

**Minutes of a Meeting of the Environmental Authority
Held on Wednesday, 25 October 2023
At the Department of Environment and Natural Resources, Botanical Gardens, Paget
and Remotely using Teams Teleconference**

PRESENT: Ms. Davida Morris, Chair (initially by remote access, then in person)
Mr. Eugene Saunders, Deputy Chair
Mr. Andrew Barnes, Member
Mr. Willie Ferguson, Member (by remote access)
Mr. James Morrison, Member (by remote access)
Mr. Jonathan Starling, Member (by remote access)

ADVISORS: Dr. Geoff Smith, Environmental Engineer, DENR
Dr. Shaun Lavis, Hydrogeologist, DENR
Ms. Patricia Hollis, Environmental Officer, DENR
Mr. Armell Thomas Acting Chief Environmental Health Officer (by remote access)
Ms. Crystal Baxter, Environmental Health Officer (by remote access)
Mr. Tarik Christopher, Acting Chief Engineer, Public Works (by remote access)

ABSENT: Mr. Paul McDonald, Acting Senior Planner, Dept. of Planning
Mr. Kirk Outerbridge, Chief Engineer, Public Works

1. Resignation of Member

It was noted that Susan Armstrong resigned from the Environmental Authority, due to an illness in her family.

2. Confirmation of Minutes

The Minutes of the meeting no. 386 held electronically on 30 August 2023 were approved and then signed by the Deputy Chair.

3. BELCO Air Quality Updates, Information Requests and Operating Licence Reissue

3.1. BELCO Presentation on Annual Report

The BELCO presentation on last year's annual report was postponed until the November meeting due to the ongoing disruption caused by the cyber-attack on the Government's computer network.

3.2 Environmental Authority letter to BELCO

It was reported that no reply had been received yet to the Environmental Authority's letter to BELCO dated 31 August 2023. [*However, subsequent communications with BELCO revealed that BELCO had responded on the 22nd September 2023, which had coincided with the period of the cyber-attack on the Bermuda Government. The response by BELCO will be considered by the Authority in subsequent meetings.*]

3.3 Emission Control Order

There was no update to report.

3.4 Tank Water Sampling

The Authority TOOK NOTE:

that BIOS sampled 10 water tanks in the vicinity of BELCO in mid-October. The samples will be analysed for combustion byproducts. Analytical results are expected to be available in early January 2024.

4 Elbow Beach Waste Water Treatment Plant

The Authority TOOK NOTE:

that there is nothing new to report: The main hotel is closed and in foreclosure, wastewater is received only from one restaurant and some of the apartments of Fritholme Gardens. The plant

continues to operate without an activated sludge as a result of the low organic load. The effluent monitoring data for August 2023 remained consistent with that of previous months.

5 Ministry of Public Works Tynes Bay Waste to Energy Incinerator August and September 2023 Operation Update

5.1 The Authority TOOK NOTE:

August 2023

- Stream #1 was available for 31 days and ran for 19 days. Down time was due to clinker blockage and water treatment failure.
- Stream #2 was available for 31 days, ran for 18 days. It was shut down for planned maintenance.
- The turbine was available for 31 days and ran for 29 days at 52% efficiency.
- Total waste processed (less metal) was 4,446 tonnes. Cooking oil processed was 45.4 tonnes
- Total electricity sent to BELCO 16 July to 16 August: 1,659 MWh. Total electricity produced for August was 1,748 MWh.
- Eighty-eight (88) loads of ash-cement and 25.6 tonnes of unconsolidated ash were disposed of at the Airport Waste Management Facility (AWMF).

September 2023

- Stream #1 was available for 30 days and ran for 17 days. Down time was due to feeder table issue and a blockage caused by wet trash.
- Stream #2 was available for 30 days, ran for 28 days. It was shut down for unplanned maintenance due to wet trash chute blockage.
- The turbine was available for 30 days and ran for 29 days at 52% efficiency.
- Total waste processed (less metal) was 3,789 tonnes. Cooking oil processed was 52.3 tonnes
- Total electricity sent to BELCO 16 August to 14 September: 1,277 MWh. Total electricity produced for September was 2,359 MWh.
- Eighty-seven (87) loads of ash-cement and 98.5 tonnes of unconsolidated ash were disposed of at the Airport Waste Management Facility (AWMF).

5.2 Letter to MPW about continued non-compliance of Operating Licence Conditions

It was confirmed that to date the Ministry of Public Works (MPW) has yet to respond to the Environmental Authority's letter regarding the continued disposal of unconsolidated ash at the Airport Waste Management Facility, contrary to the operating licence conditions. Mr. Tarik Christopher had agreed to seek a response from MPW.

5.3 Testing of Tynes Bay and Mediawaste Incinerator Ashes

The Environmental Engineer reported that samples of consolidated and unconsolidated Tynes Bay and Mediawaste bottom and fly ashes are in the process of being collected. Analytical results of their analyses will assist in determining the appropriate disposal options for the ash from both facilities.

6. Clinical Waste Incinerator (Mediawaste) Update

6.1 The Authority TOOK NOTE:

that Mediawaste facility is back in operation after being damaged during lightning storm in early August.

6.2 The Authority TOOK NOTE:

that one 20ft shipping container of biomedical waste was delivered from the Airport Waste Management Facility to the Mediawaste Site. The number of containers of biomedical waste in storage at the Airport Waste Management Facility was reduced to 18 containers.

6.3 The Authority TOOK NOTE:

That the contract to monitor emissions from the Mediawaste Facility is being re-scoped after the initial bids were higher than expected.

7. Applications for Construction Permits and Operating Licences (New)

7.1 CP-757, CP-758, OL-1193, OL-1194 Bermuda Housing Corp

The Authority **DEFERRED**:

the applications for construction permits and operating licences for two 300 kW diesel generators at 60 South Road, Warwick.

7.2 CP-796, OL-1223 Bermuda Commercial Laundry

The Authority **DEFERRED**:

the application for a construction permit and operating licence for a 150 kW diesel generator at 44 Ord Road, Warwick.

7.3 CP-799, OL-1225 Huntley Towers Ltd.

The Authority **DEFERRED**:

the application for construction permit and operating licence for a 102 kW diesel generator at Unit 1, 3 Tanglewood Road, Paget

7.4 CP-800, OL-1226 Roof Tops Ltd.

The Authority **APPROVED**:

the application for construction permit and operating licence for a 273 kW diesel generator at 64 Church Street, Hamilton, subject to standard conditions

7.5 CP-802, 803, 804, OL-1129, 1130, 1131 J. M DaSilva Ltd.

The Authority **APPROVED**:

the applications for construction permits and operating licences for two sand sifters and one rock crusher at Units 24, 25, 26, 2 Wallers Point Road, St. George's, subject to standard conditions.

7.6 CP-805, OL-1323 Ian Paul.

The Authority **APPROVED**:

the application for construction permit and operating licence for a 26 kW propane generator at 1 South Road, Hamilton Parish, subject to standard conditions and providing no objections were received during the advertised period.

7.7 CP-806, OL-1323 Holly & Terry Barrow

The Authority **APPROVED**:

the application for construction permit and operating licence for a 18 kW propane generator at 16 Harrington Sound Lane, Smith's, subject to standard conditions and providing no objections were received during the advertised period.

8. Applications for Construction Permits and Operating Licences (Reissues)

8.1 The Authority APPROVED:

the applications for reissue of operating licences listed on the four-page printout, subject to standard conditions, with the exception of OL-526 (John Fuge genset), OL-142 (Corporation of Hamilton WWTP), OL-145 (Grotto Bay WWTP), OL-1183 (BLDC WWTP). OL-526, which is the replacement of a small generator with a slightly larger one. If the new genset sound levels are equivalent or quieter, the application is approved. If it is louder, the application is to be brought back for consideration. The WWTPs require submission of annual reports. .

9. Applications for Export Permit No. 104 Ministry of Public Works

9.1 The Authority APPROVED:

the application submitted by the Ministry of Public Works. for the export of nine 1000 lb cylinders of R-22 and R-134A mixture; one 10 lb cylinder of R-22; two 25 lb cylinders of R-407c, and one 8 lb cylinder of R-404a. .

10. Applications for Water Rights (New)

10.1 The Authority APPROVED:

WR 5796 Marvin Hanna., domestic disposal borehole for tank overflow at 40 Railway Trail, Southampton, subject to standard conditions.

10.2 The Authority APPROVED:

WR 5797 Brenton Slad., domestic disposal borehole for tank overflow at 4 Newport Gardens, Southampton, subject to standard conditions.

10.3 The Authority APPROVED:

WR 5798 Government of Bermuda., commercial disposal borehole for treated sewage effluent from public bathrooms at Horseshoe Bay, 94 South Road, Southampton, subject to standard conditions and providing the borehole is sealed to at least 50 feet below sea level.

11. Applications for Water Rights (Reissues)

11.1 The Authority APPROVED:

the reissuance of Water Rights on the one-page printout, subject to standard conditions, with the exception of two indicated as withdrawn.

12. Air Quality Monitoring Programme

The Authority **TOOK NOTE:**

That Government is funding the air quality programme in the 2024/25 financial year. It is anticipated:

- 1) a fixed monitoring station at East Broadway will be re-established. This is a Regulatory grade monitoring station.
- 2) Six portable monitoring stations to be located at:
 - a. East Broadway (for comparison/correlation)
 - b. Prospect (to replace fixed station, monitoring TBWEF)
 - c. Ocean Lane (Belco emissions and downdrafting)
 - d. Saltus Grammar School (Belco emissions)
 - e. Berkeley Institute (Belco emissions)
 - f. Wallers Point Road, St. David's (clinical waste incinerator and crematorium)

These will detect NO₂, SO₂, CO, O₃, PM-10, PM-2.5, VOC's to the standards provided in the Clean Air Regulations & Clean Air Act Amendment Bill (*i.e.* UK Air Quality Objective Target Levels).

13. Date of the Next Meeting

The date of the next meeting was set for 8:30 am, Wednesday, 29 November 2023.



CHAIRMAN

Jan 24, 2024
DATE