

RUMFORD-MEXICO SEWERAGE DISTRICT

SUPERINTENDENT'S 2020 ANNUAL REPORT

December 9, 2020

To the Board of Trustees.

Historically, the prior Superintendent would send a generic annual report to the three communities which the District serves. The report typically was less than a page in length and was a duplicate year over year with only few minor changes. Beginning this year, I will be submitting an annual report to you, the Trustees of the District, and will provide copies to the three communities. The annual report will be a summation of activities from December of the prior year until December 2020.

Major Board Decisions:

- December 2019 meeting, the Board unanimously adopted MRWA survey salary guidance, and to abide by the personnel policy new employee probationary period of 3 months.
- January 2020 meeting, the Board unanimously voted to accept the proposed 2020 budget containing a 5% rate increase.
- February meeting, the Board voted to change the responsibilities of the Vice Chairman of the Board to include monthly checking account oversight and increase the position pay range from \$80/month to \$125/month. Motion passed with one dissention. The Board also motioned to reject the Town of Bethel's sludge for composting with the motion unanimously passing.
- March meeting, the Board moved to apply for a Rural Development SRF Grant, which passed unanimously. The Board also motioned and approved updates to the District Personnel Policy regarding Trustee pay rates and employee vacation accruals.
- Because of the COVID-19 crisis, the April meeting was cancelled.
- May meeting, the Board moved and approved a family hardship clause to allow employees to utilize accumulated sick time verses vacation time to address family hardships resulting from the closure of the State by the Governor. The Board was notified the \$1MM ME DEP SRF Grant application was withdrawn per the States request as the District was not advanced enough in the process to qualify. The Board was notified the ME DEP awarded a \$100K FSP grant to develop a Fiscal Sustainability Plan which includes an Asset Management System. The Board was notified ME DEP awarded a \$5K grant towards a mandatory Environmental Assessment Report required by the State and Federal government to qualify for large development grants such as RD and CDBG.
- June meeting, William (Bill) Buotte retired from the Board of Trustees after serving 27 years on the Board in various capacities and finishing as the Board Chairman.
- July meeting, Mary LaPointe was elected as the Chairwoman of the Board vacated by W. Buotte upon retiring. The Board moved and approved unanimously to appoint Peter Gautreau of Rumford to a 3-year term as the Alternate Trustee. The Board moved and approved edits to the Personnel Policy to better clarify the vacation policy changes made by the Board during the November 7, 2018 Board meeting.
- August meeting, the Board moved and approved the tabling of a job posting for a full-time position to replace the position of the Office Manager when she retires. The Board moved and approved a motion to purchase asset management system (AMS) software for the District for a three-year contract of \$18,000.00 to meet the FSP Grant stipulations.
- September meeting, the Board was informed of the 21% rate increase for 2021. The Board moved and approved a phased plant upgrade presented by the Superintendent to address issues requiring attention that cannot wait for Grant monies.

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- October meeting, the Board motioned and approved to replace the terminated employee. The new employee will replace the existing Belt Press Operator, who was transitioned into the assistant Chief Operator position. The Board moved to hire Extreme Cleaning as part time custodial services to assume custodial duties. The Board authorized the borrowing of monies from the Maine Bond Bank to cover expenses for the District's share of the FSP grant and the Board authorized the Superintendent and Treasurer of the Board to sign and accept loan documents for the District from the Maine Bond Bank. The Board approved the plan to move forward with upgrading the plant Proview logic with a SCADA system in 2021 as part 1 of the phased plant upgrades.
- November meeting, the Board accepted a letter of retirement from Sandy Fish whose last day with the District is December 24, 2020.
- December 2020 meeting, the Board rejected a motion to re-hire Sandy Fish as a part time bookkeeper and motioned/approved to replace her position with a full-time operator/bookkeeper position. The Board also motioned and approved the replacement of the Service Truck, and the replacement of the muffin monster shredder cartridge at a cost of \$21K.

District Finances:

The Board approved the operating budget for 2020 with a 5% increase over 2019 against the request of the Superintendent to increase it by 19.4% to cover actual long term average expenses of \$950K. 2019 financial statements concluded with a net positional increase of \$561.00, which was the first time since the late 70's the District operated in the black. 2020 is expected to see a slightly larger gain estimated at \$15K increase in the Net Position. Moving forward into 2021 as illustrated in the notice to the communities in July 2020, the District will see a 21% rate increase which is required to cover 100% of District operating costs for 2021. The District is planning to put out for Bid the replacement of the Dix Avenue Pump Station roof in early summer of 2021 and the installation of SCADA system at the Main Plant.

Operations:

The treatment plant was compliant with all discharge monitoring conditions in 2020. However, the Town of Rumford has not as of this writing addressed the stormwater Inflow/Infiltration issues identified in a 2009 – 2010 Wright-Pierce Engineering Study mandated by ME DEP. The new Rumford Town Manager hired mid-summer 2020 is committed to addressing these issues as the Town Budget permits; with the understanding the current conditions were an inheritance and it will take time to draft a planned response. The operations experienced considerable plugging from rags/wipes beginning in the spring of 2020 and lasting through out the year. The rags/wipes issue is not a new issue as the plant muffin monster needs an upgrade. However, the COVID-19 pandemic caused a shortage of toilet paper in the first half of 2020 resulting in alternative use of wipes/rags that exasperated pipe/pump plugging issues. This dramatically increased the exposure of District employees to bio-hazardous debris being flushed down the toilet.

The Rumford Community Hospital experienced a Bunker See oil spill from their two boilers in April that discharged to the Town of Rumford's sewer collection system and discharged into the District's collection system. The original estimate was downgraded from 700 gallons to 450 gallons. The thick oil contaminated the treatment plants biological process and required removal from the system by a contract vacuum truck service with oversight by the Maine Department of Environmental Protection.

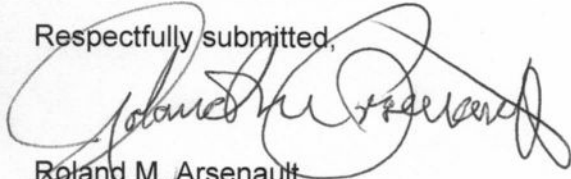
The District employees successfully repaired multiple key valves in the activated sludge process allowing much more flexibility with sludge dewatering and activated sludge operations. However, the #1 Digester was drained for the first time in 20 plus years and found to be greater than half full of grit. The cost to clean and dispose of the material was estimated to be greater than \$75K. Management found a work around and are slowly feeding the material back through the influent screening process for the remainder of 2020 and restarting after 2021 spring high flows.

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Mechanical Integrity:

The employees of the District have stepped up to address the multitude of mechanical, structural, and electrical issues that were neglected for a long period. Please see the attached Addendum illustrating work completed since August 2018.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Roland M. Arsenault", written over a horizontal line.

Roland M. Arsenault
Superintendent

ADDENDUM 1

December 8, 2020

BUILDING AND GROUNDS - Main Plant & Other

Repaired stormwater collection swale behind #2 Sec. Clarifier.
Repaired damaged gates at lower and upper parking lots
Repaired yard lighting on lower access road by Aeration Tanks
Repaired upper parking lot lighting near gate
Repaired mail box at lower gate
Installed a plastic storage shed for landscaping tools at upper lot
Cleared Trees and Brush at Dix Ave Pump Station
Re-graded catchbasin near ash building
Re-graded lawn areas at the two Septic vlv locations
Repaired Fencing at Dix Ave. Pump Station
Purchased used 1 Ton dump with sander, plow
Repaired hole in concrete walkway to Main office.
Replaced all door locks/gate locks at all District Locations
Repaired lock on Chemical Room Loading Door
Purchased/installed chains for riding lawn mower
Purchased new Confined Space Tripod with winch rescue system
Repaired buried electrical supply to lower parking lot lighting

MECHANICAL REPAIRS/REPLACEMENT - MP

Replaced motor on #3 Compost blower
Replaced time on #5 Compost blower
Replaced upper belt on belt press
Replaced lower belt on belt press
Replaced RST Screen on belt press
Modified CCT surface spray system for easy maintenance.
Replaced Mexico-Dixfield flow meter in Rt.2 Vault
Replaced Rotors, gas cap, brakes & calipers on 1 Ton
Excavated/Replaced #2 Digester 6" eccentric Septic inlet valve
Excavated/Replaced yard hydrant by Septic tank
Replaced belt on Thickener Room exhaust Blower
Replaced Thickener 8" eccentric valve
Replaced Thickener 8" eccentric valve actuator
Replaced 8" mud valve drain #2 Digester
Replaced smoke pipe on Furnace
Repaired #1 RSP 12" Discharge Vlv. Stem.
Replaced oil seals on Muffin Monster
Replaced bearings on #1 Digester Floating Aerator
Replaced starter on Service Truck
Replaced Hydraulic Heater in Press Room
Repaired air lines to Belt Press
Replaced sample pump on effluent sampler
Replaced 3 HP high pressure compost blower
Replaced 1 Hp grinder sump pp. in pump room basement
Replaced mechanical seal, shaft with new SS sleeve, bearings and seal water lines for #1 RSP
Sandblast and repainted #1 RSP

Replaced mechanical seal, shaft with PF17 SS, bearings and seal water lines for #3 RSP
Sandblast and repainted #3 RSP
Repair oil filter mechanical aerator #3
Replaced bearings/motor on muffin monster
Replaced seal water piping/fittings on all 3 RSP pps.
Installed water filtering system on seal water system
Drained/Flushed plant deep well pump due to iron contamination
Replaced 10 ft of 4" drain pipe at compost bays
Purchased used freezer to replace effluent sample refrigerator

Purchased new refrigerator to replace used freezer on effluent sampler
Replaced Hydraulic Heater in maintenance garage
Replaced sample refrigerator in Lab
Replaced incubator in lab
Repaired roof drain pipe in lab ceiling
Purchased 2 rebuild kits for the new mechanical seals on RSP's due to bad seal water
Repaired leaking city water backflow meter
Replace RSP #1 shaft with 17-4 SS shaft, rebuilt mechanical seal, replace bearings
Repaired #2 Aerator 10" Eccentric Vlv, installed new ss shaft.
Repaired/rebuilt 2 - 10" WAS mud valves to #2 Aerator Tank
Repaired/rebuilt 2 - 10" WAS mud valves to #1 Aerator Tank
Repaired/rebuilt 2 - 10" WAS mud valves to #2 Digester Tank
Repaired/rebuilt 2 - 10" WAS mud valves to #1 Digester Tank
Repaired 4 - 4" Discharge gate valves #2 Aerator Tank
Excavated/Replaced #2 Digester 6" eccentric Septic inlet valve
Replaced 8" mud valve drain #1 Digester

INFORMATION TECHNOLOGY

Purchased redundant hand held BW Gas Alert XTII 4-GAS Detector
Purchased 4 iPads for use with Utility Cloud asset management program

MECHANICAL REPAIRS/REPLACEMENT - DA

Replaced Bearing on Grit Pump
Rebuilt instrument air compressor for bubbler system
Purchased 3/4 HP portable standby air compressor for bubbler system

MECHANICAL REPAIRS/REPLACEMENT - SR

Replaced instrumentation bubble air compressor

MECHANICAL REPAIRS/REPLACEMENT - FH

Replaced 8" 2 piece flange with retaining ring sleeve coupling for RSP
Replaced bubbler system in wet well with pressure transducer
Installed SCADA monitoring system of RSP's/Wet Well/Alarm panel
Installed new cellular data communication between FH - MP
Installed redundant High level Bulb Float in Wet Well
Removed air compressor system/controls

MECHANICAL REPAIRS/REPLACEMENT - RP

Replaced refrigerator sample cooler
Replaced Sodium Hypo pump
Purchased redundant Hypo pump
Trouble shoot RSP #2 breaker
Replace contact RSP #2

ELECTRICAL-INSTRUMENTATION REPAIRS/REPLACEMENT - MP

Installed GFI outlets with waterproof covers in Sec. Clarifiers.
Repaired 2 ton overhead yard hoist
Removed/replaced wiring to Mexico-Dixfield flow meter
Brought Mexico-Dixfield flow meter into SCADA
Rewired Effluent Sampler building to meet Code
Removed/replaced wiring to Outfall 001 flow meter
Removed bubble tube to Outfall 001
Replaced bubble tube with ultrasonic flow meter Outfall 001
Replaced lighting fixtures/wiring in RSP pump room
Rewind Floating Aerator #1 10 hp motor
Replaced VFD for Belt Press RST

ELECTRICAL-INSTRUMENTATION REPAIRS/REPLACEMENT - DA

Replaced SCADA touch screen with larger unit
Replaced wiring for Grit system VFD to SCADA
Replaced wiring to Sluice Gate, tied into SCADA
Rewind motor #2 Digester Floating Aerator
Installed new cellular data communication between DA - MP
Installed new seal water solenoid valves all 3 RSP's
Installed radar level transmitter in Wet Well
Installed redundant radar level transmitter in Wet Well

Wired the three Raw Sewerage Pp. VFD's to SCADA
Installed redundant high level Wet Well floats

Rewound motor on grit rake drive

ADMINISTRATION

Initiated Preliminary Engineering Review with Wright-Pierce Engineering.
Initiated Environmental Assessment with Wright-Pierce Engineering.
Initiated Fiscal Sustainability Report with Wright-Pierce Engineering
Installed Utility Cloud Asset management software District wide
Updated HR policies
Updated MP O&M manual
Updated Personnel Policy

Updated Wet Weather policy for MP & RP

August 7, 2019

BUILDING AND GROUNDS

Repaired Main Plant roof leaks
Relaced windows in mainplant stairwell
Tree removal in upper parking lot
Bush removal by maintenance garage
Brush removal behind secondary clarifiers
Brush removal behind equipment storage garage
Metal pile cleanup/disposal from behind equipment garage
Tire pile cleanup/disposal from behind compost mixing barn
Cleaned out chlorine injector room of old paint/equipment
Cleaned out junk from equipment garage
Replaced American Flag
Removed 15 years of garbage from Dix Avenue pump station.

MECHANICAL REPAIRS/REPLACEMENT - MP

Repaired yard valves by Bio-Towers
Repaired Mud Valve #2 Digester
Replaced #1 Secondary Clarifier valve boxes
Replaced #1 Secondary Clarifier valve stems
Replaced #1 Waste Pump
Replaced #2 Waste Pump
Replaced Main Plant Grit Pump
Replaced Main Plant Grit Rake drive
Rebuilt old Grit Rake drive - backup
Replaced Polymer Tank
Installed new polymer tank level controller
Installed new polymer tank water meter
Unplugged Thickener pit discharge pipe
Unplugged inlet pipe of #1 Secondary Clarifier
Repaired #1 Secondary Clarifier return sludge box seal
Repaired #2 Secondary Clarifier inlet inspection hatch
Repaired #2 Secondary Clarifier return sludge coupling
Repaired #2 Secondary Clarifier skimmer
Repaired #2 Secondary Clarifier Skimmer arm/supports
Repaired #2 Secondary Clarifier return sludge box seal
Replaced #2 Secondary Clarifier return sludge box support arms
Repaired #2 Secondary Clarifier 2 foot diameter inlet pipe failure
Installed scum fan on #2 Secondary Clarifier
Installed scum fan on #1 Secondary Clarifier
Installed scum sprayer on Chlorine Contact Tank
Repaired/installed wash up hose in Wet Well basement
Repaired/installed wash up hose in Screen Room
Replaced 6 emergency life rings/life lines
Repaired 4 - #2 Aeration tank level control valves
Purchased 1 hp sump pump for pipe gallery
Repaired fuel pump on JCB Loader
Replaced oil heat exchanger on Dodge truck
Replaced tires on Dodge truck
Replaced transmission lines on Dodge Truck
Replaced headlights on Fisher Plow

ELECTRICAL-INSTRUMENTATION REPAIRS/REPLACEMENT - DA

Repaired breaker panel for Sluice Gate
Repaired/Replaced operating switches for sluice gate controller
Replaced sluice gate controller
Repaired bubble lines for all flow meters
Replaced PLC controllers for sluice gate
Replaced pLC controllers for Wet Well level controller
Rewired Wet Well level controller

ADMINISTRATION

Updated the District Charter
37% user rate increase to balance budget
Created District server/file sharing system
Created District electronic file system
Achieved a \$40K Grant to develop a Preliminary Engineering Review
Acquired an electronic map of the District User Sewer system
Rt. 2 paving project representation

INFORMATION TECHNOLOGY

Installed new PC in Control Room
Replaced failed Laptop at Dix Avenue Pump station
Installed new PC in Office Managers location
Replaced Superintendents PC
Replaced Superintendents Printer
Installed SKADA system at Dix Avenue pump station
Installed high speed internet - MP
Installed printer in Control Room - MP
Purchased field laptop

MECHANICAL REPAIRS/REPLACEMENT - DA

Replaced both Wet-Well Bubbler tubes
Modified piping in Wet-Well to allow isolation of Grit rake area
Replaced instrument air compressor

MECHANICAL REPAIRS/REPLACEMENT - FH

Repaired Emergency Generator
Repaired #1 Raw Sewerage Pump
Repaired Bubbler system

MECHANICAL REPAIRS/REPLACEMENT - RP

Repaired Emergency Generator
Repaired Sample Refridgerator

ELECTRICAL-INSTRUMENTATION REPAIRS/REPLACEMENT - MP

Replaced electrical junction boxes #1 Clarifier
Replaced electrical junction boxes #2 Clarifier
Installed GFI outlets #1 Clarifier
Installed GFI outlets #2 Clarifier
Repaired #1 Clarifier bridge load limit switch
Repaired #2 Clarifier bridge load limit switch
Replaced #1 Compost Blower Motor
Replaced #1 Compost Blower timer
Replaced #3 Compost Blower timer
Replaced #5 Compost Blower timer
Replaced 1 - 6 compost starter heaters
Replaced #1 Waste Pump starter heaters
Replaced #2 Waste Pump starter heaters
Rewired Emergency Generator to run 100% of plant
Installed amp meters on all motor panels
Repaired #5 Compost Blower Motor
Rewired Outfall flow meter on isolated circuit
Rewired Polymer tank flow meter & Level indicator
Replaced outlets and electrical boxes in pump room with GFI protection
Replaced light switches in pump room
Replaced Raw Sewerage Pump seal water pressure switches
Replaced pipe gallery outlets/light switches
Repaired/replaced yard lighting with energy efficient LED lights
Replaced controller for yard lights
Repaired/replaced aeration basin outlets w/GFI
Repaired #1 RSP VFD Drive
Reprogrammed #1, #2 and #3 RSP VFD drives
Repaired/modified instrument air supply header in blower room.
Repaired Wet Well level indicator - MP
Repaired Thickener pit bubbler tube
Repaired phone lines/jacks through out plant