

Kent



County

Department of Public Works

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KENT COUNTY REGIONAL SEWER ADVISORY BOARD FOUR HUNDRED THIRTY-FIVE (435TH) MEETING JANUARY 4, 2023 at 5:00 PM

SAB members will meet in the Levy Court Chamber. While the public is welcome to attend, capacity is limited due to social distancing.

Join the meeting via Webex by going to: <https://kentcountyde.webex.com/kentcountyde/j.php?MTID=m023a8ecca56d8d3b82b2d948f5ffa680>

Or by phone, by calling 1-408-418-9388

Meeting number (access code): 2350 3392 961 #

ROLL CALL AND DETERMINATION OF QUORUM

MINUTES OF THE PREVIOUS MEETING AND ACTION THEREOF

REPORTS OF OFFICERS, COMMITTEES AND STAFF

A. KCRRRF OPERATIONS AND MAINTENANCE REPORT

1. November 2022

B. ENVIRONMENTAL PROGRAMS REPORT

1. November 2022

C. SEWER ADVISORY BOARD – LEVY COURT ACTIONS

D. OLD BUSINESS

E. NEW BUSINESS

1. Long Range Wastewater Master Plan

COMMENTS

ADJOURNMENT

POSTED: December 22, 2022

TAKEDOWN: Upon Replacement

Kent



County

Department of Public Works

**KENT COUNTY REGIONAL SEWER ADVISORY BOARD (SAB)
FOUR HUNDRED THIRTY-FOURTH (434TH) MEETING MINUTES
DECEMBER 7, 2022, 5:00 PM
Kent County Levy Court Complex
555 Bay Road, Levy Court Chambers, Dover, DE**

MEMBERS PRESENT

Gerald Pepper - Attended Virtually
Edward Strouse - Attended Virtually
William Yonker, Chairman
Robert Haynes
Lee Dean
Edward Welch, Vice Chair
Matthew Jordan
Jason Lyon
Jacob Mitchell – Attended Virtually

REPRESENTATIVE

2nd District
3rd District
4th District
5th District
6th District
At Large
Dover Air Force Base
Dover
Smyrna – Alt

MEMBERS ABSENT

Rodney Slaughter
Harold Scott
Bryan Ashby
Mike Svaby
James Puddicombe
Jason McNatt

REPRESENTATIVE

1st District
Camden Wyoming
DNREC - Alt
Milford
Milford - Alt
Smyrna

OTHERS PRESENT

Paul Hertz
Andrew Riggi
Austin Hart
Hollie Ford
Mark Kennedy
Commissioner-Elect
Kent County Public Works
Kent County Public Works
Kent County Public Works
Kent County IT

INSTRUCTIONS FOR TELECONFERENCE: Prior to the official start of the meeting, Mr. Riggi introduced himself and reviewed the instructions for the teleconference participants. The statement noted that this was a public meeting which was being recorded and described the public participation process. Roll call was conducted.

ROLL CALL AND DETERMINATION OF QUORUM

Roll call was completed, and it was determined that there was a quorum present. The meeting was called to order by Mr. Yonker at 5:02 pm

Approval of Meeting Minutes – Mr. Yonker asked if everyone had reviewed the minutes and asked for questions or comments. No questions or comments were noted. A motion was made by Mr. Lyon and seconded by Mr. Haynes to accept the meeting minutes of October 5, 2022. **Motion carried unanimously.**

REPORTS OF OFFICERS, COMMITTEES AND STAFF

OPERATIONS AND MAINTENANCE REPORT(S)

Operations and Maintenance Report – September 2022 – Mr. Riggi summarized the report. There were no odor complaints or power outages for the month of September. There were two enterococcus exceedances and one sanitary sewer overflow. The overflow was due to a broken force main associated with the pump station in South Bowers. The average flow for the month was 11.2MGD.

Wastewater Facilities Division activities included working with an outside vendor to service the photovoltaic solar field; completed installation of influent screens; and processed 335.87 MGal of wastewater. Maintenance highlights for the month included installation of a portable belt filter press to help process solids and work continued on the radio SCADA system. Hauled and spread 972 tons of biosolids.

Mr. Yonker asked if there were any questions/comments on the September 2022 Operations and Maintenance Report. Receiving none, Mr. Yonker asked for a motion to accept the September 2022 Operations and Maintenance report. A motion was made by Mr. Welch and seconded by Mr. Strouse to accept the report. **Motion carried unanimously**

Operations and Maintenance Report – October 2022 – Mr. Riggi summarized the report. There were no odor complaints or power outages for the month of October. There were three sanitary sewer overflows. The first occurred due to heavy rains at several pump stations. The second was caused by a leaking valve at a pump station and third was a force main break on Carter Road in Smyrna. There was one enterococcus exceedance. The average flow for the month was 11.71 MGD.

Wastewater Facilities Division activities included the commissioning of new turbo blowers and 363.04 MGal of wastewater was processed. Leaking force main repairs were completed. We hauled and spread 1,049 tons of biosolids on area fields.

Mr. Yonker asked if there were any questions/comments on the October 2022 Operations and Maintenance Report. Receiving none, Mr. Yonker asked for a motion to accept the October 2022 Operations and Maintenance report. A motion was made by Mr. Dean and seconded by Mr. Welch to accept the report. **Motion carried unanimously**

ENVIRONMENTAL PROGRAMS REPORT(S)

Environmental Programs Report – September 2022 – Mr. Riggi summarized the report. PCB analysis was completed and continued working with EEC on revised report for US EPA local limits. FOG permits were issued for ten (10) food service facilities.

Mr. Yonker asked for any questions/comments on the September 2022 Environmental Programs Report. Receiving none, Mr. Yonker asked for a motion to accept the September 2022 Environmental Programs Report. A motion was made by Mr. Welch and seconded by Mr. Jordan to accept the report. **Motion carried unanimously.**

Environmental Programs Report – October 2022 – Mr. Riggi summarized the report. Continued working with EEC on revised report for US EPA local limits, a notice of violation letter was sent to Sea Watch for exceeding Chromium metals limit and requiring a retest. FOG permits were issued for nine (9) food service facilities.

Mr. Yonker asked for any questions/comments on the October 2022 Environmental Programs Report. Receiving none, Mr. Yonker asked for a motion to accept the October 2022 Environmental Programs Report. A motion was made by Mr. Strouse and seconded by Mr. Dean to accept the report. **Motion carried unanimously.**

SEWER ADVISORY BOARD -LEVY COURT ACTIONS –

OLD BUSINESS – NONE

NEW BUSINESS

1. SAB Budget Committee

Mr. Riggi, reading from the Sewer Advisory Board By-Laws, stated that the make up the Budget Committee includes four members representing the Town of Smyrna, the City of Dover, the City of Milford and the Camden-Wyoming Sewer & Water Authority. The Sewer Advisory Board Chairperson shall also be on the committee and appoint two additional members. Mr. Yonkers asked for volunteers to be appointed to the Budget Committee. Mr. Haynes and Mr. Welch both volunteered.

2. SAB Annual Dinner

Mr. Yonker informed members of the change of location for the Annual Dinner from Fraizer's to McGlynn's and Ms. Ford requested that members RSVP via email by December 21, 2022.

3. SAB 2023 Meeting Schedule

Mr. Yonker informed members that the schedule for 2023 was included in the packet and reviewed the meeting dates for January 2023.

4. Nominations for Chair and Vice Chair

Mr. Yonker opened nominations for the Chair position. Mr. Dean nominated Mr. Welch, as Chair; Mr. Haynes seconded the motion. **Motion carried unanimously.**

Mr. Welch nominated Mr. Haynes as Vice-Chair; Mr. Dean seconded the motion. **Motion carried unanimously.**

COMMENTS

Mr. Riggi provided the following project update.

- The portable press at the plant has been operational for two months. No violations have been reported and with other mechanical issues, processing has not fallen behind. A meeting with the DNREC Secretary has been scheduled to discuss notice of violation.
- Blower Generator project is nearing completion. Two new blowers and a new generator have been installed. Staff is currently waiting on the Air Quality Operational Permit, and it is estimated that the project will be complete by March 2023.
- George & Lynch is scheduled to begin work in South Bowers, with project completion by the end of December.
- Progress is slow on the Paris Villa/London Village project with 60% of the sewer line installed. A request for an extension of time will be submitted.
- Bid documents have been submitted, reviewed, and returned to the engineer for revisions on the Whispering Pines Septic Elimination project. It is hopeful that construction will begin in the Spring or early Summer.

Mr. Dean introduced Levy Court Commission-Elect Paul Hertz, who was in attendance.

ADJOURNMENT

Receiving no other comments, questions or business, Mr. Yonker requested a motion for Adjournment. A motion to adjourn was made by Mr. Dean and seconded by Mr. Hayes. **Motion carried unanimously.** The meeting adjourned at 5:22 p.m.



Kent County
Department of Public Works
Wastewater Facilities Division

MEMORANDUM

Date: December 20, 2022

To: Sewer Advisory Board Members

From: Diana T. Golt, P.E., Public Works Director *dtg*
 Colby Harrington, Assistant Director of Public Works

RE: **KCRRRF OPERATIONS & MAINTENANCE REPORT**

REPORTING PERIOD: November 2022

Odor Complaints: There was one odor complaint in the month of November.

Power Outages: There were no power outages in the month of November.

SSOs & Permit Exceedances: There were no SSO's or Permit Exceedances in the month of November

PERFORMANCE DATA:

The November average flow of 10.89 MGD is lower than the 12-month average and lower than the 18-month average shown in Table 1. The peak daily flow was 12.32 MGD.

Table 1. Effluent Flow, MGD (Ave): ^a

Permit Basis ^a	November	12 Month	18 Month
20	10.89	11.78	11.92

Table 2. KCRRRF Performance:

Parameter	Concentration In (Daily Avg)	Concentration Out (Daily Avg)	Permit Limit (Daily Avg)	Removal (% or lbs/day)
TSS (Ave)	233.7 mg/L	2.5 mg/L	15 mg/L	98.9%
CBOD(Ave)	270.6 mg/L	1.71 mg/L	544 lbs/day May - Sept	99.4%
Nitrogen	45.1 mg/L	4.46 mg/L	327,405 lbs/yr	3,691 lbs/day
Phosphorous	4.8 mg/L	0.32 mg/L	51 lbs/day	407 lbs/day
Enterococcus	297.4 col/100 ml	5 col/100 ml	Geo.Mean 33 col/100 ml	99.4%

Notes:

- a. A daily average discharge rate of 20 MGD was used by DNREC to determine mass-based effluent limits.

The current NPDES permit has moving 12-month cumulative load limits as well as seasonal limits from May through September for Nitrogen (N), Phosphorus (P), and Carbonaceous Biochemical Oxygen Demand (CBOD). All parameters are within the rolling average. See table below.

Table 3. KCRRRF Performance related to cumulative load limits:

		TN	TP	CBOD
PERMIT LIMIT	Moving 12-mo cumulative load, lbs	327,405	18,615	198,560
	Seasonal Daily Avg: May - Sept, lbs	NA	51	544
EFFLUENT RESULTS	Moving 12-mo cumulative load, lbs	95,323	10,006	117,677
	Seasonal Daily Avg: May - Sept, lbs	360	26.25	156
	% Effluent Results of 12-mo Limit	29%	54%	59%

ELECTRIC USAGE & SOLAR PRODUCTION:

Table 4. Electric Usage		
Timeframe	Peak Demand	Daily Average
November 2022	1.684	28,806
Prior Month	1.666	28,806

Table 5. Solar Production		
Period	Total Monthly Production	Avg. Daily Production
October 2022	79,018 kW	2,634 kW
Prior Month	100,602 kW	3,245 kW

WASTEWATER DIVISION ACTIVITIES

Plant Operations:

1. Repaired chains and diffusers in the North and South Aeration Basin
2. Made operational adjustments to the new Influent Screens 1 & 2
3. Cleaned troughs in UV disinfection chambers
4. Cleaned distribution holes in clarifiers
5. Continued commissioning new blowers 4 & 5
6. Ran parallel solids processing press
7. Held bi-weekly Operations meetings
8. Finished the October eDMR and submitted
9. Processed a total of 326.66 MGal in November for a YTD total of 3.9797 billion gallons

Maintenance:

1. Repaired UV units as needed, cleaned UV bulbs and channels
2. Replaced Serpentix conveyor motor
3. Repaired bearings and bolts on pugmill
4. Worked with contractor repairing plant water line
5. Cleaned clarifier scum pits
6. Flushed Kitts Hummock force main
7. Utilized SLRAT equipment at DAFB Housing
8. Cleaned wet wells
9. Jetted gravity systems and laterals
10. Replaced ARV's throughout County Transmission system
11. Serviced trucks, equipment, and generators
12. Continued tanking S. Bowers gravity sewer system
13. Installed new pump at PS#45
14. Completed 1,800 hours of repairs and preventive maintenance

Electrical:

1. Removed 3G device and installed radio at PS#30B
2. Installed Sensaphone from PS#40 at LS#8
3. Replaced lime screw VFD BIO
4. Replaced Pugmill safety switch BIO
5. Replaced CPU, several input cards and the main PLC in BIO
6. Continued overhaul of entire SCADA radio system

Biosolids:

1. Processed 10.324 million gallons of sludge at 1.0% solids
2. Gas usage: 3,426 MCF (1-MCF = 1000 cu/ft). Usage is 89 MCF higher
3. Average belt press solids were 17.6% and final dryer (Dryer #3) solids equal to 51.4%
4. Average sludge flow = 360 gpm

AgOPS:

1. Hauled and spread 430 tons of biosolids on area fields
2. Worked with contractors on multiple projects around the treatment facility
3. Continued site improvements, including organizing material and cleaning up storage areas
4. Performed PM work on heavy equipment



Kent County
Department of Public Works

MEMORANDUM

DATE: December 14, 2022

TO: Sewer Advisory Board

FROM: Diana T. Golt, P.E., Public Works Director *dtg*
F. James Burk, Environmental Program Manager

RE: **Environmental Programs Report – November 2022**

1. Industrial Pretreatment Program:
 - a. Reviewed ALS invoices related to lab testing for plant and pretreatment.
 - b. Took pretreatment van through DMV inspection: failed due to OBD2 sensor connection.
 - c. Conducted an annual IPP inspection on the following facilities:
 - 11/02 Delaware Solid Waste Authority
 - 11/16 Energy Center Dover
 - 11/17 Perdue
 - 11/28 Sea Watch
 - 11/30 Garrison Electric
 - d. Entered all pretreatment/Kentorganite/monthly and semi-annual monitoring data into tracking spreadsheets.
 - e. Compiled documentation requested by the EPA inspection contractor.
2. Septage Hauler Program:
 - a. Collected hauler log sheets from KCRRRF, PS1 (Smyrna) and PS17 (Harrington) Monday through Friday. Log data was confirmed by review of video; and logs were faxed to Finance for billing.
 - b. Prepared notification to haulers that the County does not accept grease.
3. FOG (Fats, Oils, and Grease) Program:
 - a. Completed several FOG inspections; verified proper cleaning of interceptor and/or grease trap(s).
 - b. Mailed FOG applications to 15 FSF
 - c. Thirteen (13) FSFs were permitted as follows:

11/10	Frederica Senior Center	(Frederica)
11/15	Complete Care at Silver Lake	(Dover)
11/15	Delaware Technical Community College	(Dover)
11/20	Five Guys Burgers	(Camden)
11/20	Little Caesars	(Milford)
11/20	Little Caesars	(Dover)
11/20	Halls Family Restaurant	(Wyoming)
11/20	Franco's Pizza and Pasta	(Dover)
11/20	Yukon Korean BBQ	(Dover)
11/20	King Buffet	(Dover)
11/30	Hibachi Restaurant	(Dover)
11/30	Pinnacle Rehabilitation Center and Nursing Home	(Smyrna)
11/30	McGlynn's Pub and Restaurant	(Dover)

Environmental Programs Report includes the Industrial Pretreatment Program, the Fats, Oil & Grease Program, the Septage Hauler Program, and PCB compliance monitoring.



Kent County
Department of Public Works

MEMORANDUM

DATE: December 21, 2022
TO: Sewer Advisory Board Members
FROM: Diana Golt, P.E., Public Works Director *dtg*
RE: Long Range Wastewater Master Plan

The Department has planned for an update of its “Long Range Wastewater Master Plan” to assess the current and future wastewater needs of the County. The Kent County’s wastewater collection, conveyance and treatment system serves the residents and businesses of Kent County as district users or through Municipal Contract Users. County residents with onsite septic systems indirectly use the County sewer system when their septic hauler service discharges to County’s septage receiving facilities. The updated plan will include analysis of flow projections; consideration of climate change; review of alternatives for conveyance, wastewater treatment & disposal, and biosolids reuse & disposal; and recommendations.

On June 28, 2022, Levy Court approved a contract to award with KCI Technologies, Inc. (KCI), for consulting services related to the Long-Range Wastewater Master Plan.

Representatives of KCI Technologies will present information to the Sewer Advisory Board on January 4, 2023, for discussion and public participation. Funding is \$50,000 from DNREC SRF Wastewater Matching Planning Grant, \$100,000 in sewer fund operating revenues, and \$50,000 from FY2022 Sewer Fund Contingencies.