

Kent



County

Department of Public Works

Engineering Division

(302) 744-2430 Fax (302) 736-2100

555 Bay Rd., Dover, DE 19901

Wastewater Facilities Division

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139 Milford Neck Rd., Milford, DE 19963

KENT COUNTY REGIONAL SEWER ADVISORY BOARD FOUR HUNDRED THIRTY-SIXTH (436TH) MEETING FEBRUARY 1, 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. December 2022

B. ENVIRONMENTAL PROGRAMS REPORT

1. December 2022

C. SEWER ADVISORY BOARD – LEVY COURT ACTIONS

D. OLD BUSINESS

E. NEW BUSINESS

1. KCSDD1 Proposed Extension (Lebanon Area) - Beiser Group Subdivision
2. Code Revision – Sanitary Standards, Chapter 180, § 180-05 Definitions; §180-12 Industrial wastewater discharge permits; Attachment 1, Table 180-III-1 – Maximum Allowable Industrial Loadings (MAIL)
3. Proposed Sewer Budget, Fiscal Year 2024

COMMENTS

ADJOURNMENT

POSTED: January 23, 2023

TAKEDOWN: Upon Replacement

Kent



County

Department of Public Works

**KENT COUNTY REGIONAL SEWER ADVISORY BOARD (SAB)
FOUR HUNDRED THIRTY-FIFTH (435TH) MEETING MINUTES**

JANUARY 4, 2023 - 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
Lee Dean
Edward Welch, Chair
Harold Scott - Attended Virtually
Ashley Kunder – Attended Virtually
Jason Lyon
Mike Svaby
Jacob Mitchell – Attended Virtually

REPRESENTATIVE

2nd District
3rd District
4th District
6th District
At Large
Camden-Wyoming
DNREC – Alt
Dover
Milford
Smyrna – Alt

MEMBERS ABSENT

Rodney Slaughter
Robert Hayes, Vice Chair
Matthew Jordan
James Puddicombe
Jason McNatt

REPRESENTATIVE

1st District
5th District
DAFB
Milford - Alt
Smyrna

OTHERS PRESENT

Dan String
Diana Golt
Brian Hall
Hollie Ford
Mark Kennedy

KCI
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, Ms. Ford 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. Welch at 5:01 PM.

Approval of Meeting Minutes – Mr. Welch asked if everyone had reviewed the minutes of December 7, 2022 and asked for questions or comments. No questions or comments were noted. A motion was made by Mr. Lyon and seconded by Mr. Yonker to accept the meeting minutes of December 7, 2022. **Motion carried unanimously.**

REPORTS OF OFFICERS, COMMITTEES AND STAFF

OPERATIONS AND MAINTENANCE REPORT(S)

Operations and Maintenance Report – November 2022 – Mr. Hall summarized the report. There was one odor complaint and no power outages for the month of November. There were no enterococcus exceedances and no sanitary sewer overflows. The 18-month effluent flow is 11.92 MGD.

Wastewater Facilities Division activities for the month included the commission of new blowers 4 and 5. Mrs. Golt confirmed that the force main repairs at South Bowers Road were been completed and the pump station is back online. Biosolids processed 10.32 million gallons of sludge. AgOps hauled and spread 430 tons of biosolids.

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

ENVIRONMENTAL PROGRAMS REPORT(S)

Environmental Programs Report – November 2022 – Mrs. Golt summarized the report. Conducted annual IPP inspections at Delaware Solid Waste Authority, Energy Center Dover, Perdue, Sea Watch and Garrison Electric. FOG permits were issued for thirteen (13) food service facilities.

Mr. Welch asked for any questions/comments on the November 2022 Environmental Programs Report. Receiving none, Mr. Welch asked for a motion to accept the November 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

Mrs. Golt informed members that she will provide a summary on Levy Court Actions at the next meeting.

OLD BUSINESS – NONE

NEW BUSINESS

Long Range Wastewater Master Plan – Mr. Dan String from KCI provided members with a PowerPoint presentation. Mr. String also provided members a high-level overview of the work on the new plan. The KCI team is still gathering information and working with local municipalities. The final report will be finished and presented to the Sewer Advisory Board in March 2023. Members were encouraged to reach out to Mr. String with any questions. Mr. Svaby requested that a copy of the presentation be sent to all members via email.

COMMENTS

Ms. Ford reminded members that the SAB Annual Dinner is scheduled for 5:00 PM on Wednesday, January 11, 2023, at McGlynn's Pub.

ADJOURNMENT

Receiving no other comments, questions or business, Mr. Welch requested a motion for Adjournment. A motion to adjourn was made by Mr. Dean and seconded by Mr. Svaby. **Motion carried unanimously.** The meeting adjourned at 5:48 p.m.



Kent County
Department of Public Works
Wastewater Facilities Division

MEMORANDUM

Date: January 20, 2023

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: December 2022

Odor Complaints: There were no odor complaints in December.

Power Outages: There were no power outages in December.

SSOs & Permit Exceedances: There were two (2) sanitary sewer overflows (SSOs) and three (3) Permit Exceedances December.

On December 4, 2022, there was an ARV failure on Bunny Lane in Magnolia, DE, which lead to an SSO with an estimated volume of 250,000 gallons. The ARV was repaired, the area cleaned and limed, homeowners' wells were tested and treated, and regulating agencies were notified. The second SSO was on December 15, 2022. This SSO was caused by a heavy rain event which led to an estimated spill of 45,000 gallons. The spill was mitigated by diverting flows. The area affected was cleaned and limed, and regulating agencies were notified.

Two permit exceedances of TSS concentration & TSS concentration limits occurred on December 15, 2022. The two TSS violations were caused by heavy flows at the treatment plant. Due to the heavy flows, solids escaped the clarifiers and overwhelmed the sand filters. The third permit exceedance was an exceedance of enterococcus limits on December 24, 2022. The enterococcus violation was caused by power transfer issues during an emergency load shed event. The load shed event was necessitated due to extreme freezing temperatures and an extreme power load on the Mid-Atlantic electrical grid. All permit exceedances were addressed and regulating agencies were notified.

PERFORMANCE DATA:

The December average flow of 11.96 MGD is higher than the 12-month average and the 18-month average shown in Table 1. The peak daily flow was 16.36 MGD.

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

Permit Basis ^a	December	12 Month	18 Month
20	11.96	11.83	11.89

Table 2. KCRRRF Performance:

Parameter	Concentration In (Daily Avg)	Concentration Out (Daily Avg)	Permit Limit (Daily Avg)	Removal (% or lbs/day)
TSS (Ave)	264.2 mg/L	4.3 mg/L	15 mg/L	98.4%
CBOD(Ave)	283.3 mg/L	1.82 mg/L	544 lbs/day May - Sept	99.4%
Nitrogen	42.6 mg/L	2.50 mg/L	327,405 lbs/yr	4,000 lbs/day
Phosphorous	4.1 mg/L	0.08 mg/L	51 lbs/day	401 lbs/day
Enterococcus	429.6 col/100 ml	8.5 col/100 ml	Geo.Mean 33 col/100 ml	99.1%

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	97,678	9,560	119,564
	Seasonal Daily Avg: May - Sept, lbs	215	6.99	192
	% Effluent Results of 12-mo Limit	30%	51%	60%

ELECTRIC USAGE & SOLAR PRODUCTION:

Table 4. Electric Usage		
Timeframe	Peak Demand	Daily Average
December 2022	1.774	30,194
Prior Month	1.684	28,806

Table 5. Solar Production		
Period	Total Monthly Production	Avg. Daily Production
December 2022	60,931 kW	1,966 kW
Prior Month	79,018 kW	2,634 kW

WASTEWATER DIVISION ACTIVITIES

Plant Operations:

1. Completed boiler servicing with contractor.
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 2MW generator.
6. Ran parallel solids processing press.
7. Participated in multiple PJM power curtailment events.
8. Finished the November eDMR and submitted it.
9. Processed a total of 370.82 MGal in December for a YTD total of 4.35 billion gallons.

Maintenance:

1. Repaired UV units as needed, cleaned UV bulbs and channels.
2. Completed dryer repairs (hot end bearings, turn heads and conveyors)
3. Cleaned and repaired grit chambers #3 & #4
4. Installed new insulation on water piping at influent screens.
5. Replaced hydraulic rams and scraper on Press #2 in Bio
6. Replaced saddle taps on force main from PS#15A.
7. Cleaned up SSO and repaired ARV at Bunny Dr.
8. Cleaned wet wells.
9. Jetted gravity systems and laterals.
10. Replaced ARVs throughout County Transmission System.
11. Serviced trucks, equipment, and generators.
12. Installed new pumps at PS#25 and LS#5
13. Completed 1,600 hours of repairs and preventive maintenance.

Electrical:

1. Replaced exhaust fan in Bio storage trailer.
2. Wired 5 air valve actuators on aeration basin air header.
3. Replaced fluorescent light bulbs with LEDs at the treatment facility
4. Removed 3G auto dialers at DSWA and PS#30A and replaced with radios and Sensaphones
5. Replaced wet well blower at PS#8
6. Replaced soft starts and motor starters at PS#25 for new pump installation.

Biosolids:

1. Processed 9.010 million gallons of sludge at .9% solids.
2. Gas usage: 3,366 MCF (1-MCF = 1000 cu/ft). Usage is 29 MCF higher.
3. Average belt press solids were 17.5% and final dryer (Dryer #3) solids equal to 56.7%
4. Average sludge flow = 309 gpm

AgOPS:

1. Hauled and spread 114 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: January 11, 2023
TO: Sewer Advisory Board
FROM: Diana T. Golt, P.E., Public Works Director *dtg*
F. James Burk, Environmental Program Manager
RE: **Environmental Programs Report – December 2022**

1. Industrial Pretreatment Program:
 - a. Reviewed ALS invoices related to lab testing for the plant and pretreatment.
 - b. Took pretreatment van through DMV inspection: passed.
 - c. Conducted an annual IPP inspection on the following facilities:
 - 12/06 Kraft
 - 12/06 Dover Wipes
 - d. Entered all pretreatment/Kentorganite/monthly and semi-annual monitoring data into tracking spreadsheets.
 - e. Compiled documentation requested by the EPA inspection contractor.
 - f. On December 2, 2022, we received from US EPA a letter accepting Local Limits Evaluation Report prepared by EEC. The changes to the ordinance limits must be approved by Levy Court.
 - g. US EPA audit with a contract audit firm on December 7 & 8. Amanda put together the requested information for the contract auditor. EPA will be sending the results of the audit by March 2023.
 - h. Reviewed EPA memo which indicated PFAS discharge monitoring may be included in the future NPDES permits.
 - i. Started working on the DRBC, Industrial Pretreatment and Tier II annual reporting for 2022.
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.
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
 - c. Ten (10) FSFs were permitted as follows:

12/01	Mike's Food Market	Milford
12/01	Romano's Pizza	Dover
12/01	Panda Garden	Dover
12/10	JP's Wharf Restaurant	Frederica
12/10	Wings to Go	Dover
12/10	Popeye's Chicken	Dover
12/23	Hollywood Diner	Dover
12/28	Bob Evans	Camden – Dover
12/29	Perdue	Milford
12/30	Wayback Burgers	Milford

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: February 1, 2023

TO: Kent County Regional Sewer Advisory Board

FROM: Diana T. Golt, P.E., Public Works Director *dtg*

RE: KCSDD1 PROPOSED EXTENSION (LEBANON AREA) – BEISER GROUP, LLC PROPERTY

The Engineering Division received a request for County sanitary sewer (SS) service from Beiser Group, LLC, the owner of one property: Parcel No. NM-00-095.00-01-27.00-000. The proposal is for a 308-lot subdivision of single-family homes and an estimated 65 EDUs of commercial growth. The property, consisting of about 206 acres, is generally located at the southeast intersection of Sorghum Mill Road and South State Street. Please refer to the attached map.

Based on the Technical Feasibility Study (TFS) dated January 4, 2023, the proposed sanitary sewer will require a lift station (LS), associated force-main (FM), and gravity mains connecting to the existing gravity system located on the north side of Sorghum Mill Road. There is adequate capacity in the existing, downstream County sewer systems to serve this proposal.

The applicant/owner accepted the study and is responsible for the design, permitting, construction, and easement acquisition of the proposed infrastructure. The applicant has agreed to provide Kent County with an additional 15ft. wide easement for the existing 36 in. diameter FM, which parallels South State Street. Additionally, the owners/developers of the property are responsible for the payment of the applicable residential/commercial sewer permits and both impact fees per EDU of growth as required.

Therefore, staff recommends the extension of Kent County Sewage Disposal District No. 1 (KCSDD1) to include Parcel No. NM-00-095.00-01-27.00-000.

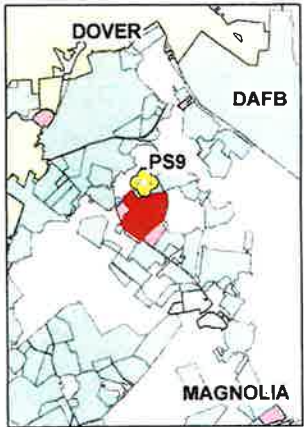
The proposal will be presented to the SAB at their regularly scheduled meeting on Wednesday, February 1, 2023, at 5:00 p.m. at the Kent County Administrative Complex, located on 555 Bay Road, Dover, DE.

Please refer to the county website (<https://co.kent.de.us/levy-court/events.aspx>) to view the Agenda for virtual meeting instructions. The applicants and interested parties are invited to participate in this public meeting.

Disclaimer: The approval of sewer service by the Kent County Public Works Department does not impact or modify land use and/or zoning. Land use and zoning are regulated by the Kent County Planning Department.

Attachment

cc: Jonathan Falkowski - BMG, Inc.



Kent County Sewage Disposal District No.1
Lands of Beiser Group, L.L.C.
Lebanon Area

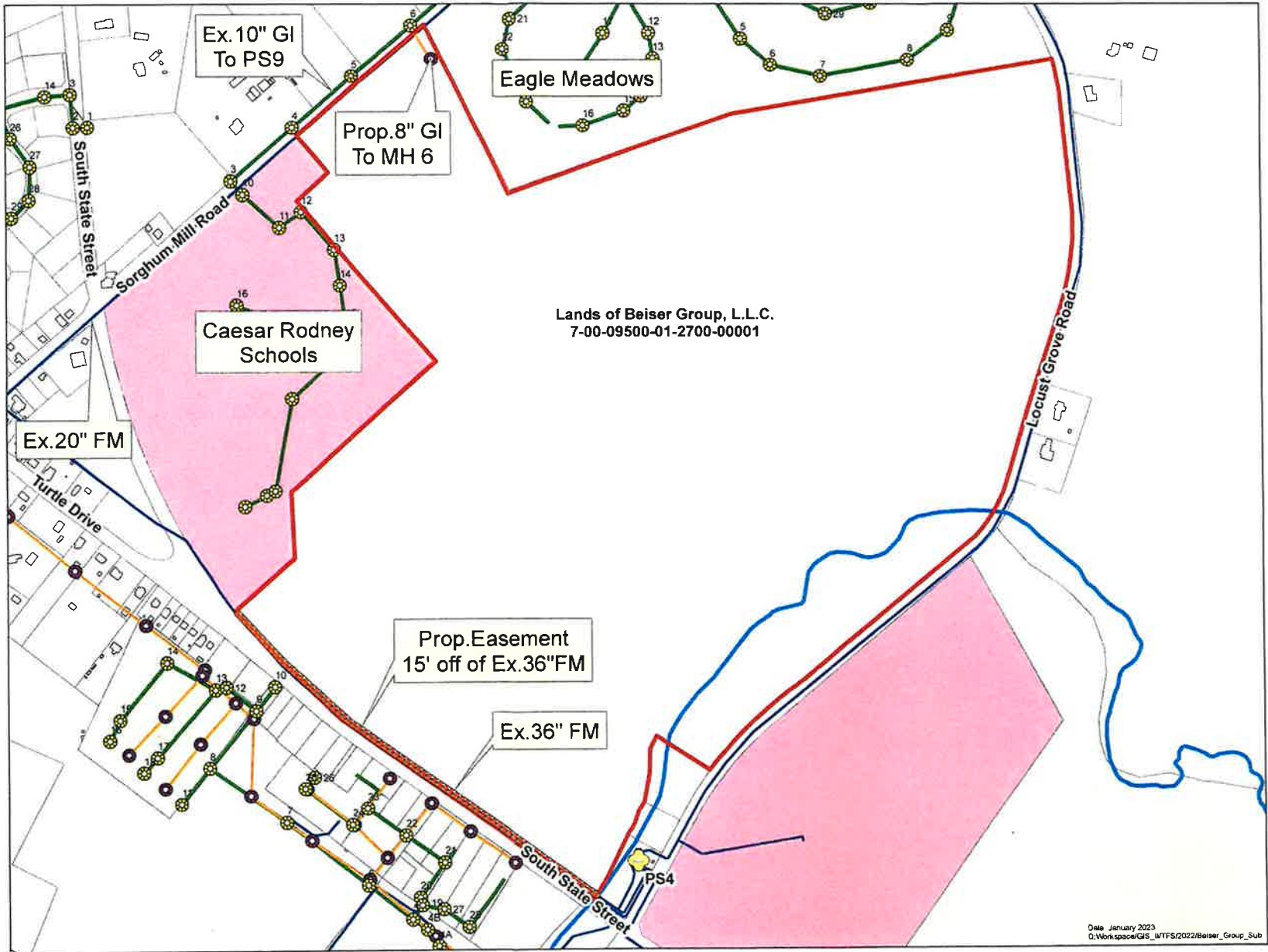
NORTH

- Easement
- Proposal Area
- EX Manhole
- TFS Manhole
- TFS Gravity
- Blue Line Stream
- EX Forcemain
- EX Gravity Sewer
- Tax Parcels

EX Service Area Portion

- KCSDD No. 1 Portion
- Municipal Contract User
- Comm/Ind Contract User

0 200 400 Feet
Not to Scale





Kent County
Department of Public Works

MEMORANDUM

DATE: February 1, 2023
TO: Kent County Regional Sewer Advisory Board
FROM: Diana T. Golt, P.E., Public Works Director *dtg*
RE: LOCAL LIMITS EVALUATION PROJECT – ORDINANCE LC-23-02

The Local Limits Evaluation project is a study to evaluate and develop Local Limits as required by the US Environmental Protection Agency (EPA) and Kent County's NPDES permit effective October 1, 2017. A Local Limits Evaluation is necessary to determine the total loadings from incoming wastewater that the Kent County Regional Resource Recovery Facility and maintain compliance with its NPDES permit, DRBC docket, and other environmental standards. The total loadings are then partitioned between residential, commercial, and permitted industrial users (aka Significant Industrial Users). The Significant Industrial Users are issued permits with pollutant limits that together total no more than the total industrial loading partition or the Maximum Allowable Industrial Loadings (MAILs) that were determined in the Local Limits Evaluation.

On April 23, 2019, Levy Court authorized a contract with EEC Environmental to complete the evaluation of local limits based on compiled lab analysis data from County staff collected samples. A report of their findings was prepared and underwent multiple rounds of comments from County and EPA staff. The final Local Limits Evaluation report prepared by EEC Environmental was submitted and accepted by EPA on December 2, 2022. EPA's letter of acceptance set a deadline for Levy Court to adopt the Local Limits with an ordinance change within four (4) months from the date of acceptance.

Ordinance LC23-02 has been prepared to address the local limits study. The ordinance revisions address adding the definition of Carbonaceous Biochemical Oxygen Demand, changing references from Maximum Allowable Industrial Limits to Maximum Allowable Industrial Loading, modifications to the table of Maximum Allowable Industrial Loadings. EEC Environmental has also recommended that the County adopt a 100 mg/L limit for petroleum and mineral Fats, Oils & Grease (FOG) as part of the specific prohibitions in the County Code.

This item will be presented to the Sewer Advisory Board for discussion. Based on the above, staff supports a recommendation from Sewer Advisory Board to Levy Court for the adoption of the Ordinance revisions.