low income, largely Hispanic students. Their project will transform a vast area of weathered asphalt into a soil-amended grassy area providing students with an athletic field to play soccer and have physical education class, as well as an outdoor Socratic classroom including stepped bench seating and picnic benches. The current parking area will be replaced with over 100,000 square feet of porous pavement.

Location: 4807 S. 2nd Street, Milwaukee, WI 53207
Gallons Captured: 359,877
GI Strategies: Native landscaping, porous pavement, rain barrels, stormwater trees, rain garden, soil amendments, and pavement removal.

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**1300 Glenview Place, Wauwatosa, WI – submitted by General Capital Group and Joseph Property Development (G98004P81)**

This project is a multifamily residential redevelopment of an approximately 10-acre site currently occupied by a number of industrial buildings. In addition to reducing the direct flow to the Menomonee River, the project will reduce the impervious areas on site by approximately 160,000 square feet. An onsite proposed connection to Oak Leaf Trail network will allow hundreds of residents a day to physically experience and learn about the improvements.

Location: 1300 Glenview Place, Wauwatosa, WI 53213
Gallons Captured: 101,000
GI Strategies: Native landscaping, porous pavement, and pavement removal.

## SUMMARY (Cont'd)

Approval of 2021 Green Infrastructure Partnership Program Projects G98004P69, G98004P72, G98004P78, G98004P80, and G98004P81

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The following projects and partners are included for reference only. They are within the Executive Director's authority and are not requested for Commission approval:

| Project Name | Applicant | Award Amount | Project Number |
|---|---|---|---|
| Abbot Row Green Infrastructure | Abbot Row Corporation | $54,970 | G98004P65 |
| Astor Court Condominium Green Infrastructure Improvements | Astor Court at East Pointe Condominium Association | $45,365 | G98004P66 |
| West Morgan Avenue and South Honey Creek Drive Bioswales | City of Milwaukee | $120,200 | G98004P67 |
| Marquette University College of Business Administration | Marquette University | $75,000 | G98004P68 |
| Greenvale Storm Water Drainage Improvement | Village of Fox Point | $69,383 | G98004P70 |
| 2021 Road and Utility Project | Village of Fox Point | $17,429 | G98004P71 |
| Green and Healthy Schools - Franklin | Milwaukee Board of School Directors on behalf of Benjamin Franklin School | $104,776 | G98004P73 |
| Green and Healthy Schools - Hawthorne | Milwaukee Board of School Directors on behalf of Nathaniel Hawthorne School | $113,755 | G98004P74 |
| Green and Healthy Schools - Neeskara | Milwaukee Board of School Directors on behalf of Neeskara School | $117,065 | G98004P75 |
| Green and Healthy Schools - Zablocki | Milwaukee Board of School Directors on behalf of Clement J. Zablocki School | $112,126 | G98004P76 |
| McKinley Marina Parking Lots Reconstruction and Site Improvements - Phase 2 | Milwaukee County Department of Parks, Recreation and Culture | $147,291 | G98004P77 |
| Green and Healthy Schools - Hayes | Milwaukee Board of School Directors on behalf of Hayes Bilingual School | $102,944 | G98004P79 |

## SUMMARY (Cont'd)

Approval of 2021 Green Infrastructure Partnership Program Projects G98004P69, G98004P72, G98004P78, G98004P80, and G98004P81

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| Project Name | Applicant | Award $ | Project Number |
|---|---|---|---|
| 2022 Hubbard Park Parking Lot Reconstruction | Village of Shorewood | $51,605 | G98004P82 |
| NOTE: Commission approval not requested for these projects | **Total** | $1,131,908 | |

## BACKGROUND

Approval of 2021 Green Infrastructure Partnership Program Projects G98004P69, G98004P72, G98004P78, G98004P80, and G98004P81

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This program provides funding support for a series of GI projects to demonstrate the importance of GI as a sustainable practice in managing the volume, rate, and quality of stormwater runoff. These projects may also catalyze more widespread GI strategies that can benefit the operation of municipal storm and sanitary sewers and the MMSD system. They may also provide potential added benefits to the award partners, including energy savings, reduction of the urban heat island effect, improved aesthetics, improved air quality, and improved water quality.

Partners were selected based on:

- The visibility of the projects and their benefits to the public (public accessibility).
- Partner match, commitment to outreach, and job training.
- Demonstration of a long-term commitment to the projects (maintenance).

The partners chosen through the request for application and evaluation process will share funding responsibility (cost share) with the District. The partner share includes costs associated with the design and construction, monetary contributions, and long-term commitments to maintain the projects. Through this program, the District can leverage significant money for GI.

The District's 2020 Facilities Plan recommended stormwater management demonstration projects to determine best practices that the District could recommend. The GIPP allows for a wide array of GI practices to be used to manage stormwater. Projects are evaluated from a qualitative standpoint post-construction, and that information is reported in District publications.

Projects qualifying for funding from the capital budget must have a total project value of $25,000 or more, and the District maintains a permanent conservation easement or maintenance covenant on the project for 11 to 20 years.

## RESOLUTION

Approval of 2021 Green Infrastructure Partnership Program Projects G98004P69, G98004P72, G98004P78, G98004P80, and G98004P81

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**RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that the Executive Director is authorized to approve five projects, G98004P69, G98004P72, G98004P78, G98004P80, and G98004P81, under the 2021 Green Infrastructure Partnership Program, and that the Executive Director is directed to execute contracts and agreements for the projects in a total amount not to exceed $1,863,260.

# Capital Budget Fiscal Note
# Total Project Cost

**RELATING TO:** Approval of 2021 Green Infrastructure Partnership Program Projects G98004P69, G98004P72, G98004P78, G98004P80, and G98004P81

| **Capital Project Number(s)** | **Impact of Requested Action on Total Project Cost:** |
|---|---|
| **G98004** | ☐ Increase ☐ Decrease ☐ New Project ☒ No Change |

| **Total Project Cost Analysis** | **Project Costs** |
|---|---|
| Adopted 2021 Total Project Cost | $17,455,653 |
| Previously Approved Changes | $0 |
| Approved Total Project Cost | $17,455,653 |
| Requested Total Project Cost | n/a |
| Requested (Increase)/Decrease | $0 |

**Action to be taken to Long-Range Financing Plan to address Total Project Cost change**

_____ Transfer from Allowance for Cost and Schedule Changes
_____ Transfer from another project (specify in comments)
_____ Delay Project(s) (specify in comments)
_____ Delete Project(s) (specify in comments)
_____ Other _____
_____ Transfer to Allowance for Cost and Schedule Changes

**Comments**

Budget Review by: Christine Durkin

Date: 5/12/2021

Item 8

**COMMISSION FILE NO:** 21-084-6 **DATE INTRODUCED:** June 14, 2021

**INTRODUCED BY:** Executive Director (Signature on File in the Office of the Commission)

**REFERRED BY COMMISSION CHAIRPERSON TO:** Operations Committee

**RELATING TO**: Award of Contract M03108P01, Impact of Water Levels on District Assets, Water Reclamation Facilities and District Headquarters

**SUMMARY:**

The Commission is requested to award and to direct the Executive Director to execute on behalf of the District Contract M03108P01, Impact of Water Levels on District Assets, Water Reclamation Facilities (WRF's) and District Headquarters (HQ), with Ramboll Americas Engineering Solutions, Inc., (Ramboll) in an amount not to exceed $416,305. Ramboll submitted the only proposal. The review committee determined that Ramboll is qualified to perform the tasks for this contract.

Lake and river water surface elevations have been at historical lows and highs in the past decade. Extreme highs and lows are predicted for the future due to climate change. The Federal Emergency Management Agency (FEMA) predicts even higher lake levels at the WRF's due to wave runup. The District must protect its assets from the adverse effects of these water surface elevation fluctuations, ensuring that District assets at the WRF's and at District HQ continue to work as intended. A separate contract (M03108P02) has already been awarded and is addressing water level risks in the conveyance system.

This project consists of a planning level study to identify District WRF and HQ assets that could potentially be affected by high or low water surface elevations (lake and river). The District WRF Asset Management Team and Freshwater Resources Monitoring Group have identified risks that the consultant will evaluate as well as other risks that are identified throughout the process.

**ATTACHMENTS:** **BACKGROUND** ☐ **KEY ISSUES** ☐ **RESOLUTION** ☒
**FISCAL NOTE** ☒ **S/W/MBE** ☒ **OTHER** ☐ ____

*OP_Contract_M03108P01_Impact_Water_Levels_District_Assets_WRF_District_Headquarters_legislative_file.docx*
*05-26-21*

**COMMITTEE ACTION:** _____ **DATE:** _____

**COMMISSION ACTION:** _____ **DATE:** _____

## SUMMARY (Cont'd)

Award of Contract M03108P01, Impact of Water Levels on District Assets, Water Reclamation Facilities and District Headquarters

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The consultant shall evaluate Jones Island WRF, South Shore WRF, and the HQ properties for other assets and asset systems that may be affected by high and/or low lake levels. The consultant shall propose alternatives to reduce risks and provide planning-level cost estimates associated with identified feasible alternatives. The consultant will deliver recommendations that may lead to future capital projects. The consultant's evaluations will be summarized in two technical memoranda that will be incorporated with the recommendations into the final deliverable of a capital improvement plan.

The overall contract includes the following major tasks: project management and planning services.

The contract duration is 12 months.

## RESOLUTION

Award of Contract M03108P01, Impact of Water Levels on District Assets, Water Reclamation Facilities and District Headquarters

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**RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that Contract M03108P01, Impact of Water Levels on District Assets, Water Reclamation Facilities and District Headquarters, is awarded to Ramboll Americas Engineering Solutions, Inc., in an amount not to exceed $416,305, and that the Executive Director is directed to execute a contract on behalf of the District.

# Capital Budget Fiscal Note
# Total Project Cost

**RELATING TO:** Award of Contract M03108P01, Impact of Water Levels on District Assets, Water Reclamation Facilities and District Headquarters

| **Capital Project Number(s)** | **Impact of Requested Action on Total Project Cost:** |
|---|---|
| **M03108** | ☐ Increase ☐ Decrease ☐ New Project ☒ No Change |

| **Total Project Cost Analysis** | **Project Costs** |
|---|---|
| Adopted 2021 Total Project Cost | $1,123,500 |
| Previously Approved Changes | $0 |
| Approved Total Project Cost | $1,123,500 |
| Requested Total Project Cost | n/a |
| Requested (Increase)/Decrease | $0 |

**Action to be taken to Long-Range Financing Plan to address Total Project Cost change**

_____ Transfer from Allowance for Cost and Schedule Changes
_____ Transfer from another project (specify in comments)
_____ Delay Project(s) (specify in comments)
_____ Delete Project(s) (specify in comments)
_____ Other _____
_____ Transfer to Allowance for Cost and Schedule Changes

**Comments**

Budget Review by: Christine Durkin

Date: 5/12/2021

**Award of Contract M03108P01, Impact of Water Levels on District Assets, Water Reclamation Facilities and District Headquarters**

## Procurement & S/W/MBE Summary Information

**Contract #** M03108P01 **Cost Center:** PRS

**Impact on Water Levels on District Assets, Water Reclamation Facilities and District Headquarters**

## PROPOSAL SUMMARY

Proposal Receipt Date: 4/7/2021

| | Total | SWMBE | Local |
|---|---|---|---|
| # of Proposals | 1 | 0 | 1 |
| # of Acceptable Proposals | 1 | 0 | 1 |

| **Proposals** *(listed by rank)* | **Negotiated Price** / *Submitted Price* | **Acceptable?** | **% Sub** | **% SWMBE** |
|---|---|---|---|---|
| Ramboll<br>Milwaukee, WI 53204 | **$421,009.00** / *$416,305.00* | Acceptable | 44.1% | 20.2% |

*Compensation packages for proposals rated "Conditionally Acceptable" and "Unacceptable" are not opened.*

## SUBCONSULTANT INFORMATION

| Type | Subconsultant Name | Type of Work | % | Amount |
|---|---|---|---|---|
| SBE | Applied Science, Inc.<br>Detroit, MI 48207 | Hydrology review & risk assessment | 14.5% | $60,958.00 |
| WBE | Penne Wilson Consulting<br>Sturgeon Bay, WI 54235 | Technical editing | 1.9% | $7,840.00 |
| WBE | Superior Engineering<br>Muskego, WI 53150 | Technical advising | 3.9% | $16,268.00 |
| Non-SWMBE | Symbiont<br>Milwaukee, WI 53214 | Risk evaluation & planning services | 23.9% | $100,425.00 |

## ECONOMIC DEVELOPMENT ELEMENTS

Local Office Preference? Y Mentor Protégé? N

## OUTREACH INFORMATION

The Procurement team performed the following outreach: advertised in the Daily Reporter and sent an e-mail notification to all registered firms in the Architecture & Engineering and Professional Services categories. The proposal opportunity is also publicly accessible from the MMSD website and Bonfire, the portal used to post RFPs. Bonfire also performs outreach to its users when an RFP is posted.

S/W/MBE Document Takers:
Applied Science, Inc.; FreshWater Engineering; Globetrotters Engineering Corporation; Himalayan Consultants, LLC; K. Singh & Associates, Inc.; Kapur & Associates, Inc.; M & M Environmental and Educational Services LLC; Oneida Total Integrated Enterprises (OTIE); Stony Point Hydrology LLC; TERRA Engineering, Ltd.; The Sigma Group

If no or low S/W/MBE participation, explain why:
n/a

Additional Comments:
n/a

## AWARDEE INFORMATION

| | |
|---|---|
| Company: | Ramboll Americas Engineering Solutions, Inc. |
| Contact Person: | Robert Bowers, PE |
| Phone Number: | (215) 499-0510 |
| E-mail Address: | robert.bowers@ramboll.com |

## EEO DATA

Location: 333 W. Washington Street<br>Syracuse, NY 13202<br>(Headquarters)

Total # of Employees: 673

| | Total | % | | Total | % |
|---|---|---|---|---|---|
| **Minorities** | 54 | 8.0% | **Females** | 229 | 34.0% |
| Asian | 22 | 3.3% | Asian | 9 | 1.3% |
| Black or African American | 13 | 1.9% | Black or African American | 7 | 1.0% |
| Hispanic or Latino | 18 | 2.7% | Hispanic or Latino | 4 | 0.6% |
| Native American | 1 | 0.1% | Native American | 1 | 0.1% |
| Other Minority | 0 | 0.0% | Other Minority | 0 | 0.0% |

*Labor Market Availability - Minorities* 38.1%

*Labor Market Availability - Females* 48.1%

## PRIME PERFORMANCE HISTORY - S/W/MBE COMPLIANCE

No S/W/MBE compliance history to report.

Item 9

**COMMISSION FILE NO:** 21-085-6 **DATE INTRODUCED:** June 14, 2021

**INTRODUCED BY:** Executive Director (Signature on File in the Office of the Commission)

**REFERRED BY COMMISSION CHAIRPERSON TO:** Operations Committee

**RELATING TO**: Award of Contract J06085P01, Jones Island Water Reclamation Facility Administrative and Maintenance Facilities Space Planning Analysis

**SUMMARY:**

The Commission is requested to award and to direct the Executive Director to execute on behalf of the District Contract J06085P01, Jones Island Water Reclamation Facility (JIWRF) Administrative and Maintenance Facilities Space Planning Analysis, with Greeley and Hansen, LLC, in an amount not to exceed $387,068. Greeley and Hansen, LLC, was the highest scoring proposer using a qualification-based selection method with one proposal received.

The purpose of the project is to create a capital improvement plan for the aging infrastructure at JIWRF so that any potential rehabilitation and replacement of these facilities can be done in an efficient manner. Many of the administrative and maintenance facilities at JIWRF are in need of rehabilitation or are inefficiently used. To adequately utilize all the available limited space at JIWRF, a capital improvement plan must be developed so that critical infrastructure can be preserved while upgrading these facilities.

Veolia Water Milwaukee, LLC, has submitted various requests over the years to repair buildings that are in need of structural repair. The intent of this project is to address those concerns and modernize the facility.

**ATTACHMENTS:** **BACKGROUND** ☐ **KEY ISSUES** ☐ **RESOLUTION** ☒
**FISCAL NOTE** ☒ **S/W/MBE** ☒ **OTHER** ☐ ____

*OP_ Contract_J06085P01_JIWRF_Space_Planning_Analysis_legislative_file.docx*
*05-17-21*

**COMMITTEE ACTION:** _____ **DATE:** _____

**COMMISSION ACTION:** _____ **DATE:** _____

## SUMMARY (Cont'd)

Award of Contract J06085P01, Jones Island Water Reclamation Facility Administrative and Maintenance Facilities Space Planning Analysis

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The general scope of work for this contract includes the review of the existing building condition and to develop a capital improvement plan for the following buildings at JIWRF:

- 234 – Return Activated Sludge Pump Station
- 261 – Inline Solids Handling Facility Planning
- 278 – Field Operation Building
- 279 – Operation Building
- 280 – Maintenance Facility

Additionally, the selected consultant will provide project management and planning services. Renderings and other graphics will be provided as needed. A sustainability analysis will also be evaluated through this project.

Once the capital improvement plan is delivered, the District will prioritize the rehabilitation and replacement of the buildings in which the greatest need has been established. The rehabilitation or replacement of the buildings is expected to be done in a phased approached.

The project is expected to take 24 months.

## RESOLUTION

Award of Contract J06085P01, Jones Island Water Reclamation Facility Administrative and Maintenance Facilities Space Planning Analysis

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**RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that Contract J06085P01, Jones Island Water Reclamation Facility Administrative and Maintenance Facilities Space Planning Analysis, is awarded to Greeley and Hansen, LLC, in an amount not to exceed $387,068, and that the Executive Director is directed to execute a contract on behalf of the District.

# Capital Budget Fiscal Note
# Total Project Cost

**RELATING TO:** Award of Contract J06085P01, Jones Island Water Reclamation Facility Administrative and Maintenance Facilities Space Planning Analysis

| **Capital Project Number(s)** | **Impact of Requested Action on Total Project Cost:** |
|---|---|
| **J06085** | ☐ Increase ☐ Decrease ☐ New Project ☒ No Change |

| **Total Project Cost Analysis** | **Project Costs** |
|---|---|
| Adopted 2021 Total Project Cost | $750,000 |
| Previously Approved Changes | $0 |
| Approved Total Project Cost | $750,000 |
| Requested Total Project Cost | n/a |
| Requested (Increase)/Decrease | $0 |

**Action to be taken to Long-Range Financing Plan to address Total Project Cost change**

_____ Transfer from Allowance for Cost and Schedule Changes
_____ Transfer from another project (specify in comments)
_____ Delay Project(s) (specify in comments)
_____ Delete Project(s) (specify in comments)
_____ Other _____
_____ Transfer to Allowance for Cost and Schedule Changes

**Comments**

Budget Review by: Christine Durkin

Date: 5/12/2021

**Award of Contract J06085P01, Jones Island Water Reclamation Facility Administrative and Maintenance Facilities Space Planning Analysis**

**Procurement & S/W/MBE Summary Information**

**Contract #** **J06085P01** **Cost Center:** **PRS**

## Jones Island Water Reclamation Facility Administrative and Maintenance Facilities Space Planning Analysis

### PROPOSAL SUMMARY

Proposal Receipt Date: 4/16/2021

| | Total | SWMBE | Local |
|---|---|---|---|
| # of Proposals | 1 | 0 | 0 |
| # of Acceptable Proposals | 1 | 0 | 0 |

| **Proposals** *(listed by rank)* | **Negotiated Price** / *Submitted Price* | **Acceptable?** | **% Sub** | **% SWMBE** |
|---|---|---|---|---|
| Greeley and Hansen LLC<br>Waukesha, WI 53186 | **$387,068.00** / *$387,068.00* | Acceptable | 28.0% | 28.0% |

*Compensation packages for proposals rated "Conditionally Acceptable" and "Unacceptable" are not opened.*

### SUBCONSULTANT INFORMATION

| Type | Subconsultant Name | Type of Work | % | Amount |
|---|---|---|---|---|
| MBE | Kapur Inc.<br>Milwaukee, WI 53217 | Structural Engineering Services | 17.0% | $65,801.56 |
| MBE | Thunderbird Engineering, Inc.<br>Milwaukee, WI 53217 | Mechanical, Electrical, Plumbing, and Fire Protection | 6.0% | $23,224.08 |
| WBE | Zoe Engineering LLC<br>Milwaukee, WI 53222 | Electrical Power, Instrumentation and Controls and Plant Automation Engineering Services | 5.0% | $19,353.40 |

### ECONOMIC DEVELOPMENT ELEMENTS

Local Office Preference? Y Mentor Protégé? NA

## OUTREACH INFORMATION

The Procurement team performed the following outreach: advertised in the Daily Reporter, sent an e-mail notification to all registered firms in the Professional Services, General Services and Engineering Services categories, sent targeted e-mails to S/W/MBE electrical and fencing companies. The bid opportunity is also publicly accessible from the MMSD website and Quest CDN. Quest CDN also performs outreach to its users when a bid is posted.

S/W/MBE Document Takers:
Applied Technologies, Inc.
Bloom Companies, LLC
Fusion Integrated Solutions, LLC
Globetrotters Engineering Corporation
IBC Engineering Services, Inc.
Kapur & Associates, Inc.
M & M Environmental and Educational Services LLC
Thunderbird Engineering Inc

If no or low S/W/MBE participation, explain why:
NA

Additional Comments:
NA

## AWARDEE INFORMATION

| | |
|---|---|
| Company: | Greeley and Hansen LLC |
| Contact Person: | Catharine M. Richardson |
| Phone Number: | (312) 578-2452 |
| E-mail Address: | crichardson@greeley-hansen.com |

## EEO DATA

Location: 100 South Wacker Drive. Suite 1400 Chicao, IL 600606

Total # of Employees 253

| | Total | % | | Total | % |
|---|---|---|---|---|---|
| **Minorities** | 107 | 42.3% | **Females** | 75 | 29.6% |
| Asian | 37 | 14.6% | Asian | 14 | 5.5% |
| Black or African American | 30 | 11.9% | Black or African American | 17 | 6.7% |
| Hispanic or Latino | 34 | 13.4% | Hispanic or Latino | 12 | 4.7% |
| Native American | 1 | 0.4% | Native American | 1 | 0.4% |
| Other Minority | 5 | 2.0% | Other Minority | 3 | 1.2% |

*Labor Market Availability - Minorities* 22.0%

*Labor Market Availability - Females* 49.0%

## PRIME PERFORMANCE HISTORY - S/W/MBE COMPLIANCE

| Contract Title | Start Date | Percent Complete | Contract Value | Payments to Prime | Proposed SWMBE $ | Proposed SWMBE % | SWMBE Actuals $ | Actuals % |
|---|---|---|---|---|---|---|---|---|
| J04073E01 - Engineering Services - JIWRF D&D Dust Collection System Modeling | 3/19/2020 | 72% | $340,492.00 | $244,295.11 | $ 122,237 | 35.90% | $57,932.25 | **24%** |

Item 10

**COMMISSION FILE NO:** 21-086-6 **DATE INTRODUCED:** June 14, 2021

**INTRODUCED BY:** Executive Director (Signature on File in the Office of the Commission)

**REFERRED BY COMMISSION CHAIRPERSON TO:** Operations Committee

**RELATING TO**: Award of Contract C01006E02, Metropolitan Interceptor Sewer Condition Assessment Project, and Approve Changes in Total Project Cost

**SUMMARY:**

The Commission is requested to award and to direct the Executive Director to execute on behalf of the District Contract C01006E02, Metropolitan Interceptor Sewer (MIS) Condition Assessment Project, to Mid City Corporation in an amount not to exceed $1,047,200. Mid City Corporation was the lowest responsible, responsive bidder between two bids received.

Further, the Commission is requested to increase the total project cost (TPC) for Project C01006, MIS Condition Assessment Project, by $130,000 for an amended TPC of $1,530,858 and to make a corresponding change to the TPC for Project M99001, Allowance for Cost and Schedule Changes.

The purpose of this project is to provide the District with a thorough condition assessment of a critical asset. The critical asset to be assessed is a sewer that begins at a manhole located near South 60th Street and West Grant Street within the City of West Allis. The sewer increases in diameter from 144 inches to 150 inches as it travels through the service area for approximately 15 miles. The sewer terminates at the South Shore Water Reclamation Facility. Due to camera quality and other limitations in traditional sewer analysis technology, such as high flows and pipe size, the District is unable to obtain detailed information about this sewer. The sewer lacks redundancy and does not have the ability to divert flow to the Jones Island Water Reclamation Facility in the event of a failure; therefore, a more detailed analysis is required.

**ATTACHMENTS:** **BACKGROUND** ☐ **KEY ISSUES** ☐ **RESOLUTION** ☒
**FISCAL NOTE** ☒ **S/W/MBE** ☒ **OTHER** ☐ ____

*OP_C01006E02_MIS_Condition_Assessment_legislative_file.docx*
*05-21-21*

**COMMITTEE ACTION:** _____ **DATE:** _____

**COMMISSION ACTION:** _____ **DATE:** _____

## SUMMARY (Cont'd)

Award of Contract C01006E02, Metropolitan Interceptor Sewer Condition Assessment Project, and Approve Changes in Total Project Cost

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The general scope of work for this contract includes the multi-sensor condition assessment contractor to provide the condition of the MIS. The multi-sensor condition assessment will include high definition camera analysis, light detection and ranging, sonar, and hydrogen sulfide sensors. The contractor will provide two dimensional imaging of the sewer so that the District can properly analyze the condition to ensure the life cycle of this critical asset.

Additionally, the scope includes gathering the pipe thickness through core samples, concrete core compression testing, manhole imaging of the 64 structures along the sewer, and traffic control measures. The District will use the data gathered to develop preliminary engineering documents for the replacement or rehabilitation of the asset.

The contract duration is expected to be 186 days.

The low bid received by the District is more than budgeted, and staff requests an increase to the TPC accordingly.

## RESOLUTION

Award of Contract C01006E02, Metropolitan Interceptor Sewer Condition Assessment Project, and Approve Changes in Total Project Cost

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**RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that Contract C01006E02, Metropolitan Interceptor Sewer Condition Assessment Project, is awarded to Mid City Corporation, in an amount not to exceed $1,047,200, and that the Executive Director is directed to execute a contract on behalf of the District.

**FURTHER RESOLVED**, by the Milwaukee Metropolitan Sewerage Commission, that the total project cost for Project C01006, Metropolitan Interceptor Sewer Condition Assessment Project, is increased by $130,000 for an amended total project cost of $1,530,858, and that a corresponding change is made to the total project cost for Project M99001, Allowance for Cost and Schedule Changes.

# Capital Budget Fiscal Note
# Total Project Cost

**RELATING TO:** Award of Contract C01006E02, Metropolitan Interceptor Sewer Condition Assessment Project and Approve Changes in Total Project Cost

**Capital Project Number(s)**

C01006

**Impact of Requested Action on Total Project Cost:**

[X] Increase [ ] Decrease [ ] New Project [ ] No Change

| **Total Project Cost Analysis** | **Project Costs** |
|---|---|
| Adopted 2021 Total Project Cost | $1,400,858 |
| Previously Approved Changes | $0 |
| Approved Total Project Cost | $1,400,858 |
| Requested Total Project Cost | $1,530,858 |
| Requested (Increase)/Decrease | ($130,000) |

**Action to be taken to Long-Range Financing Plan to address Total Project Cost change**

_____ Transfer from Allowance for Cost and Schedule Changes
_____ Transfer from another project (specify in comments)
_____ Delay Project(s) (specify in comments)
_____ Delete Project(s) (specify in comments)
_____ Other _____
_____ Transfer to Allowance for Cost and Schedule Changes

**Comments**

The increase in total project cost is due to the bids received being higher than budgeted.

Budget Review by: Christine Durkin

Date: 5/13/2021

**Award of Contract C01006E02, Metropolitan Interceptor Sewer Condition Assessment Project and Approve Changes in Total Project Costs**

**Procurement & S/W/MBE Summary Information**

**Contract #** C01006E02 **Cost Center:** PRS

**Metropolitan Interceptor Sewer Condition Assessment Project**

## BID SUMMARY

Bid Opening Date: 4/30/2021

| | Total | SWMBE | Local |
|---|---|---|---|
| # of Bids | 2 | 2 | 1 |
| # of Responsive Bids | 2 | 2 | 1 |

| Bidders | Price | Responsive? | Responsible? | % Sub | % SWMBE |
|---|---|---|---|---|---|
| Mid City Corporation<br>Butler, WI 53007 (SBE) | $1,047,200.00 | Responsive | Responsible | 47.7% | 52.3% |
| National Power Rodding Corp. (WBE)<br>Chicago, IL 60612 | $1,274,800.00 | Responsive | Responsible | Not provided | 20.0% |

## SUBCONTRACTOR INFORMATION

| Type | Subcontractor Name | Type of Work | % | Amount |
|---|---|---|---|---|
| Non-SWMBE | SewerVue Technology<br>Burnaby, BC V5A 1V5 | Pipe condition assessment | 47.7% | $500,000.00 |

## ECONOMIC DEVELOPMENT ELEMENTS

Workforce Requirements

Sanitary Sewer Service Area (SSSA) Employment: 25%

Target Area (TA) Employment: 10%

# Apprentices Required: 0

## OUTREACH INFORMATION

The Procurement team performed the following outreach: advertised in the Daily Reporter and sent an e-mail notification to all registered firms in the Construction category. The bid opportunity is also publicly accessible from the MMSD website and Quest CDN. Quest CDN also performs outreach to its users when a bid is posted.

S/W/MBE Planholders:
Mid City Corporation

If no or low S/W/MBE participation, explain why:
n/a

Additional Comments:
n/a

## AWARDEE INFORMATION

| | |
|---|---|
| Company: | Mid City Corporation |
| Contact Person: | Thomas Zoulek |
| Phone Number: | (262) 781-5940 |
| E-mail Address: | tzoulek@midcitycorp.us |

## EEO DATA

Location: 12930 W. Custer Ave. Butler, WI 53007

Total # of Employees: 55

| | Total | % |
|---|---|---|
| **Minorities** | 5 | 9.1% |
| African American | 2 | 3.6% |
| Asian | 0 | 0.0% |
| Hispanic | 2 | 3.6% |
| Native American | 1 | 1.8% |

| | Total | % |
|---|---|---|
| **Females** | 4 | 7.3% |
| African American | 1 | 1.8% |
| Asian | 0 | 0.0% |
| Hispanic | 1 | 1.8% |
| Native American | 0 | 0.0% |

*Labor Market Availability - Minorities* 20.0%

*Labor Market Availability - Females* 48.0%

Item 11

**COMMISSION FILE NO:** 21-087-6 **DATE INTRODUCED:** June 14, 2021

**INTRODUCED BY:** Executive Director (Signature on File in the Office of the Commission)

**REFERRED BY COMMISSION CHAIRPERSON TO:** Operations Committee

**RELATING TO**: Approval of Funding Agreement M10005MI02 Under Project M10005, 2021 City of Milwaukee Private Property Infiltration and Inflow Reduction Project

**SUMMARY:**

The Commission is requested to authorize and to direct the Executive Director to execute on behalf of the District Funding Agreement M10005MI02 in the amount of $566,000 for work outlined in Work Plan M10005MI02, as submitted by the City of Milwaukee under project M10005, Private Property Infiltration and Inflow (PPII) Reduction Project. Including Work Plan M10005MI02, the City has obligated seven percent of the funding available to the City through 2021 in the PPII Project.

In response to wet weather-related basement backups on the south side of Milwaukee in 2020, the City will be replacing sanitary sewers and installing storm sewer infrastructure in the 3600 blocks of South 85th, 86th, and 87th Streets. As part of the public infrastructure improvements, the City proposes to use District PPII funding to replace the sanitary laterals in the project area.

**ATTACHMENTS:** **BACKGROUND** ☒ **KEY ISSUES** ☐ **RESOLUTION** ☒
**FISCAL NOTE** ☒ **S/W/MBE** ☐ **OTHER** ☐ ____

*OP_Milwaukee_M10005MI02_II_Reduction_Project_legislative_file.docx*
*05-26-21*

**COMMITTEE ACTION:** _____ **DATE:** _____

**COMMISSION ACTION:** _____ **DATE:** _____

## BACKGROUND

Approval of Funding Agreement M10005MI02 Under Project M10005, 2021 City of Milwaukee Private Property Infiltration and Inflow Reduction Project

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In August 2020, the south side of Milwaukee received 4.5 inches of rain in three hours, causing a sanitary sewer overflow and generating numerous basement backup reports. Through a neighborhood meeting on August 8, 2020, with City and District representatives, it was apparent that basement backups are recurring and underreported in the project area. The City initiated a comprehensive evaluation of sanitary sewers and stormwater drainage in the area through fall 2020 and determined that the condition of the sanitary sewers warranted full replacement. The project area is also low lying and relies primarily on street surface stormwater drainage providing limited relief for high intensity precipitation events. The City is currently completing a closed circuit televising inspection of all sanitary laterals in the project area.

Based on the evaluation of the public and private infrastructure, the City proposes to design and construct a comprehensive rehabilitation of the sewer infrastructure in the 3600 blocks of South 85$^{th}$, 86$^{th}$, and 87$^{th}$ Streets. The project will include full replacement of the sanitary sewers, installation of new storm sewers, installation of new storm inlets, and replacement of up to 58 sanitary laterals to the right-of-way line. The City may also install stormwater laterals to facilitate future foundation drain disconnection.

The construction contract will be publicly bid and awarded in July 2021. Construction will start in August 2021 with completion anticipated by the end of October 2021.

The total project cost is estimated to be $1,830,000. The City will fund $1,264,000 for the public sanitary sewer, storm sewer, public construction inspection, design, and public outreach project components. The requested $566,000 from the District will fund the sanitary lateral replacement and inspection for the private property work.

Including Work Plan M10005MI02, the City has obligated seven percent ($566,000/$8,151,813) of the funding available to the City through 2021 in the PPII Program. The requested funding is budgeted through project M10005 and does not represent an increase in the total project cost.

## RESOLUTION

Approval of Funding Agreement M10005MI02 Under Project M10005, 2021 City of Milwaukee Private Property Infiltration and Inflow Reduction Project

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**RESOLVED,** by the Milwaukee Metropolitan Sewerage Commission, that the Executive Director is authorized and directed to execute on behalf of the District Funding Agreement M10005MI02 in the amount of $566,000 for work outlined in Work Plan M10005MI02 as submitted by the City of Milwaukee under project M10005, Private Property Infiltration and Inflow Project.

# Capital Budget Fiscal Note
# Total Project Cost

**RELATING TO:** Approval of Funding Agreement M10005MI02 Under Project M10005, 2021 City of Milwaukee Private Property Infiltration and Inflow Reduction Project

| **Capital Project Number(s)** | **Impact of Requested Action on Total Project Cost:** |
|---|---|
| **M10005** | ☐ Increase ☐ Decrease ☐ New Project ☒ No Change |

| **Total Project Cost Analysis** | **Project Costs** |
|---|---|
| Adopted 2021 Total Project Cost | * |
| Previously Approved Changes | $0 |
| Approved Total Project Cost | * |
| Requested Total Project Cost | n/a |
| Requested (Increase)/Decrease | $0 |

**Action to be taken to Long-Range Financing Plan to address Total Project Cost change**

_____ Transfer from Allowance for Cost and Schedule Changes
_____ Transfer from another project (specify in comments)
_____ Delay Project(s) (specify in comments)
_____ Delete Project(s) (specify in comments)
_____ Other _____
_____ Transfer to Allowance for Cost and Schedule Changes

**Comments**

*The PP I/I program does not have a total project cost because it is a capital program. The long-range financing plan includes $30.0 million. The program's reserve and the long-range financing plan have sufficient funding for the current request of $566,000.

Budget Review by: Christine Durkin

Date: 5/12/2021

# OPERATIONS COMMITTEE MEETING

## June 14, 2021

## EXECUTIVE DIRECTOR'S REPORT

## 21-001-01

### A. Monthly Reports

# June 2021

| Sun | Mon | Tue | Wed | Thu | Fri | Sat |
|---|---|---|---|---|---|---|
| | | *1* | *2* | *3* | *4* | *5* |
| *6* | *7* | *8* | *9* | *10* | *11* | *12* |
| *13* | *14* **Operations Committee-9:00 a.m. PF&P Committee-9:05 a.m.** | *15* | *16* | *17* | *18* | *19* |
| *20* | *21* | *22* | *23* | *24* | *25* | *26* |
| *27* | *28* **Commission-9:00 a.m.** | *29* | *30* | | | |