Minutes of a Meeting of the Environmental Authority Held on Wednesday 25 June 2025

At the Department of Environment and Natural Resources, Botanical Gardens, Paget and Remotely using Teams Teleconference

PRESENT: Ms. Davida Morris, Chair

Mr. Eugene Saunders, Deputy Chair

Mr. James Morrison, Member (remote access)

Dr. Tom Sleeter, Member

Mr. Jonathan Starling, Member (remote access)

ADVISORS: Ms. Patricia Hollis, Environmental Officer, DENR

Dr. Shaun Lavis, Hydrogeologist, DENR

Ms. Crystal Baxter, Environmental Health Officer

ABSENT: Mr. Andrew Barnes, Member

Ms. Debby Correia, Member

Dr. Geoff Smith, Director, DENR

Mr. Paul McDonald, Assistant Director, Dept. of Planning Mr. Tarik Christopher, Chief Engineer, Public Works Mr. Armell Thomas, Acting Chief EHO, Health

MPW&E REPRESENTATIVES:

Mr. Nasir Wade, TBWEF Plant Manager

Ms. Zoey Roberts, TBWEF Health, Safety & Environment Officer

1. Confirmation of Minutes

Minutes of the meeting No. 405 held on 20 May 2025 were approved and signed by the Chair.

2. MPW&E Presentation on the Tynes Bay Waste to Energy Facility Annual Report OL-004

Ms. Zoey Roberts, Tynes Bay Health, Safety and Environment Officer, gave an overview of 2024 operations of the Tynes Bay Waste to Energy Facility, Devonshire

It was reported that a total 50,951 tonnes of refuse were combusted in 2024. W & E domestic waste collection decreased from about 38% of the waste in 2020 to about 25% in 2024. Trade refuse increased over the same time period from about 39% to about 49%. The percentage of waste from the public drop-off refuse and public drop-off wood waste remain relatively constant at about 18% and 5% respectively.

By weight of waste, total refuse remained steady at about 45,000 tonnes per year over the last 5 years. Trade refuse increased steadily from about 18,000 tonnes to 23,000 tonnes. Wood waste, public drop-off wood waste and domestic waste weights remained unchanged since 2020.

- Weights of cooking oil received at TBWEF increased from about 380 tonnes in 2020 to about 520 tonnes in 2024. There is an initiative being tested by MPW & E to export cooking oil for reuse/recycling.
- About 816 tonnes of horticultural waste from the Marsh Folly Compost Facility were combusted; contrary to the conditions in the Tynes Bay WEF operating licence. Horticultural waste is listed as a restricted waste in the TBWEF Operating Licence
- The impact of the proposed introduction of the ban on single use plastics was discussed. There could be a reduction of about 30% of wastes and a significant loss of burning potential.

In 2024, TBWEF produced about 24,254 MWh of electricity, of which 17, 418 MWh (72%) was exported to BELCO. TBWEF supplies electricity for its own use and that of the Tynes Bay Reverse Osmosis Plant.

The processing of ash was discussed. It was reported that of the 5,558.4 tonnes of ash processed, 809 tonnes were metals (removed). 963 ash concrete blocks were produced, 834.8 tonnes of unconsolidated ash were disposed of at the Airport Waste Facility, and 959 tonnes of incinerator ash/concrete mix were poured as pancakes.

There was considerable discussion over the disposal of unconsolidated ash at the facility, a practice that is not authorized under the operating licence except in the case of emergencies. The unavailability of ash trucks and the lack of funding for overtime are not considered by the Authority to be "emergencies".

Also discussed was the apparent lack of compressive strength of the ash blocks produced. Average monthly compressive strength ranged from 0.85 N/mm² to 2.1 N/mm². This was in contrast to the average strength reported in 2009 of 14.11 N/mm², suggesting a deviation from the approved ash concrete mix. The reasons for the reduction in compressive strength were not known by Tynes Bay staff.

It was acknowledged that there are too few trucks to transport the cement/ash mix to the Airport Facility. Of the 4 in existence, generally 2 or 3 are out of operation due to maintenance issues. Another truck was ordered a year ago, and this is expected to be in Bermuda soon.

An annual average rise of 6°C in the sea water near the outfall was reportedly due to a buildup of sediment/organic matter within the pipes. Maintenance is scheduled to be undertaken on the pipes and the electro chlorination plant by the end of 2025.

Data on the potential and actual production days of the TBWEF were presented. The streams are taken out of service for planned maintenance and for unexpected failures (e.g. mattress springs obstructing works, aluminium melting around the grate, fires due to build up of cooking oil).

Mr. Wade described future options for the TBWEF. It has been decided to refurbish streams 1 and 2 in the next 3 years to extend the plant life for 15 years, and then install stream 3 before decommissioning one of the present streams. It is estimated to take 8 years to build a new stream.

The Authority was reminded that testing of the stack emissions was not possible during COVID, when personnel were not able to travel. Plans are being finalised for stack emissions to be tested in February 2026. Mr. Wade commented that the stack had recently been painted which improved the visual aspect, and the flues were recoated to prevent rust emissions.

The Authority **TOOK NOTE**.

Mr. Wade and Ms. Roberts were thanked for their presentation.

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

3.1 CP-837, OL-1286 Peter Parker, 5 Tranquility Lane, Southampton

It was noted that Dr. Tom Sleeter recused himself.

The Authority APPROVED:

the application for a construction permit and operating licence for a 22 kW propane generator, subject to standard conditions, noting that 3 near neighbours had given their consent, and the owner had acknowledged that if there are complaints, noise attenuating modifications will need to be undertaken.

3.2 CP-845, OL-1299 Robert & Barbara Lee, 21 Middle Road, Smith's

The Authority **APPROVED**:

the application for a construction permit and operating licence for a 26 kW propane generator, subject to standard conditions.

3.3 OL-1230-1 to OL-1230-5 Meyer Agencies "Carnival Sunshine"

The Authority **APPROVED**:

the application for operating licences 3 diesel gensets, one boiler, and one emergency genset onboard the "Carnival Sunshine", subject to standard conditions.

3.4 OL-1231-1 to OL-1231-10 Meyer Agencies "Norwegian Aqua"

The Authority **APPROVED**:

the application for operating licences 5 diesel gensets, one boiler,, one oily water separator, one waste water treatment facility, one starting compressor, and one dry cleaning machine, onboard the "Norwegian Aqua", subject to standard conditions.

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

4.1 The Authority **APPROVED**:

the applications for reissue of operating licences listed on the three-page printout, subject to standard conditions, with the exception of OL-1075 Bermuda Skyport WWTP which was deferred pending submission of the annual report. Those approved include OL-358 Belmont Harbour Road WWTP and OL-992 Greybar Holdings, 12 Bakery Lane WWTP.

5. Applications for Import Permit

5.1 The Authority **TOOK NOTE:**

Of the issuance of an import permit C-204 to Reeces' Refrigeration for the import of 6 cylinders each with 25 lbs R507 and 4 cylinders each with 25 lbs R407a, subject to standard conditions.

6. Applications for Water Rights (New)

The Authority APPROVED:

6.1 WR 5788 submitted by Philpott for a domestic abstraction well at 7 Granaway Heights Road, Southampton, subject to standard conditions.

6.2 WR 5830 submitted by Meyer Properties for a commercial supply well for power washing boat hulls. DENR visited the site ensure location was away from the coastline and within the boat yard. Approval is subject to standard conditions.

7. Applications for Well Diggers Licence

7.1 The Authority APPROVED:

The application submitted by E & C Well Drilling Services for an annual well diggers licence, subject to standard conditions.

8. Applications for Water Rights (Reissues)

8.1 The Authority **APPROVED**:

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

9. Date of the Next Meeting

The next meeting was scheduled for Thursday, 26 June 2025.

CHAIRMAN

DATE DATE