

MINUTES  
NORTHEAST OHIO REGIONAL SEWER DISTRICT  
BOARD OF TRUSTEES MEETING  
NOVEMBER 3, 2022

A Regular Meeting of the Board of Trustees of the Northeast Ohio Regional Sewer District (NEORS D) was called to order at 12:30 p.m. by Darnell Brown.

I. Roll Call

Present: Darnell Brown  
Timothy DeGeeter  
Ronald Sulik  
Jack Bacci  
Sharon Dumas  
Samuel Alai  
Marjorie Chambers

The Secretary informed the President that a quorum was in attendance.

II. Approval of Minutes

**MOTION** – Mayor Bacci moved, and Ms. Dumas seconded to approve the Minutes of the October 20, 2022 Board Meeting. Without objection, the motion carried unanimously.

III. Public Session

There were no items.

IV. Chief Executive Officer's Report

Kyle Dreyfuss-Wells, Chief Executive Officer, advised the Board that on October 27, twenty students from John F. Kennedy High School visited the Southerly WWTP. Tracey Phelps, Deputy Director of Operation & Maintenance, Tanisha Crockett, Maintenance Worker, and David Nemchik, Instructor Industrial Electrical, provided an overview presentation followed by a tour of the WWTP.

The high school has a manufacturing technology program, led by Instructor Bruce Walker. Mr. Walker has spent the first half of the school year teaching the students about the components of maintaining a WWTP and the tour allowed them to reinforce the instruction they have received. NEORS D looks forward to hosting the students two to three times per year to see their theories in practice. Ms. Dreyfuss-Wells thanked Ms. Chambers for organizing the event.

From October 14 through October 26, NEORSD held its quarterly employee recognition events. During COVID-19, these events were held virtually or with small groups in attendance and are now back to full attendance. Ms. Dreyfuss-Wells provided photographs from the ceremonies.

On October 29, NEORSD held its sixth and final Utility Assistance Resource Fair of 2022. The purpose of the events is to remove barriers to enrolling in cost saving programs. This most recent event was held in Parma and served 184 customers, with representatives from the City of Cleveland Division of Water, Cleveland Public Power, First Energy, Dominion, Step Forward, CHN Housing Partners, Cuyahoga County Job & Family Services, and the Cleveland Food Bank in attendance to aid local residents. Ms. Dreyfuss-Wells thanked Mayor DeGeeter and his staff for their assistance organizing the event. In total, the Utility Assistance Resource Fairs have serviced 952 customers in 2022 and NEORSD staff is looking forward to the 2023 events.

NEORSD now has a podcast called Clean Water Works, which is hosted by Mike Uva, Communications Production Lead, and Donna Friedman, Manager of Community Watershed Coordination. Each episode features a different NEORSD employee, and so far, has featured Frank Schuschu, Industrial Compliance Specialist, a 46-year veteran of NEORSD, and SSMO's Joshua Dress and Josh Jeffi to discuss their work of monitoring and maintaining the collection system. Ms. Dreyfuss-Wells added that the podcast has been downloaded 1,000 times and encouraged everyone to listen.

NEORSD's Twitter account was recognized by Cleveland Magazine at their "Best of Cleveland" awards ceremony on October 13. Ms. Dreyfuss-Wells congratulated John Gonzalez, Manager of Communications, for this honor and noted that NEORSD's social media presence is recognized nationwide and is a great way to educate the public about complex engineering, watersheds, and other technical issues.

#### V. Action Items

##### Authorization to Issue Request for Proposal (RFP)

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| Resolution No. 354-22 | Authorization to issue an RFP, in accordance with Ohio Revised Code Chapter 153, for design and construction administration/resident project representation services for the Renewal of Culverted Streams II project. |
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**MOTION** – Mayor Alai moved, and Ms. Chambers seconded to adopt Resolution No. 354-22. Without objection, the motion carried unanimously.

Authorization to Re-bid

Resolution No. 355-22      Authorization to re-publish notice calling for bids, in accordance with Ohio Revised Code Section 6119.10, for the purchase of two  $\frac{3}{4}$ -ton class cargo van vehicles with an anticipated expenditure of \$120,000.00.

**MOTION** – Ms. Chambers moved, and Ms. Dumas seconded to adopt Resolution No. 355-22. Without objection, the motion carried unanimously.

Authorization to Purchase

Resolution No. 356-22      Authorization of \$250,000.00 to purchase as-needed spare parts from sole source vendor Schwing Bioaset Inc. to repair and maintain Schwing Bioaset material handling equipment at the Southerly and Westerly wastewater treatment centers.

Resolution No. 357-22      Authorization to purchase replacement hardware for the District's GJM and EMSC Storage Area Network and supporting hardware from Cambridge Computer Services, Inc., under the National Cooperative Purchasing Alliance, in a total amount not-to-exceed \$1,036,147.88.

**MOTION** – Mr. Sulik moved, and Ms. Chambers seconded to adopt Resolution Nos. 356-22 through 357-22. Without objection, the motion carried unanimously.

Authorization to Enter Into Agreement

Resolution No. 358-22      Authorization to enter into a project agreement with the City of Parma to provide local match funding in an amount not-to-exceed \$181,655.00 to be combined with \$1,634,895.00 from the Federal Emergency Management Agency's Hazard Mitigation Grant Program for the City's acquisition and demolition of eight residential structures within FEMA's designated Special Flood Hazard Area.

**MOTION** – Mayor Bacci moved, and Ms. Chambers seconded to adopt Resolution No. 358-22. After the following discussion, without objection, by roll-call vote, with all present members voting yes, and recusal from discussion and abstention from voting by Mayor DeGeeter, the motion carried.

President Brown noted that the resolution appears to pertain to a number of homes built in a floodplain area and there seems to be significant federal funding for the project. President Brown requested additional information.

Frank Greenland, Director of Watershed Programs, explained that Baldwin Creek is the project area with flooding and erosion problems on several branches. The City of Parma received a substantial FEMA Hazard Mitigation Grant to demolish the structures in the flood-prone areas. The total project cost of \$1.8 million requires a 10% local match, which will be provided by NEORS.

Mr. Greenland provided a map of the project area and the properties to be demolished under this project as well as the Dell Haven Basin Project, which is a substantial project that is currently in the land assembly phase.

#### Authorization to Amend Agreement

Resolution No. 359-22      Authorization to Amend Agreement No. 21002567 with the Village of Valley View providing local matching funds for the Hazard Mitigation Grant Program FEMA-DR-4424.7R-OH project by increasing the agreement amount by \$30,115.50 related to escalating implementation costs, thereby bringing the total agreement amount not-to-exceed \$40,990.50.

**MOTION** – Ms. Chambers moved, and Mayor Bacci seconded to adopt Resolution No. 359-22. Without objection, the motion carried unanimously.

#### Property Related Transaction

Resolution No. 360-22      Authorization to acquire one parcel in fee simple at the property known as PPN 456-12-004, located on Pleasant Valley Road, in the City of Parma; to acquire one parcel in fee simple to be split from the property known as PPN 456-12-003, located at 9906 Pleasant Valley Road, in the City of Parma; and to acquire one temporary easement on the property known as PPN 456-12-003, located at 9906 Pleasant Valley Road, in the City of Parma, all owned by the Board of Education of the Parma City School District, necessary for the construction and maintenance of the Baldwin Creek Dell Haven Basin near York Road project, and to allow for the entirety of the payment to be disbursed to Northstar Title Services, LLC, with total consideration of \$381,000.00 plus closing costs.

Resolution No. 361-22      Authorization to acquire one parcel in fee simple to be split from the property known as PPN 456-10-010, located at 7367 York Road, in the City of Parma, owned by the Most Reverend Edward C. Malesic, Bishop of the Catholic Diocese of Cleveland, as implied trustee for Holy Family Parish, necessary for the construction and maintenance of the Baldwin

Creek Dell Haven Basin near York Road project, and to allow for the entirety of the payment to be disbursed to Guardian Title & Guaranty Agency, Inc., with total consideration of \$450,000.00 plus closings costs.

Resolution No. 362-22      Authorization to acquire one permanent stormwater easement and two temporary easements at the property known as PPNs 472-30-005, 472-30-007, and 472-30-052, located at 6476 York Road, in the City of Parma Heights, owned by Drug Mart Plaza-U.S. & P.H., LLC and Drug Mart Holdings, LLC, necessary for the construction and maintenance of the Big Creek Bank Stabilization near York Road in Parma Heights project with total consideration of \$1.00.

Resolution No. 363-22      Authorization to acquire one parcel in fee simple at the property known as PPN 483-16-006, located at 11944 Edgerton Road, in the City of North Royalton, owned by Thomas J. Berry and Venechia Berry, necessary for the construction and maintenance of the Rocky River East Branch Subwatershed Problem Area 04 - EBPA\_04 project, to enter into a lease agreement with Thomas J. Berry and Venechia Berry, and to allow for the entirety of the payment to be disbursed to Northstar Title Services, LLC, with total consideration of \$335,000.00 plus closing costs.

Resolution No. 364-22      Authorization to acquire one permanent stormwater easement at the property known as PPN 552-04-014, located at 6722 Cheryl Ann Drive, in the City of Seven Hills, owned by Jay C. Owens and Nora Q. Owens, Co-Trustees of the Owens Family Trust Dated February 17, 2003, necessary for the construction and maintenance of the Hemlock Creek Bank Stabilization in Seven Hills Phase 1 project with total consideration of \$4,680.00.

**MOTION** – Mayor Alai moved, and Mayor Bacci seconded to adopt Resolution Nos. 360-22 through 364-22. After the following discussion, without objection, the motion carried unanimously.

President Brown noted that Resolutions Nos. 360-22 and 361-22 appear to be related projects at different locations to provide flood relief and presumably, actions will be taken to ensure that structures are not built there in the future.

Mr. Greenland again provided a map of the Baldwin Creek project areas and explained that NEORSD is acquiring two properties from the City of Parma School District and another from the Catholic Diocese, where NEORSD will construct a stormwater detention basin to alleviate flooding along Baldwin Creek. The basin should capture 100-year level flows and the expectation is that it

will increase the current downstream 2-year level of service to a 10-to-25-year level of service, depending on location. There will be follow-up projects downstream in an attempt to reach a 25-year level of service for the entire area.

President Brown asked whether this is a commercial or residential area. Mr. Greenland explained that it is a combination of both, and the project is a strategic opportunity to install a detention basin in a highly urbanized area. President Brown noted that the criteria for stormwater design varies from residential to commercial. Mr. Greenland explained that the goal for storm sewer design in the streets is 10-year level. In this instance, the stream is out of its banks and flooding properties which can transfer inflow and infiltration into the sanitary collection system.

Mayor DeGeeter offered that following large rain events, it is not uncommon for the intersection of York Road and Pleasant Valley to be closed due to flooding, which is problematic.

President Brown asked for additional information regarding Resolution No. 363-22. Mr. Greenland explained that this is a 1.67-acre parcel in a Master Planning Project area along the east branch of the Rocky River in North Royalton. At this location, the flooding stream starts to come out of its banks at a 2-year level storm. NEORSD is acquiring the property to create floodplain expansion in the area.

President Brown asked if the surrounding bodies of water provide any storage capability. Mr. Greenland explained that the issue was evaluated during the Master Planning studies and would be fleshed out during the detail design phase.

#### Authorization to Grant Credit

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| Resolution No. 365-22 | Authorizing the District to issue a credit adjustment in the total amount of \$83,338.76 against sewer charges on the NEORSD account ending in 0003 for Jacobs Investments at 1151 Main Avenue, Cleveland. |
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**MOTION** –Mayor Bacci moved, and Ms. Dumas seconded to adopt Resolution No. 365-22. After the following discussion, without objection, the motion carried unanimously.

President Brown asked if the credit was requested by the City of the Cleveland. Ken Duplay, Chief Financial Officer, answered affirmatively and explained that this was a standard water outlet leak. NEORSD investigated the leak at the City's request and agreed with the credit.

#### Authorization to Adopt

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| Resolution No. 366-22 | Authorization to adopt the Cuyahoga County 2022-2027 All-Hazards Mitigation Plan. |
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**MOTION** – Mr. Sulik moved, and Ms. Chambers seconded to adopt Resolution No. 366-22. Without objection, the motion carried unanimously.

VI. Information Items

President Brown noted that the Financial Report and Investment Advisory Report were included in the Board's Information Items and instructed his fellow Board members to direct any questions to Mr. Duplay.

Frank Foley, Director of Operation and Maintenance, provided the Operation and Maintenance (O&M) Quarterly Update for the Third Quarter of 2022, beginning with safety. Through the third quarter, there have been a total of 2 lost workdays and 31 restricted workdays, which is an improvement from the past several years. This number will increase as there has been a motor vehicle accident in the fourth quarter involving two SSMO staff and resulted in missed work.

Of the four events occurring through the third quarter which led to lost or restricted time, there was one motor vehicle accident, one strain, one slip, and one person was splashed in the eye with gasoline while trying to start a weedwhacker in the field.

The DART rate, which is the number of incidents per 100 full-time employees that results in lost or restricted workdays, is 1.03 for O&M and 0.7 District-wide.

Regarding effluents, total suspended solids for all three WWTPs were below monthly limits for the quarter, as were carbonaceous biochemical oxygen demand (CBOD), and phosphorus. However, there are also weekly limits, wherein the Ohio EPA reviews seven-day increments for each week of the month. During the fourth week of September, the effluent limit for phosphorus was exceeded at Southerly. There were two consecutive days wherein the influent concentrations were approximately 8 mg per liter opposed to the usual concentration of approximately 4 mg per liter. Plant staff took appropriate measures to attempt to reduce the concentration but were unable to do so by the end of that week. The reason for the increase has not been identified.

Concentrations of *E. Coli* were well below the limits at all three plants.

As for maintenance, as was expected, the costs were greatest at the Southerly WWTP, as it is the largest plant. In comparing corrective maintenance costs to preventive maintenance costs, the collection system had much higher preventative maintenance costs than corrective maintenance costs through the third quarter.

In the collection system, year-to-date, there have been two dry weather overflows, which were caused by a downstream blockage and an equipment failure, respectively. So far, this is a significant improvement from 2021, which saw nine dry weather overflows.

The automated collection system equipment has been performing very well during wet weather, with almost 100% availability. There was one incident in July where two pump failures decreased the availability to 99%.

There are ten O&M budget centers with a total operating budget of approximately \$63.1 million for 2022. Year-to-date spending through the third quarter is approximately \$42.9 million. Approximately 75% of the variance is attributable to salaries and wages, electricity, and chemicals. Spending has increased by \$1.2 million from last year.

Mr. Foley advised the Board that on a quarterly basis, Jim Bunsey, Chief Operating Officer, Doug Reichlin, Deputy Chief Operating Officer, and himself, go to each facility to provide an update to the management staff. In the third quarter, Mr. Foley and Mr. Bunsey held roughly 30 meetings with frontline managers to hear anything that they wanted to share. The information is being reviewed and divided into a number of themes and will be presented to the chiefs next week. Feedback from those meetings will be disseminated in the fourth quarter meetings with the managers throughout O&M.

Mr. Foley invited Kathryn Crestani, Enterprise Biosolids and Residuals Superintendent, to provide an update regarding the Renewable Energy Facility (REF) and how it helps to support NEORSD's goals around cost savings and sustainability.

Ms. Crestani began her presentation with a broad overview of wastewater treatment, explaining that the water gets cleaner as it goes through each process because more solids are removed with each step.

The solids that are removed must go through multiple processes, including the thickening process and dewatering centrifuges to decrease the total amount of water in the solids. The sludge cake is 30% solids after the dewatering centrifuge process, then incinerated at 1,300 to 1,600 degrees Fahrenheit. Some of the heat is recycled to preheat air. Energy is captured through the waste heat boilers to create high-pressure steam which turns a turbine and generates electricity.

The REF processes solids from the Southerly WWTP and the Easterly WWTP via a pipeline that runs directly between the WWTPs. The REF will eventually handle sludge from the Westerly WWTC, which will be sent via tanker trucks.

Ms. Crestani provided photographs and diagrams of the incinerators and explained that the three incinerators have a capacity of 100 dry tons per day each.

Incineration allows NEORSD to significantly reduce the volume of materials to dispose. If the sludge cake was not incinerated, it would need to be hauled to landfill, meaning that twenty 20-ton trailer loads would have to be hauled through the plant, and on the roads, generating significant



hauling fees and tactical risk. By incinerating, NEORSD is able to reduce the risk by reducing the volume down to 120 dry tons per day of ash, which is inert and can be easily stored.

Ms. Crestani explained that since the REF came online in October 2013, energy use and costs are down across the entire Southerly WWTP due to the energy generated from the REF and energy conservation projects within the REF and the WWTP.

Ms. Crestani provided a photograph of the turbine and explained that it produces 1.2 megawatts and the REF uses 3 megawatts. The energy produced by the turbine is only used within the REF and reduces energy costs by approximately \$1,500 per day. The entire Southerly WWTP uses approximately 10 megawatts on a dry day and 12 megawatts on a wet day.

The REF used to have multiple hearth incineration, the operation of which requires significant amounts of natural gas. The new technology uses fluidized bed incineration, the primary fuel source for which is the sewage sludge. When a unit is brought online, natural gas is required to heat up the refractory and sand bed before feeding the sludge. If the conditions are right, and the sludge has good fuel value, the incinerators can be run without the use of natural gas.

The ash that remains after incineration is stored in ash lagoons with some effluent water, across the street from the Southerly WWTP until it is hauled away. Each lagoon can hold one year's worth of ash. The local company that hauls the ash charges NEORSD for the service, then uses the ash to create a topsoil product which they sell wholesale. Since 2018, the ash has not been going to landfill. This results in \$900,000 in annual costs savings as well as reduced greenhouse emissions.

President Brown asked if there are other opportunities to generate revenue from the solids. Mr. Foley explained that NEORSD takes solids from the Cleveland water treatment plants, which are discharged through the sewer system to the WWTP. NEORSD has considered converting REF to a merchant facility where sludge could be brought in from other facilities, however, it would be extremely costly and not worth the investment. President Brown added that NEORSD has the space to do so if the financials aligned. Ms. Dreyfuss-Wells added that one of the issues is irregularities of what would come from different plants.

Mr. Reichlin began his Operational Readiness Initiative (ORI) update and reminded the Board that he came to NEORSD over five years ago to head up ORI and as his tenure is coming to an end, he would provide a summary of the accomplishments of the program.

The vision of the initiative was to get the District's People, Processes, and Performance to work together optimally and create a culture of sustainability and continuous improvement. Initially, there were approximately 50 items identified by Veolia, the District's Operational Readiness Assessment consultant, and over the course of the project, there have been 131 tasks, which were prioritized based on impact and level of effort.

Some successes of the program include a review and reorganization of O&M to standardize maintenance practices across all WWTPs, including the standardization of documentation systems and standard operating procedures (SOPs)

NEORSD's Technical Services Group (TSG) was born out of a comprehensive needs assessment, which has been in place for approximately three years and is helpful across the District. With the help of TSG, NEORSD has moved away from paper to a more digitized platform, optimized the maintenance processes and procedures and established standardized key performance indicators. Additionally, the old computerized maintenance management system was moved to a NexGen platform which is completely paperless and has been very successful.

Instrumentation and maintenance calibration has been standardized, and with assistance from Health & Safety, the monitoring of hazardous gases was improved for protection of employees and equipment.

Significant work was done to optimize REF operation including: the evaluation and upgrade of the reliability and systems to reduce downtime caused by equipment failures; utilizing Prius mode, wherein incinerators are run on a rotation to improve loading rates and save money; and the addition of a full-time process engineer to provide ongoing technical support and identify areas for improvement.

A comprehensive energy model of all three WWTPs was created and supported a greater than 25% energy reduction at the Southerly WWTP and approximately 10% reduction at the Easterly and Westerly WWTPs.

NEORSD established a contract with Enel X North America, which allows it to manage peak demands at the WWTP by utilizing emergency generators to come off of the outside electrical grid, resulting in a combined savings of approximately \$1 million annually.

Other improved WWTP efficiencies include optimizing chemical use; decommissioning the primary sludge degritters and the gravity belt thickeners at the Southerly WWTP; decommissioning the multiple hearth incinerators at the Westerly WWTP with the intention of transitioning the sludge from landfill to being incinerated at the Southerly WWTP.

A comprehensive predictable maintenance program was implemented, utilizing high-tech diagnostic tools to identify latent problems. This has significantly improved the reliability of equipment. The maintenance activities and workforce have been right-sized. Additionally, there was an evaluation of lubricant use that identified several locations where plants were using the wrong lubricants, contributing to repetitive failures.

A facility-wide HVAC evaluation was conducted and determined that it would be more efficient to bring HVAC services in-house. This process is ongoing.

The process of performing condition assessments has been standardized and become more of a robust, engineering-based assessment of equipment replacement and repair projections, improving reliability and efficiency.

There have been 79 tasks completed to date resulting in \$6.4 million per year annual savings, and a net present value of \$111 million. Some tasks will be ongoing improvements.

Mr. Reichlin expressed his appreciation to Tom Shively, Program Manager, who will remain with NEORS. There is a transition plan underway to ensure that Mr. Shively has adequate resources.

President Brown thanked Mr. Reichlin for his efforts in efficiency and optimization.

VII. Open Session

There were no items.

VIII. Public Session (any subject matter)

There were no items.

IX. Executive Session

Mayor Bacci pursuant to Ohio Revised Code Section 121.22 (G)(1), moved, and Mr. Sulik seconded to enter an executive session to consider the compensation of public employees. By roll call vote, the Board voted unanimously to enter into executive session at 1:35 p.m.

The Board returned to open session at 2:31 p.m.

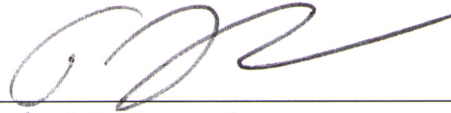
X. Approval of Items from Executive Session

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| Resolution No. 367-22 | Authorizing funding for year 2022 Pay for Performance, including base pay increases for non-union employees up to four percent (4%), effective the first pay of 2023, and a budgeted amount not-to-exceed \$676,000.00 for merit pay to eligible non-union employees to be distributed in January 2023, all as determined by the Chief Executive Officer. |
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President Brown indicated that following Executive Session, the Board has follow-up questions for staff. The Board deferred action on Resolution No. 367-22 pending further review.

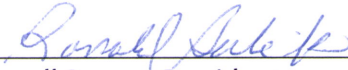
XI. Adjournment

**MOTION** – President Brown stated business having been concluded, he would entertain a motion to adjourn. Mayor Bacci moved, and Ms. Dumas seconded the motion to adjourn at 2:32 p.m. Without objection, the motion carried unanimously.



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Timothy J. DeGeeter, Secretary  
Board of Trustees  
Northeast Ohio Regional Sewer District



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Darnell Brown, President  
Board of Trustees  
Northeast Ohio Regional Sewer District