

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

PRESENT: Mr. Eugene Saunders, Deputy Chair (by remote access)
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
Ms. Patricia Hollis, Environmental Officer, DENR
Ms. Crystal Baxter, Environmental Health Officer
Mr. Tarik Christopher, Principal Engineer (Water & Sewage), Public Works
(by remote access)
Mr. Kirk Outerbridge, Chief Engineer, Public Works (by remote access)

ABSENT: Ms. Davida Morris, Chair
Mrs. Susan Armstrong, Member
Mr. Andrew Barnes, Member
Dr. Shaun Lavis, Hydrogeologist, DENR
Mr. Paul McDonald, Acting Senior Planner, Dept. of Planning
Mr. Armell Thomas Senior Environmental Health Officer

1. Confirmation of Minutes

The Minutes of the meetings nos.378 and 379 held on 23 and 28 March 2023 were approved. They will be signed at a subsequent meeting when the Chair or Deputy Chair are present.

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

2.1. The Members continued discussions of their meeting with BELCO representatives held on 23 March 2023 and considered the contents that are required in a draft letter to BELCO detailing the requests for actions to be taken to address the ongoing downdrafting of exhaust fumes at Ocean Lane, soot fallout events, and fuel/oil fumes from the BELCO tank-farm located on St. John's Road.

2.2 ENV-SOP-11

The Authority **AGREED:**

to request BELCO to provide more clarity on their ENV-SOP-11 (Environmental Standard Operating Procedure for when meteorological conditions favour downdrafting on Ocean Lane and the potential for fuel switching). BELCO shall be asked to provide times of when fuel switching (*i.e.* from HFO to road Diesel) was performed, whether complaints are required before fuels are switched, what other requirements are necessary before fuel-switching will be performed and details of affected engines.

2.3 Extending NPS stack

The Authority **AGREED:**

that they are satisfied that it is impractical for BELCO to extend the stack, considering the additional weight of concrete on the foundations that were not designed for such a change.

2.4 Extending NPS Flues

The Authority **AGREED:**

to request BELCO to undertake additional air dispersion modelling to predict the effects of what a unit extension in the metal flue height would correspond to an equivalent reduction in the wind window for downdrafting to occur (*i.e.* What would increase to the minimum wind speed to cause downdrafting be for every meter the flues are extended). It is considered that if the potential extension to the flues was minimal then this would be worth considering further with respect to the practicalities of designing a suitable flue extension system.

2.5 Reducing the Orifice of Flue Exit

The Authority **AGREED:**

that previous responses provided by BELCO to the December EA letter were satisfactory in that reducing the orifice of the flues would lead to increased back pressure that could damage the engines. This option may therefore not be a viable solution to increase the lofting of the exhaust plume in order to help reduce the extent of downdrafting to the Ocean Lane area.

2.6 Ambient Air Monitoring Stations

The Authority **TOOK NOTE:**

that DENR and BELCO are both looking for sites for an ambient air monitoring station near Ocean Lane and Whitney Avenue. It was noted that pole mounted sensors, whilst not US EPA certified, are being investigated for deployment by DENR as a good screening method. Their readings will help determine the most suitable site for a US EPA Certified air monitoring station. It was noted that prosecutions under the Clean Air Regulations 1993 are more likely to be successful when completed using data collected from US EPA certified air monitoring stations. The Environmental Engineer added that the air quality monitoring programme is being reviewed in light of Government funding being reinstated for FY 23/24. It is anticipated that there will be one certified station and one pole mounted sensor at East Broadway and several pole mounted sensors located around BELCO with one at Prospect.

2.7 Submission of Complaints information to DENR

The Authority **TOOK NOTE:**

That subject to receiving written confirmation and compliance with privacy legislation, BELCO has advised that it will comply with requirements to continue to report complaints to DENR.

2.8 Other Abatement Options

The Authority **AGREED:**

that BELCO shall be asked to provide details on what abatement options are being considered, the timelines to implement, and feasibility studies, including the pros and cons of each. This would be expected to include the use of Electro-Static Precipitators (ESPs) and lower sulphur fuels. It was noted that DENR and the Environmental Authority had learnt from the media about BELCO considering soot abatement using ESP technologies.

2.9 Timeline for BELCO to respond

The Authority **AGREED:**

that a timeline for BELCO to respond to the letter shall be stated (*i.e.* 2 to 3 weeks).

2.10. Way Forward

Following the issuance of this latest letter from the Authority to BELCO, the Authority noted that going forward it would be more prudent for the Authority to issue BELCO with a deadline by which time to address the various problems listed. It is noted that the problems include downdrafting of exhaust fumes, soot fallout and fuel/oil fumes along St John's Road. It is also noted that the timelines for achieving the required outcomes will be dependent on the type and extent of works necessary by BELCO. Therefore, any deadline issued by the Authority to BELCO would need to first be agreed with BELCO. Essentially, the Authority stated that BELCO should be told to fix the problems within an acceptable timeframe rather than how to fix them.

2.11. Warning Letter sent from DENR to BELCO

The Authority **TOOK NOTE:**

that the Environmental Engineer, Department of Environment and Natural Resources (DENR) sent a warning letter to BELCO on 17th April 2023 advising them that Government is considering the issuance of an Emissions Control Order under section 12(1)(v) of the Clean Air Act 1991. Specifically, the Emissions Control Order relates to the 'damage to property' caused as a result of the periodic emissions of soot fallout. The Department has provided BELCO until the 1st June 2023 to provide a suitable response, with justified reassurances, of why an Emission Control Order should not be issued, which is in accordance with the process of natural justice.

The Environmental Engineer added that the Department is seeking to hire a suitable engineering company with drone experience and access to drone operators to develop a method to ascertain soot impact through photography of roofs in the neighbourhood.

3 Elbow Beach Waste Water Treatment Plant

The Authority **TOOK NOTE:**

that there is nothing new to report: the main hotel is closed, 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 March 2023 remains consistent with that of previous months.

4 Ministry of Public Works Tynes Bay Waste to Energy Incinerator March 2023 Operation Update

The Authority **TOOK NOTE:**

- No update was available for March. Data will be presented at the next meeting.

5. Clinical Waste Incinerator (Mediwaste) Update

The Authority **TOOK NOTE:**

that Mediwaste is expecting to receive their occupancy certificate from the Department of Planning soon. Once it is issued, the Environmental Engineer will inspect the facility for compliance with the operating licence. If found satisfactory, the facility will be able to store clinical waste at the site ready for processing. It is understood that the Department of Health will oversee the opening of the containers and placement of the contents in the incinerator. It was reported that there are nineteen (19) full, sealed shipping containers located at the Airport Waste Management Facility and one partially filled container at the Sallyport Hazardous Waste Facility that is used to store clinical waste that is collected by Mediwaste on a day-to-day basis.

The Environmental Engineer confirmed that the Department of Environment & Natural Resources is preparing a competitive bid RFQ for an independent contractor to test the gaseous phase emissions during a 3-month study. This RFQ would address the reassurances made by Minister Roban to the Concerned Citizen's group with regards to independent testing being provided to verify the grounds under which the approvals were granted.

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

6.1 OL-1213 -1 – OL-1213-6 Meyer Agencies “Norwegian Sun”

The Authority **APPROVED:**

the operating licences for a generator, oily water separator, dry cleaning facility, two boilers and one waste water treatment plant on-board the “Norwegian Sun”, subject to standard conditions.

6.2 OL-1214 Aptech mobile sand sifter

The Authority **APPROVED:**

the operating licence for a mobile sand sifter, subject to standard condition and providing it is used on sites with relevant Department of Planning building permits.

6.3 OL-1214 Aptech mobile concrete block machine

The Authority **APPROVED:**

the operating licence for a mobile electric concrete block machine, subject to standard conditions, providing it is used on sites with relevant Department of Planning building permits, and providing it meets the Authority's noise requirements for nearest neighbours.

6.4 CP-793, OL-1215 HotelCo Bermuda Holding Ltd

The Authority **APPROVED:**

the operating licence for a 125 kW diesel generator for use at 1 Fort Albert Hill, St. George's, subject to standard conditions.

6.5 OL-1217, OL-1218 Meyer Agencies, C/S Decisive

The Authority **APPROVED:**

Two operating licence a diesel generator and a waste water treatment plant on board the C/S Decisive, subject to standard conditions. It was confirmed that no sewage effluent would be discharged into Bermuda's waters. Sanitation trucks are used to collect any waste effluent.

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

7.1 The Authority APPROVED:

the applications for reissue of operating licences listed on the two-page printout, subject to standard conditions, with the exception of OL-352 Elbow Beach WWTP. This was deferred pending submission of the annual report.

8. Well Diggers Licence—E & C Welldrilling

The Authority **APPROVED:**

the issuance of an annual well diggers licence to E & C well drilling for the 2023 calendar year, subject to standard conditions.

9. Applications for Water Rights (New)

9.1 The Authority APPROVED:

WR 5788 Laverne Philpott, domestic water right at 7 Granaway Heights Road, Southampton, for household supply via a reverse osmosis plant, subject to standard conditions. DENR will notify the Department of Health with respect to a subsequent licence that may be required for the water purification plant to be used to generate potable water.

9.2 The Authority APPROVED:

WR 5789 Hotelco, one domestic water right at 1 Fort Albert Hill, St. George's, for rainwater disposal, subject to standard conditions.

9.3 The Authority TOOK NOTE:

On 28 Feb 2023, **WR 5783 Dr. K. M. Snaith**, was granted a commercial water right at 20 Queen Street, St. George's for disposal of sewage effluent, subject to standard conditions and providing no sewer connection was feasible. It was reported that the Corporation of St George's stated that there was no sewer connection/sewer main within a reasonable distance. The required sealed depth of the borehole was 40 feet below sea level.

9.4 The Authority APPROVED:

the amendment in location of **WR 5780 Manuel DeSilva**, a commercial irrigation well. The location was clarified as being at the corner of Belmer Drive and South Road, Devonshire, and not at 6 Margarita Lane, Devonshire as originally reported (see minutes 28 February 2023).

10. Applications for Water Rights (Reissues)

10.1 The Authority APPROVED:

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

11. Date of the Next Meeting

The date of the next meeting was set for 8:30 am, Tuesday, 30 May 2023.



CHAIRMAN

30 May 2023

DATE