

CONFIDENTIAL



Water Authority of the Cayman Islands

Minutes of 302<sup>nd</sup> Meeting held on 18<sup>th</sup> September 2019

**Members Present:**

Chairman:	Mr K Gomez
Members:	Mr H B Ebanks Mr J Gill Ms A Owens Mr M Rankine Mr C Randall Mr W Welcome
Secretary:	Dr G Frederick-van Genderen
Apologies:	Mrs L Ryan Mr A Wright

**Call to Order**

The Chairman welcomed members to the meeting and after ascertaining that there was a quorum, the meeting was declared open and called to order at 1:49pm. The Chairman noted apologies for Mrs L Ryan and Mr A Wright. The Chairman then asked Mr H B Ebanks to open the meeting with prayer.

**Confirmation of Minutes of the 301<sup>st</sup> Meeting held on 14<sup>th</sup> August 2019**

The Chairman asked for confirmation of the Minutes of the 301<sup>st</sup> Meeting held on 14<sup>th</sup> August 2019. Mr J Gill moved the motion to accept the Minutes as amended, Mr C Randall seconded the motion and the motion passed unanimously by members able to vote.

**Declaration of Conflicts of Interest**

None were declared.

## Matters Arising

### a) Lower Valley Reverse Osmosis Plant (LVRO) - Update.

The Chairman reported that during the month of August 2019, running one RO train only, the plant produced on average 1,070 cubic metres per day, which is approximately 36% of its total design water production capacity. A few days of water production was lost as the plant was shut down to clean the membranes, and to change-out the pre-filters.

The Chairman noted that August 2019 was a challenging month for the water production at the Lower Valley Water Works as the LVRO plant had to be shut down more than usual to facilitate membrane cleaning, membrane replacement (from the inactive train to the active train), and short-term acid soak. An order has been placed for new RO membranes, to replace the first element in each pressure vessel on the active train (each one holds seven) in order to improve overall product water conductivity and reduce membranes differential pressure. These are the original membranes that were installed in late 2014 as part of the Design-Build contract. Typically, the life expectancy of RO membranes is around 5 years, so this is only slightly less than typical. It must be noted that the LVRO plant was down for several months in 2016 due to the modification of the feed water pipework. Additionally, the feed water quality has not been optimal, resulting in frequent down time and rapid membrane fouling. Membranes perform better if they are running continuously. Preservation of membranes during plant downtime is possible, but will still result in some degradation (although much less if the membranes are not preserved). The Authority's Water Production Division has carried out some membrane cleaning and short-term acid soak, which improves performance but does affect life expectancy. However, full membrane replacement (on both trains) will be done after the wells have been rehabilitated and the new feed water well pumps have been installed. Additionally, water production was lost for approximately 9 hours due to 7 power outages.

The Chairman advised that although the required acid had not yet arrived on island, the rehabilitation/acidification works on the feed water wells is tentatively scheduled to start around mid-October 2019. It is expected that the acid will be here by then.

### b) Cayman Brac Infrastructure Upgrade & Expansion Project - Update.

The Chairman reported that last week the 200mm (8-inch) HDPE pipe was fused and installed along the edge of Cross Road in anticipation of it being used as temporary main during the upgrade of the 150mm (6-inch) pipeline, to 200mm (8-inch). Work was completed except for the connection at the intersection with West End Road West (near CNB). Due to the annual leave of the New Works

superintendent, this work will not be completed until the first week of October 2019, after which the upgrade to 200mm (8-inch) will commence.

The Chairman reported that work was carried out on the upgrade of the suction pipework at West End Water Works, from 80mm (3-inch) to 150mm (6-inch). This new pipeline has been installed, pressure tested and disinfected, and was connected in the early morning hours of 17 September 2019.

The Secretary advised members that the Authority will need to relay some pipes in the Faith Hospital access road due to construction at the Faith Hospital being too close to the water mains. Relocation of the water mains will be paid by the HSA.

Redacted under section 21 (1)(b) of the Freedom of Information Law (2018 Revision)



**c) 31 December 2018 Audit of Consolidated & Divisional Statements - Update**

*31 December 2017 Audit – Consolidated, Divisional and Island Financial Statements for Water, Wastewater and Statutory*

The Secretary reported that the draft 2017 Island Financial Statements were provided to KPMG for their review. It is expected that the 2017 Island Statements will be available at the October meeting.

*Annual Report 2018*

The Secretary reported that the 2018 Annual Report will be completed soon after the audit has been signed off by the Office of the Auditor General.

*31 December 2018 Audit – Consolidated, Divisional and Island Financial Statements for Water, Wastewater and Statutory*

The Secretary reported that the Financial Controller met with Grant Thornton (GT) on 20 August 2019 to discuss the updated proposed calculation. After the meeting GT sent over the updated calculation which was forwarded to KPMG for their review on 21 August 2019. KPMG came back with a suggested revision to the calculation and also a sample set. The Authority provided all the samples on 06 September 2019 and is working to clear up any last items. The Board was provided with draft copies of these statements and provided that there are no material changes the Board was respectfully asked to approve the statements and authorise the Chairman, Director and Financial Controller to sign.

Members present and able to vote agreed to approve the statements and authorise the Chairman, Director and Financial Controller to sign.

Redacted under section 16 (b)(i) and 21 (1)(b) of The Freedom of Information Law (2018 Revision)

*Employee Health Insurance Renewal*

The Secretary advised that Marsh, the Authority's broker, was provided with the information from CINICO and will be in contact with CINICO to provide them with the information required to provide a quote on the SAGCs' plan. Marsh will provide the Authority with a comparative analysis with what is currently in place.

Redacted under section 21 (1)(b) of The Freedom of Information Law (2018 Revision)

*American Express Payment options*

The Secretary reported that the Authority (via the Finance Department) received an email on 22 August 2019 introducing American Express (AE) as a payment option on the island. It is common knowledge that the American Express card is a widely accepted card internationally however the exposure in Cayman has been limited, prompting AE and Bank of Butterfield (BOB) to partner up and present this new initiative. The Financial Controller met with Rafael Furntes-

Fernandez the Business Development Executive visiting Cayman together with Rene Lopez from BOB on 27 August 2019. Although the discussion was short it was apparent that the relationship with offering another payment option and it being introduced into our forum appeared seamless.

The Financial Controller discussed this payment option with the Customer Service Manager on 28 August 2019 and it was mutually decided that it is always a good business decision to increase the payment methods available to customers. If the Board is in agreement then the Authority will reach out to FAC (First Atlantic Commerce) to ensure compatibility with the online portal and work with BOB to upgrade the terminals at the main office. Members present and able to vote had no objection to the Authority adding the option for customers to pay via American Express.

d)

Redacted under section 21 (1)(b) of The Freedom of Information Law (2018 Revision)



Redacted under section 21 (1)(b) of The Freedom of Information Law (2018 Revision)



e) **Miscellaneous Updates.**

- a) *In-House Pipelaying Crews* - The Chairman reported that on 29 July 2019 the crew mobilised to start work at the pipeline extension along High Rock Drive to the proposed mental health facility. Unfortunately, some trencher issues occurred again and after some investigations it was determined that these issues were caused by a faulty computer (not surprising after more than 12 years of operation), which has now been ordered and is expected to arrive later during

the week of 16 September 2019. By 06 September 2019, a total of 350 metres (1,150 feet) of 300mm (12-inch) diameter PVC pipe had been installed, or almost 15% of the total project length of approximately 2,380 metres (7,800 ft).

- b) **Water Supply Division** - The Chairman reported that Operations has made good progress with the upgrade of the pipeline in Butterfly Circle, off Hirst Road. This project comprises the replacement of just over 900 metres (3,000 feet) of 80mm (3-inch) nominal diameter pipe with 150mm (6-inch) and 100mm (4-inch) nominal diameter pipe. To date approximately 640 metres (2100 ft) of new pipeline has been installed. It is anticipated that, barring unforeseen circumstances that could cause delays, the project should be completed by the end of October 2019.

The project to replace/upgrade the existing pipeline along Palm Dale Avenue and Success Circle (off Crewe Road) will commence after the Butterfly Circle project has been completed.

On 25 August 2019, another DMA (District Meter Area) meter was installed at the intersection of Agricola Road and Shamrock Road. There is now a total of four DMA water meters installed, creating four distinct zones, where the net inflow can be compared against water sales and thus potential problem areas isolated and identified. This information is essential to reduce the amount of "lost" (or Non-Revenue) water.

Unfortunately, there have been some telecommunication issues with the SIM cards provided by the equipment provider. The equipment provider is also trying to find a solution. Trial of test SIM cards provided by Digicel started on 16 September 2019.

- c) **North Side Water Works** - The Chairman noted that as reported previously, approximately 2.5 acres at the North Side Water Works were cleared in early March 2019 in anticipation of the construction of two additional water storage tanks.

By the deadline (noon on 09 August 2019) for tender submission (for earthworks to prepare the site to the final elevation), only three tenders had been received, and all three were considered responsive, and capable of carrying out the works required.

Redacted under section 21 (1)(b) of the Freedom of Information Law (2018 Revision)

KP Heavy Equipment Ltd commenced work on 29 August 2019, and it is anticipated that this contract will be completed by the end of October 2019.

The tender documents for the two new water storage tanks at North Side Water Works are almost complete. There is adequate space for only three, not four, additional tanks for a total of five. In order to maximise the water storage volume at this site, the specification has been modified to increase the maximum tank diameter to 150 feet (was 125 feet) and the maximum tank height to 27 feet (was 23 feet). This will accommodate a tank with a storage capacity of no less than 3.0 million US gallons (11,355 cubic metres) each, or 50% more per tank (currently 2.0 million US gallons (7,570 cubic metres)).

- d) **Wastewater Division** – The Chairman reported that during the month of August 2019, the design hydraulic capacity of the wastewater treatment plant (2.5 mgd) was exceeded on 8 days. The average daily wastewater inflow from West Bay Road during that period was 2.30 mgd (or approximately 92% of design capacity). This amount was 14.5% less than the average influent measurement during the same period the previous year (2.69 mgd).

With the trencher temporarily out of commission, the New Works Crew excavated for and installed new electrical conduits at the Wastewater Treatment Plant, between the Control Building and the SBR Cluster. The existing conduits, installed in 2003, are prone to becoming submerged with groundwater, causing frequent electrical issues. A decision was made to install new conduits at a higher elevation, much higher above groundwater elevation (and electrical wires with better insulation specification). This work is expected to be completed by the end of September 2019.

- e) **Joint H<sub>2</sub>S monitoring programme** - The Chairman reported that Water Authority representatives met with Dart on 02 September 2019 to discuss the joint H<sub>2</sub>S monitoring programme that will ascertain the source(s) of and relative air quality impacts in the area around the wastewater plant, the landfill and Cayman International School (CIS). It was agreed that each party would provide their protocol for their respective H<sub>2</sub>S analysers. Prior to the meeting (on 26 August 2019), the Authority forwarded the results of the H<sub>2</sub>S monitoring carried out by the Water Authority to date.

On 05 September 2019 a trial run was carried out which confirmed that both parties' analysers provided comparable results. On 13 September 2019 the Water Authority forwarded the SOP for the Jerome J606 H<sub>2</sub>S analyser. A further meeting will be held soon to determine the sample point locations, the frequency of the sampling, and the duration of the joint monitoring programme.

- f) **FOI updates** – The Chairman reported that no new FOI questions were received since the August 2019 Board meeting as shown in the FOI Report provided to members.

- g) **Request for Bill Adjustment and Reimbursement re Customer Account#** [REDACTED]

[REDACTED] – The Chairman reported that the customer was advised of the Board's decision in August 2019 but decided to refer her complaint back to OfReg. The Authority awaits request for information from OfReg as well as clarification regarding what guidelines OfReg is using to consider this complaint. Regarding the Consultation for the Complaints Process to which the Authority provided feedback on 15 June 2018, to date the Authority has not received any response or heard what the outcome of that consultation was.

- h) **Hurricane Ivan 15 Year Anniversary** – The Chairman reported that the Authority commemorated the 15<sup>th</sup> anniversary of Hurricane Ivan by hosting a customer/staff event on 11 September 2019. Members of the public that came out were provided with the opportunity to reflect on the lessons learnt and focus on efforts that have been and will be made to strengthen the Authority's infrastructure and build resiliency.

\*Redacted under section 23 of The Freedom of Information Law (2018 Revision)



- i) **Laboratory Audit** - The Chairman reported that the Water Authority Laboratory received its accreditation from the American Association for Laboratory Accreditation (A2LA) in 2002. In order to maintain the accreditation, the Laboratory is audited by the A2LA every 2 years. The A2LA audit was conducted 10-12 September 2019. The audit comprises of a rigorous review of the Laboratory's testing procedures, quality control, quality assurance, records, risk management and staffing competency. The Laboratory is accredited in accordance with the ISO standard 17025: 2017 "*General Requirements for the Competence of Testing and Calibration Laboratories*". As a result of the extensive revision of the 2005 ISO standard to the current 2017 standard, the Laboratory had a significant amount of preparations to ensure compliance with the 2017 standard. The auditor found a few deficiencies which were not substantial in nature, the corrective actions that the Laboratory has to implement to maintain the accreditation will not be onerous.
- j) **Improper disposal of hydrocarbons impacting the piped water supply of several Water Authority customers** - The Chairman reported that during the week of 02 September 2019 the Water Authority received a customer complaint about water from the piped water supply system having a bad smell. The customer was located in a new subdivision, they had moved into their new house about a year ago.

The standard practice for water quality complaints is that the Laboratory follows up with testing and for Operations to take corrective action if necessary. In this case it took substantial time and resources from the Laboratory and Operations to find the root cause of the complaint and to resolve the issue. It turned out that petroleum hydrocarbons were present in two catchment basins of the stormwater drains in front of the residence. The drainage basins are not water tight and over time the contamination had leaked out into the groundwater and affected the nearby service line of the residence. The water supply of 6 customers was impacted and they were advised not to use the water for potable purposes until the situation was resolved. The Water Authority cleaned out the drainage basins, excavated the impacted soil and removed contaminated groundwater in the area, the contaminated material was disposed at the Wastewater Treatment plant for treatment and disposal. In addition, the service pipes from the water main in the road to the 6 meter boxes were replaced with pipe that is resistant to fuel contamination. Upon completion the 6 customers were advised that they can use the water again.

It is assumed that this incident was caused by improper disposal of waste oil or fuel into the stormwater catchment basin. Unfortunately, the Water Authority was not able to determine who caused this, so there is no way to deal with the responsible party. As a follow up the Authority will use this incident to educate the public that fuel, waste oils and any other hydrocarbons should be disposed properly through the collection programme of Department of Environmental Health and not into stormwater drains or into the environment as such practice is a threat to public health and the environment.

- k) **Emergency Radios** - The Chairman reported that the Authority has 42 radios of which 6 are required for the Utilities-EST which is chaired by the Water

Authority. This EST (Emergency Support Team) is part of HMCI's national disaster preparedness management. The remaining radios are for Water Authority staff in the event of a national disaster. The radios operate on the Government's Motorola Radio system. The Water Authority is being charged \$55 per radio per month for a total of \$2,310 per month or \$27,720 per year. The Secretary reports that the Authority only received the Service Level Agreement on 30 August 2019 and it is likely for this year the Authority may be obligated to pay for most of the year. However, the Secretary has responded to the Department of Public Safety Communications and requested that as of 01 December 2019, 36 identified radios be deactivated until requested to be activated by the Water Authority on 01 June 2020 for the hurricane season (i.e. until 01 December 2020).

### Current Business

#### a) **Management Accounts July 2019.**

Members were provided with copies of the 31 July 2019 Management Accounts. As noted above members are aware that the closing numbers for 2018 have yet to be finalised however the Financial Controller does not expect that there will be any material changes once the 31 December 2018 statements are finalised.

The Authority continues to generate stable revenues and with prudent expense management the net income continues to grow and the financial statements for the 7-months ending 31 July 2019 show no surprises. Operating revenue continues to increase from prior year, showing a modest increase of 6.5% over last year, trucked water in the Brac continues to show lower sales than last year (decreased of 15.7%), which is reasonable as sales move to the distribution system, with city water increasing by 27.1% and 63.8% for Residential and Public Authority respectively.

Given the increase in operating revenue it is reasonable that the water production and purchases also increased, with operating expenses coming in at 2.7% above last year with the majority of the increase due to increase in utilities and depreciation expense.

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The Financial Controller is pleased to advise that the Authority is officially debt free, paying the last of the loan commitments to Ocean Conversion Ltd in June 2019. Only 11 years ago, as at 30 June 2008 the Authority had nine financial commitments (CIG, OCL and FCIB) with a value of [REDACTED]. Over the course of the last decade the Authority has paid off all commitments, adhered to the CIG's moratorium on new borrowings and has managed to accumulate over [REDACTED]. Members recognised this achievement and congratulated the Authority's management.

Administrative expenses are slightly higher than in 2018 by 8.4%, which is within expectation, as new staff are being hired, compensation packages adjusted earlier this year and increased health insurance. Information technology costs increased as the Authority purchased new switches from Caribbean Solutions Lab for the Administration building.

In summary, the Authority continues to show strong sales and has maintained a stable net income in the first 7-months of the 2019 financial period.

Mr W Welcome left the meeting at this point.

### **Any Other Business**

- a) Redacted under section 23 of The Freedom of Information Law (2018 Revision)
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Redacted under section 23 of The Freedom of Information Law (2018 Revision)



b) **SIWI World Water Week 2019.**

The Secretary reports that she was pleased to attend and participate in the World Water Week (WWW) 25-30 August 2019 in Stockholm, Sweden. This is an annual conference held in the same city since 1991. It is organised by the Stockholm International Water Institute (SIWI). SIWI's focus is on a range of research and development topics within and around water that support decision-makers around the world. During WWW the Stockholm Water Prize and the Stockholm Junior Water Prize are awarded. The theme this year was: *"Water for Society: Including all"*.

The conference took place at the Tele2Arena, a large multipurpose facility. Attendance is in the range of 4000 persons, the centre of the conference hall is the exhibit area which is surrounded by the meeting rooms where the sessions take place. There are about 10 parallel sessions for each timeslot, so attendees have to decide which session to join. The sessions do not follow the traditional conference format of delivery of a lecture followed by Q&A. The sessions are interactive with a panel and Q&A throughout the presentations. The Secretary attended some presentations that were followed by dividing the audience in discussion groups who report back to the general discussion afterwards. The conference relies heavily on technology. For instance, the sessions are "silent": attendees wear a headphone to listen to speakers so that the noise from one session does not interfere with another. Additionally, during some of the sessions attended, audience interaction was by using smart phones.

Overall the conference was targeted to the problems and solutions in the water sector for developing or lesser developed countries. There were many common global themes that are relevant to the water and sanitation sector in the Cayman Islands, examples are emerging pollutants, resource protection, safety protection and education for sanitation workers, education in the water and sanitation sector and governance and integration of the water and sanitation sector in the

overall development sector. The exposure during the week was very good, as it was an opportunity to reflect on the role and future of the Water Authority in the Cayman Islands. Below are a few points to note:

*2021 Caribbean Water and Wastewater Association Conference*

The Cayman Islands will host the 2021 CWWA conference. Traditionally this conference has the format of 20-minute presentations followed by a 5-minute Q&A session. Whereas this format works well for sharing knowledge, scientific and technical information, it is less effective for sharing and discussing the more thematic issues such as governance, climate change and the future of the water and sanitation sector. It is worthwhile to consider a similar format for some presentations as at WWW.

*Stockholm Junior Water Prize*

The Stockholm Junior Water Prize competition brings together students from 35 countries. National winners gather in Stockholm to compete for the international title. The students showcased their projects during the conference. It may be an option to consider a Junior Water Prize for the 2021 CWWA Conference.

*Field trip to Lake Erken*

The Secretary had the opportunity to join the field trip to the Lake Erken Research Laboratory. This facility was established in 1944 and the long-term research and monitoring of the lake has generated a wealth of data. The tour included a boat on the lake to see the instrumentation used to collect data, a presentation on the predictive model on lake water quality, and a presentation on putting a value on the use of the monitoring data.

Altogether it was a worthwhile conference which showed that the issues being dealt with in the water and wastewater sector in the Cayman Islands are very similar in other countries. Also, the conference highlighted the importance of getting young people involved in the water and sanitation sector, so that they are well educated and prepared to continue to develop the Water Authority.

The Secretary thanked the Board for their support.

**c) CWWA 2019 Conference & October 2019 Board Meeting.**

The Secretary advised that she expects she will be requested to accompany the Honourable Minister responsible for the Water Authority at the regional High Level Forum for Water Ministers that is taking place in conjunction with the Caribbean Water & Wastewater Association's 2019 Conference in St Kitts, 14-15 October 2019. Additionally, as the Water Authority will be hosting the 2021 CWWA Conference in the Cayman Islands it is important for the Authority to have representation at the Annual General Meeting on 16 October 2019. The Secretary respectfully requested the agreement of members to reschedule the next Water Authority Board meeting to 09 October 2019. The Secretary noted

that this would be the annual Cayman Brac meeting. Members all agreed to reschedule the next Water Authority Board meeting to 09 October 2019.

### Donation Requests

The Secretary advised that the Sponsorship Assessment Sub-committee will meet after the Board meeting to deal with the following requests for assistance:

1. *Ratify* - DG 5K Challenge Cayman Brac.
2. *Ratify* - Ministry of CPI - to assist RPCU.
3. The Cayman Islands Power Lifting Organization - Cayman Strongman.
4. Chamber of Commerce - Golden Apple Awards.
5. Cayman National Cultural Foundation - Rundown.
6. Lions Club of Tropical Gardens - 22nd Annual Breast Cancer Awareness.
7. Cayman Islands Red Cross - Donation for Bahamas Hurricane Relief.

There being no other business the Chairman thanked members and the meeting was adjourned at 3:35pm.

This is a true and accurate account of the proceedings.

  
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The Chairman  
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The Secretary