1. Introduction

1.1. The Department of Environmental Health (DEH) exceeded its 2016/17 (18 month) overtime (OT) budget of $0.25m by 796% with a total expenditure of $2.24m.

1.2. In November 2017, the Chief Officer of the Ministry of Health, Environment, Culture and Housing (CO HECH) requested that the Internal Audit Service (IAS) review OT expenditure at DEH. At that time it was agreed that the work would be undertaken in two phases: *Phase 1* considered how overspend of such magnitude was able to occur, exploring the adequacy of budget monitoring, reporting and subsequent management actions. A report was issued in February 2018. *Phase 2* then went on to consider what factors contributed to the OT and the extent to which DEH could have controlled them to reduce or eliminate overspend. A report was issued in July 2018.

1.3. *Phase 2* findings were such that an additional *Phase 3* was initiated in late July to consider who worked the OT and identify any anomalies to question its legitimacy. The primary objectives were:

- To identify any data anomalies in the OT hours claimed by individual DEH personnel; and
- To determine whether any such anomalies suggest intentional abuse.

1.4. This report should be read in conjunction with the previously issued *Phase 1* and *Phase 2* reports.

2. Audit Scope / Limitations on Work Undertaken

2.1. The audit scope was restricted primarily to data-analytics procedures on OT records from DEH’s Time-Force System (TFS). TFS is used by the vast majority of operational personnel at DEH including those from Solid Waste Collections and the Landfill which are the two business units responsible for the vast majority of the OT spend.

2.2. In consideration of the potential for a formal fraud investigation, the audit scope was restricted from including interviews with any individuals who were found to have dubious OT records. General operational and procedural questions were still posed to senior and mid-level management to help inform and progress the necessary work.
3. **Audit Methodology**

3.1. The IAS undertook the following steps during this review:

- Obtained and performed data-analytics on TFS data for both regular and OT hours by employee from 2013 through to 2017;
- Obtained legal opinion on the general application of OT framework established within Personnel Regulations; and
- Obtained and analysed data on fuel use and the tonnage of waste collected and processed.

4. **Audit Conclusion**

4.1. Based on the work undertaken and the evidence reviewed, the IAS concludes, for Phase 3 of this review:

> “Our review identified multiple employees from the Department of Environmental Health with implausible 2016/17 overtime records, indicative of widespread abuse and substantial mismanagement within the Solid Waste Collections, Landfill, Recycling and Fleet operations.

We believe the exploitation of a cultural practice, whereby overtime is routinely accrued before the completion of regular contracted hours, intensified in 2016/17. Inadequate management information renders it impossible to quantify, but a significant number of paid overtime hours could have been regular work hours for which no additional expenditure should have been made.”

4.2. Recommendations from the *Phase 2* report covered the management information concerns expressed in the conclusion above. An additional recommendation relevant to the above conclusion has been made as part of this *Phase 3* report which has been classified as high priority and accepted by Management at the Ministry HECH.

4.3. For convenience the conclusions from *Phase 1* and *Phase 2* of the review are also restated here.

4.4. *Phase 1* concluded, based on the work undertaken and the evidence reviewed, that:

> “The overtime overspend was the result of multiple failures and missed opportunities to report the issue across numerous roles and responsibilities within both the Department and the Ministry. (....Continues on next page)
Ultimately, the Director of DEH had the responsibility of managing the approved budget, avoiding cost overruns and escalating concerns to the Ministry, all of which he substantially failed to do. At the Ministry level, the CO should have been agreeing and authorizing overtime for the Department and the CFO and DCFO should have been monitoring expenditure, budget variances and forecasts, and escalating concerns to the CO to ensure the Department was operating within the parameters of its approved budget; however, these responsibilities were not carried out as intended.”

4.5. **Phase 2** concluded, based on the work undertaken and the evidence reviewed, as it relates to operations at Solid Waste Collections unit:

“Although able to corroborate management data identifying vehicle downtime and staff absenteeism as major factors contributing to overtime expenditure at Solid Waste Collections, we did not find sufficient evidence to substantiate the extent of the 2016/17 increases in these and other recorded factors including ‘special projects’ and ‘heavy workloads’.

With inadequate management information, malfunctioning internal controls and conflicting evidence, we believe there is a high probability that intentional abuse of the system was another significant factor behind the increased expenditure.

We believe a number of options were available to DEH management that could have been deployed to effectively contain the overtime overspend.”

4.6. In addition to our overall conclusions above which were all made to inform Management action, we have made a total of 11 recommendations across the 3 phases of the work undertaken. All recommendations have been made with the intent to protect or enhance the internal control environment, and have been accepted by Management at DEH or Ministry HECH.

Andy Bonner
Director, Internal Audit Service
Recommendation | Management Responses
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**HIGH PRIORITY RECOMMENDATIONS**

Recommendation 1  
*<Redacted under Freedom of Information Law Section 20 (1) (d)>*

| Recommendation Accepted? | YES |
| Recommendation Owner: | *Chief Officer (HECH)* |
| Target implementation date: | *September 2018* |
"The Internal Audit Service exists to enhance and protect the organizational value of the Cayman Islands Government by providing risk-based and objective assurance, advice and insight"