

E.S.A Maintenance Report

TO: ESA Board of Directors
Theodore F. Lewis, Jr., *Executive Director*

FROM: Chris Muccie , *Superintendent, Safety Coord, N.J.D.E.P. C-2 Licensed Operator*

DATE: March 7, 2024

Report for February 2024 Activities

A. Problem Areas:

- Grease Traps Inspections – not performed in 5 years resulting in buildup in pipes resulting in emergency call outs due to blockages in mains. Started addressing inspections but due to limited staff its taking a long time. To date of the approximate 150 locations to be inspected, we have been able to inspect only 9, of which 4 were inaccessible.
- Land Rover –2 Blockages of main lines due to grease and paper towels build up . The easement is blocked by two storage containers, a fence and cars. Advised Ted who went out to speak to them. They should be sent a letter by the attorney advising they need to keep access to our manholes and easement free and clear.
- Circle Pump station has been an issue this month with multiple pumps getting clogged routinely. There may be an issue related to infiltration / inflow volume or it may be related to the Land Rover line. Pipe lining and camera inspections are needed.
- Old Orchard is having water intrusion issues on rainy days. The pump station should be inspected by T&M, the contractor and the ESA to determine a resolution. This issue is causing high water alarms.
- Maxwell Pump Station has rain water intrusion and needs a lining and a new inflow manhole cover. Need to find a source for custom ESA lids.
- Wampum pump station has no low level alarm and has only three reporting alarms, it needs more. This needs to be corrected.
- Our original pump station monitoring is a dialog / RACO Scada system which has been inoperable primarily due to the Police Department's control over the phone line and conversion to VOIP. We had a demo of a cloud based cellular system that would allow for more types of alarms for better monitoring. We have requested feedback from T&M and have requested a demo unit to test on one of our stations. Greater efficiency of time will help free manpower for other projects and routine duties.

- Pump Station Back Up Generators are required to be tested weekly. Our generators do not have automatic startup testing systems and as such this needs to be done manually. Due to staffing limitations we are lucky to be able to test start the generators manually monthly.
- Marks outs are performed daily as required by law. We are currently using manual maps, paper wye-cards, and a metal detector to locate our lines, cleanouts and covered manholes. We understand that the manholes were previously entered into a GIS system which is inaccessible due to membership issues. Some mark-outs can take up to two hours to perform due to our missing wye cards . We need to come up with a solution to missing WYE-cards, mapping and cameraing in order to make marking out more accurate and effective.

B. Activities

- updating OSHA and DEP compliance guidelines. To date of more than 21 that are required, approximately 14 have been completed. Attached is the Guidelines sheet for guidance.
- Daily calling to check phone lines at the OLD Orchard , Old Deal , Brookwood , Deep Woods ,Wampum , Circle, County Club, Crystal Inn, Eaton Crest, Industrial Way, Laurel Gardens, Lewis Street and Maxwell Road pumping stations.
- Every Monday and Thursday completed pump station maintenance and inspections
- Completed hearing conservation policy
- Ordered fire extinguishers for all generators at all pump stations.
- Met with municipal maintenance electrician to install two 70 amp circuit breakers at Wampum pump station .
- Met with Victoria from T and M to discuss upcoming lining project and about updating maps.
- Inspected clean outs at 2000 Lowther Drive Building 700 house numbers 117,119,121,123
- Met with Csl to remove flow meters (liberty points project)
- Plowed snow at all pump stations / shoveled snow
- Pulled pump 1 at maxwell pump station
- All employees attended ladder safety class from MEL
- Inspected 246 Industrial way west
- Completed respiratory protection program
- Pulled pump 2 At maxwell pump station
- Ordered Respirators for all crew members
- Pulled pump 2 at maxwell pump station
- Added the correct signage at shop and all pump stations to be in compliance with OSHA
- Continued working on updating entire SDS file log
- Inspected JC penny and lord and taylor disconnects
- Completed Crane and Hoist safety written program

- Pulled pump 2 at Industrial Way pump station

C. Items Needed:

- New Camera Truck – current vehicle is out of date and a safety hazard.
- New snake for clearing cleanouts to main. Existing snake is cumbersome and inefficient.
- GPS units for all trucks – to allow office and superintendent to know location of all vehicles at all times.
- Camera's for exterior of garage.
- New RACO scada system for pump stations to allow for online access to pump station issues.
- Bedliner for dump truck – the current bed is deteriorating due to acids from pump station debris. Ted approved this and we are moving forward with this repair.
- GIS access and mapping.
- A GPR (ground penetrating radar) unit which will allow for better cleanout and line location. Due to missing WYE-cards we cannot easily find cleanouts or lines.
- Ipad for use while performing markouts – we are currently using our phones to access PDF maps and the screen is too small to navigate.
- Vibration test meter and Megger meter for pumps. This will allow for routine testing of pumps to determine alignment, bearing and housing issues along with electrical wire insulation deterioration. There is a Operations and Maintenance of Pumps training class which will be offered at Rutgers. Ted has approved for the staff to take the course. Once the course is completed the staff will need the required meters to perform more preventative maintenance.
- We currently only have one paper set of wye cards which are crucial to us. Having the wye cards scanned and saved to a USB drive for backup would be ideal.
- Employee Id cards and business cards. Some business's are demanding to see photo employee Ids for us to conduct grease trap inspections.

D. Coordination with the Public & other Agencies:

- New Jersey One Call System Mark outs (62) – *see attached*
- *Complaint Memorandum: (18)*
 - RN# 24 151 wall street house stoppage (not ours)*
 - RN# 25 Circle pump station channel # 1 and #6 high water / backup*
 - RN# 26 67 buttonwood house stoppage (ours)*
 - RN# 27 Maxwell pump station pump 1 fail *

RN# 28 state of emergency declared snow storm . stayed at work to plow stations and shovel snow

RN# 29 109 Grant clean out was sticking out of sidewalk resident complained . lowered cleanout

RN# 30 Maxwell pump station channel 4 pump # 2 fail

RN# 31 Maxwell pump station channel 4 Pump # 2 fail

RN# 33 365 Benson Place House stoppage (not ours)

RN# 34 105 highway 36 main line backup

RN# 35 Circle pump station channel # 1 high water

RN# 36 11 farm lane (house stoppage)

RN# 37 circle pump station Channel # 1 and # 6 high water / backup

RN# 38 JC penny Monmouth mall disconnect inspection

RN# 39 154 South street house stoppage (ours)

RN# 40 land rover sewer main line backup

E. Scheduled Monthly & Quarterly Activities:

- .completed monthly generator and crane inspections and maintenance.
- Jetted monthly trouble spot areas. **NOT PERFORMED DUE TO STAFF LIMITATIONS**
- Completed monthly inspection check list for harness, fall protection, wench and cable.
- Completed jack stand inspection form.
- Inspected all fire extinguishers at garage, shop , and all trucks.
- Inspected emergency eye wash station and replaced water in it ..
- Weekly generator startup inspections. **NOT PERFORMED DUE TO STAFF LIMITATIONS**
- Varying frequency - Lateral, manhole, mainline (SSO program) root treatments. **NOT PERFORMED DUE TO STAFF LIMITATIONS**
- Once every five years - Manhole inspections to determine deterioration. **NOT PERFORMED DUE TO STAFF LIMITATIONS**
- Hold monthly safety meeting with employees covering written safety policies .
- Driver Vehicle Inspection Reports; completed the reports for ESA vehicles operated daily as required by the NJDOT federal motor carrier safety regulations.
- Fuel all vehicles as needed. If the Board wishes to see the gallons please advise and we can include on the report.
- Monthly fixed ladder inspections / portable ladder inspections

- Grease trap inspections.
- Monthly force main walk through to check for signs of leakage

Attachments:

Guidelines for Evaluation of Written Programs

Root Treatment List

SSO Grease Cutter Program List

Entire list of mark-outs done in Febuary