



## INTERNAL AUDIT DIVISION

### REPORT 2016/013

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Audit of the Department of Field Support's guidance and oversight of wastewater management in peacekeeping operations

Overall results relating to the effective guidance and oversight of wastewater management by the Department of Field Support in peacekeeping operations were initially assessed as partially satisfactory. Implementation of four important recommendations remains in progress

FINAL OVERALL RATING: PARTIALLY SATISFACTORY

9 March 2016  
Assignment No. AP2015/615/05

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# AUDIT REPORT

## Audit of the Department of Field Support's guidance and oversight of wastewater management in peacekeeping operations

### I. BACKGROUND

1. The Office of Internal Oversight Services (OIOS) conducted an audit of the Department of Field Support's (DFS) guidance and oversight of wastewater management in peacekeeping operations.
2. In accordance with its mandate, OIOS provides assurance and advice on the adequacy and effectiveness of the United Nations internal control system, the primary objectives of which are to ensure: (a) efficient and effective operations; (b) accurate financial and operational reporting; (c) safeguarding of assets; and (d) compliance with mandates, regulations and rules.
3. The introduction of troops and support infrastructure associated with United Nations field operations considerably affects the local environment. If left unmanaged, waste from field operations can cause environmental pollution and resource degradation, ultimately affecting the health and the economic well-being of local communities. Ineffective waste management also increases the cost of mission operations, affects mission efficiency, sustainability and effectiveness and can damage the reputation of the United Nations. As at October 2015, 124,000 personnel were serving in 16 peacekeeping operations across several hundred locations.
4. The Secretary-General highlighted waste management as a major challenge for peacekeeping missions, and the Department of Peacekeeping Operations (DPKO) and DFS have committed to improve the environmental performance of peacekeeping operations and minimize their environmental impact. By virtue of its importance, the improvement of the management of the environmental impacts of peacekeeping operations, including wastewater management, has been included as one of the key performance objectives in the Senior Manager's Compact of the Under-Secretary-General for Field Support.
5. Responsibilities for wastewater management within peacekeeping operations are assigned to staff at both Headquarters and in the field. DFS is responsible for providing guidance on and oversight of wastewater management practices, with the majority of responsibilities assigned to a Water and Sanitation Engineer within the Engineering Section, with support from a Water and Sanitation Engineer at the United Nations Global Service Centre (UNGSC) in Brindisi, Italy and a DFS Environmental Officer based in the Office of the Director, Logistics Support Division.
6. Comments provided by DFS are incorporated in italics.

### II. OBJECTIVE AND SCOPE

7. The audit was conducted to assess the adequacy and effectiveness of DFS governance, risk management and control processes in providing reasonable assurance regarding the **effective guidance and oversight of wastewater management by DFS in peacekeeping operations**.
8. The audit was included in the 2015 risk-based work plan of OIOS because of the operational and reputational risks related to lack of guidance provided to field missions and inadequate oversight of their management of wastewater.

9. The key control tested for the audit was regulatory framework. For the purpose of this audit, OIOS defined this control as one that provides reasonable assurance that policies and procedures: (a) exist at DFS to guide the oversight of wastewater management in United Nations field operations; (b) are implemented consistently; and (c) ensure the reliability and integrity of operational information.

10. The key control was assessed for the control objectives shown in Table 1.

11. OIOS conducted this audit from September to November 2015. The audit covered the period from 1 January 2014 to 30 November 2015 and examined the governance and oversight arrangements by DFS, as well as guidance and tools provided by DFS over wastewater management in peacekeeping operations.

12. OIOS conducted an activity-level risk assessment to identify and assess specific risk exposures, and to confirm the relevance of the selected key controls in mitigating associated risks. Through interviews and analytical reviews, OIOS assessed the existence and adequacy of internal controls and conducted necessary tests to determine their effectiveness.

### III. AUDIT RESULTS

13. The DFS governance, risk management and control processes examined were initially assessed as **partially satisfactory**<sup>1</sup> in providing reasonable assurance regarding the **effective guidance and oversight of wastewater management by DFS in peacekeeping operations**. OIOS made four recommendations to address issues identified. DFS devoted significant attention to improving the management of wastewater in missions, including issuing a new policy on waste management, implementing regular reporting by missions of wastewater status, and securing additional resources for an Environmental Affairs Officer and a Water and Sanitation Engineer at UNGSC.

14. To improve operations, DFS needed to assign adequate resources to: (a) finalize and promulgate its Environmental Policy and Draft Environmental Guidelines; (b) implement the Waste Management Policy and develop detailed guidelines on minimum standards and practical requirements for wastewater management; and (c) finalize the baseline wastewater survey and implement enhanced mechanisms for the regular and systematic collection, monitoring and reporting of data on waste management activities of peacekeeping operations. DFS also needed to define and document the respective responsibilities and organizational structure for environmental, waste and wastewater management strategy, support, monitoring and oversight at DFS and UNGSC.

15. The initial overall rating was based on the assessment of the key control presented in Table 1. The final overall rating is **partially satisfactory** as implementation of four important recommendations remains in progress.

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<sup>1</sup> A rating of “**partially satisfactory**” means that important (but not critical or pervasive) deficiencies exist in governance, risk management or control processes, such that reasonable assurance may be at risk regarding the achievement of control and/or business objectives under review.

**Table 1: Assessment of key control**

Business objective	Key control	Control objectives			
		Efficient and effective operations	Accurate financial and operational reporting	Safeguarding of assets	Compliance with mandates, regulations and rules
Effective guidance and oversight by DFS of wastewater management in peacekeeping operations	Regulatory framework	Partially satisfactory	Partially satisfactory	Partially satisfactory	Partially satisfactory
<b>FINAL OVERALL RATING: PARTIALLY SATISFACTORY</b>					

## Regulatory framework

Further guidance and training to missions on requirements for wastewater management was needed

16. The DPKO/DFS Environmental Policy, issued in 2009, provides the overall framework for the management of environmental issues, including wastewater management by peacekeeping operations. DFS is required to issue Environmental Guidelines to support the policy and to provide details on implementation of environmental practices, including training. In September 2015, DFS issued a Waste Management Policy that provides further instructions on waste management requirements in missions, including on wastewater.

17. A review of current policies and guidelines indicated that although they provided a broad overview of wastewater management requirements, there was insufficient detailed guidance and instructions to missions. For example:

- The Environmental Policy does not provide specific details such as minimum staffing ratios, technical standards, or performance benchmarks to assist field staff in implementing the requirement to assess and address their needs with respect to waste management staffing, infrastructure, and monitoring and reporting; and
- The Waste Management Policy referred missions to the requirements outlined in the Environmental Policy and the Environmental Guidelines but these documents did not provide sufficient guidance on all matters contained in the Waste Management Policy, such as the wastewater norms and standards referenced in the policy, including those on testing the quality of treated wastewater.

18. In addition, the Environmental Guidelines, developed in 2010, remain in draft form and have yet to be formally issued. At the time of the audit, DFS was conducting a baseline survey of mission wastewater practices to help inform the development of additional standards and guidance to missions, and a review of the Environmental Policy and Guidelines was also in progress. However, the slow pace of development of detailed guidance and instructions, due to the limited staff resources dedicated to the task, including an extended vacancy in the post of the DFS Environmental Officer, led to inconsistencies and sometimes significant deficiencies across missions' wastewater management practices. This was evidenced by DFS field monitoring visits.

**(1) DFS should assign adequate resources to: (a) update and promulgate its Environmental Policy; (b) finalize and promulgate its Draft Environmental Guidelines; and (c) implement the Waste Management Policy, including the further development and implementation of detailed guidelines on minimum standards and practical requirements for wastewater management, as well as support for ongoing instruction and training to missions on these requirements.**

*DFS accepted recommendation 1 and stated that it would issue a revised Environmental Policy and finalize the associated Environmental Guidelines as soon as possible in 2016. DFS would monitor the implementation of the Waste Management Policy, noting that the provision of guidelines to missions was required and that such guidelines would be issued depending on available resources. Recommendation 1 remains open pending receipt of evidence relating to the issuance of, and plans to support training on, the Environmental and Waste Management Policies and the associated Environmental Guidelines.*

Roles and responsibilities for DFS oversight of wastewater management needed to be clarified

19. The DPKO/DFS Environmental Policy outlines the responsibilities for environmental and waste management in the field, with the Waste Management Policy providing further details on specific responsibilities for waste management, including wastewater.

20. In DFS, primary functions related to wastewater management were performed by a Water and Sanitation Engineer, with support from the DFS Environmental Officer. During 2014; however, the DFS Environmental Officer (a P-3 level post) was vacant for 10 months, and only filled temporarily in October 2014. The recruitment at DFS of an Environmental Affairs Officer, with responsibility for environment and waste management, was also being finalized.

21. A review of policies, procedures and job descriptions, and interviews with relevant staff indicated that the delineation of responsibilities, particularly between DFS and UNGSC on functions relating to strategic direction, operational support, monitoring and oversight of wastewater management had not been resolved. In addition, the job opening outlining responsibilities for the Environmental Affairs Officer that was under recruitment reflect responsibilities that overlap with those assigned to the current Environmental Officer based on the Environmental and Waste Management Policies. Also, the relationship between this new position and the various other positions involved in environmental issues and waste management, including the temporary DFS Special Adviser on Environment and Peace Operations, as well their appropriate organizational locations, had not been clarified.

22. At the time of the audit, environmental, waste and wastewater management responsibilities were performed by relatively few staff members, often in addition to other responsibilities. Despite the fact that the Environmental Policy contains substantial reference to waste management requirements, it does not reflect the recent developments in waste management such as the creation of and the roles of the various new positions dealing with environment, waste and wastewater management. The current review by DFS of the Environmental Policy and Guidelines provides an opportunity to address these issues.

**(2) DFS should define and document the respective responsibilities and organizational structure for environmental, waste and wastewater management strategy, support, monitoring and oversight at DFS and UNGSC.**

*DFS accepted recommendation 2 and stated that it was moving towards strengthening the environmental resources at Headquarters by requesting a P-5 post in the 2016/17 budget submission to augment and consolidate the existing resources of a P-4 Environmental Waste Officer*

*and a P-3 Environmental Officer. If the P-5 post is approved, DFS would review and revise the responsibilities for environmental activities at DFS and UNGSC. Recommendation 2 remains open pending the receipt of evidence of the review and documentation of the respective responsibilities and organizational structure for environmental, waste and wastewater management strategy, support, monitoring and oversight at DFS and UNGSC.*

DFS monitoring and oversight of missions' reporting of wastewater management needed to be enhanced

23. The Secretary-General's Bulletin on the Organization of DFS provides that one of DFS core operational functions is the monitoring of compliance with logistics policies and procedures in field operations, including mission wastewater management practices. The Environmental and Waste Management Policies require missions to collect data, monitor and report on waste management practices and DFS to monitor overall mission practices and compliance with wastewater requirements.

24. Although DFS had implemented quarterly reporting on practices by missions, deficiencies continued to exist in wastewater management by missions that had not been fully disclosed in their reports to DFS. For example, field visits in early 2015 by UNGSC identified non-compliance with wastewater management requirements in some missions. Wastewater management failures were also identified in audits by OIOS, for example: some missions needed to: (a) adequately treat and dispose of wastewater; (b) regularly inspect and maintain treatment plants and other wastewater infrastructure; and (c) regularly inspect waste disposal sites and monitor contractors' disposal methods and practices. These missions had not fully disclosed these deficiencies in their reports to DFS. Consequently, the self-reporting measures implemented by DFS had not been effective in ensuring complete reporting of non-compliant practices.

25. The above resulted as DFS had not allocated adequate resources to conduct more detailed monitoring and oversight of mission wastewater practices, including regular monitoring visits to field operations to verify mission self-reporting of wastewater management.

26. To address the conditions identified by UNGSC, DFS started conducting a baseline wastewater survey of all missions to gather detailed information on wastewater systems and processes within each mission. Based on the responses, DFS planned to classify missions as non-critical or critical, and those missions identified as critical would be subject to additional reporting requirements and oversight measures. The Under-Secretary-General for Field Support outlined plans for the Logistics Support Division (with support from UNGSC) to implement an independent field mission verification programme applicable to all missions deemed to be critical by the baseline study. All other missions would be required to provide monthly reports on wastewater management within the mission.

**(3) DFS should dedicate adequate resources to finalize the baseline wastewater survey and implement enhanced mechanisms for the regular and systematic collection, monitoring and reporting of data on waste management activities of field operations and their compliance with applicable policies and other requirements.**

*DFS accepted recommendation 3 and stated that the wastewater baseline survey had been completed and its results and recommendations were being presented to senior management for their approval. Also, the planned outcomes of the baseline survey included stronger and more detailed reporting and monitoring processes and enhanced field visit review and verification activities. Recommendation 3 remains open pending receipt of evidence of the implementation of enhanced mechanisms for the regular and systematic collection, monitoring and reporting of data on waste management activities of field operations and their compliance with applicable policies and other requirements.*

Performance targets and detailed monitoring framework still needed to be developed

27. The Waste Management Policy requires DFS to issue waste management standards and performance targets, and ensure proper monitoring and oversight of waste management activities (including for wastewater management). For effective monitoring and oversight, it is a good practice to develop quantitative and qualitative targets to measure achievements.

28. The Environmental Policy, draft Environmental Guidelines and Waste Management Policy provide high-level requirements and goals on expected waste management practices, including on wastewater. However, DFS did not have a detailed framework that specified measureable quantitative and qualitative targets and key performance indicators to help guide missions in their technical management of wastewater. This prevented missions from adequately planning and assessing compliance with their wastewater practices and DFS from assessing and reporting individual and overall mission performance.

29. The current baseline study of wastewater management practices and the DFS review of the Environmental Policy and Draft Guidelines provide an opportunity to develop a more detailed framework to guide mission practices and to assess and report on mission performance.

**(4) DFS should develop quantitative and qualitative targets for supporting and monitoring wastewater management activities by including the development of a performance monitoring and reporting framework as part of its reviews of the Environmental Policy and the baseline study of wastewater management.**

*DFS accepted recommendation 4 and stated that the recent Wastewater Baseline Survey review included assessing revised quantitative and qualitative management and technical targets that were included in the new baseline report prepared for management consideration. These included an assessment of staff requirements and the establishment of testing facilities, as well as the adoption of the North Atlantic Treaty Organization's effluent disposal standards. Recommendation 4 remains open pending receipt of evidence of the issuance of a performance monitoring and reporting framework that includes quantitative and qualitative targets for wastewater management activities.*

#### **IV. ACKNOWLEDGEMENT**

30. OIOS wishes to express its appreciation to the Management and staff of DFS for the assistance and cooperation extended to the auditors during this assignment.

(Signed) Eleanor T. Burns  
Director, Internal Audit Division  
Office of Internal Oversight Services



## STATUS OF AUDIT RECOMMENDATIONS

## Audit of the Department of Field Support's guidance and oversight of wastewater management in peacekeeping operations

Recom. no.	Recommendation	Critical <sup>2</sup> / Important <sup>3</sup>	C/ O <sup>4</sup>	Actions needed to close recommendation	Implementation date <sup>5</sup>
1	DFS should assign adequate resources to: (a) update and promulgate its Environmental Policy; (b) finalize and promulgate its Draft Environmental Guidelines; and (c) implement the Waste Management Policy, including the further development and implementation of detailed guidelines on minimum standards and practical requirements for wastewater management, as well as support for ongoing instruction and training to missions on these requirements.	Important	O	Receipt of evidence relating to the issuance of, and plans to support training on, the Environmental and Waste Management Policies and associated Environmental Guidelines.	31 March 2017
2	DFS should define and document the respective responsibilities and organizational structure for environmental, waste and wastewater management strategy, support, monitoring and oversight at DFS and UNGSC.	Important	O	Receipt of evidence of the review and documentation of the respective responsibilities and organizational structure for environmental, waste and wastewater management strategy, support, monitoring and oversight at DFS and UNGSC	31 March 2017
3	DFS should dedicate adequate resources to finalize the baseline wastewater survey and implement enhanced mechanisms for the regular and systematic collection, monitoring and reporting of data on waste management activities of field operations and their compliance with applicable policies and other requirements.	Important	O	Receipt of evidence of the implementation of enhanced mechanisms for the regular and systematic collection, monitoring and reporting of data on waste management activities of field operations and their compliance with applicable policies and other requirements	31 March 2017

<sup>2</sup> Critical recommendations address critical and/or pervasive deficiencies in governance, risk management or control processes, such that reasonable assurance cannot be provided with regard to the achievement of control and/or business objectives under review.

<sup>3</sup> Important recommendations address important (but not critical or pervasive) deficiencies in governance, risk management or control processes, such that reasonable assurance may be at risk regarding the achievement of control and/or business objectives under review.

<sup>4</sup> C = closed, O = open

<sup>5</sup> Date provided by DFS in response to recommendations.

## STATUS OF AUDIT RECOMMENDATIONS

## Audit of the Department of Field Support's guidance and oversight of wastewater management in peacekeeping operations

Recom. no.	Recommendation	Critical <sup>2</sup> / Important <sup>3</sup>	C/ O <sup>4</sup>	Actions needed to close recommendation	Implementation date <sup>5</sup>
4	DFS should assign adequate resources to: (a) finalize and promulgate its Environmental Policy and Draft Environmental Guidelines; and (b) implement the Waste Management Policy, including the further development and implementation of detailed guidelines on minimum standards and practical requirements for wastewater management, as well as support for ongoing instruction and training to missions on these requirements.	Important	O	Receipt of evidence of the issuance of a performance monitoring and reporting framework that includes quantitative and qualitative targets for wastewater management activities	31 March 2017

# **APPENDIX I**

## **Management Response**

**CONFIDENTIAL**

Routine

TO: Ms. Eleanor Burns, Director  
A: Internal Audit Division, OIOS

DATE: FEB 25 2016

THROUGH:  
S/C DE:

REFERENCE: UNHQ-AR-BOI-Memo-2-  
2016-7186

FROM: Anthony Banbury, Assistant Secretary-General  
DE: for Field Support



SUBJECT: **Audit of the Department of Field Support's guidance and oversight of**  
OBJET: **wastewater management in peacekeeping operations (Assignment No. AP2015/615/05)**

1. I refer to your memorandum dated 4 February 2016 regarding the above-mentioned audit. We note that OIOS has taken into account our comments provided on 29 January 2016. Please note that DFS does not have any further comments on the findings in the report. However, we have updated Appendix I to reflect the individual responsible for the implementation of the recommendations with the deadline, as well as a request to change the wording of recommendation 1.

1. Thank you for the opportunity to comment on the draft report. We stand ready to provide any further information that may be required.

Cc: Ms. Cynthia Avena-Castillo

## Management Response

## Audit of the Department of Field Support's guidance and oversight of wastewater management in peacekeeping operations

Rec. no.	Recommendation	Critical <sup>1</sup> / Important <sup>2</sup>	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
1	DFS should assign adequate resources to: (a) finalize and promulgate its Environmental Policy and Draft Environmental Guidelines; and (b) implement the Waste Management Policy, including the further development and implementation of detailed guidelines on minimum standards and practical requirements for wastewater management, as well as support for ongoing instruction and training to missions on these requirements.	Important	Yes	USG, DFS	First quarter of 2017	DFS requests that the recommendation should be reworded to read: " <i>(a) update and promulgate its Environmental Policy; (b) finalise and promulgate its Draft Environmental Guidelines; and (c) implement the Waste Management Policy, including the further...</i> ". Other comments of the Department are reflected in the report.
2	DFS should define and document the respective responsibilities and organizational structure for environmental, waste and wastewater management strategy, support, monitoring and oversight at DFS and UNGSC.	Important	Yes	USG, DFS	First quarter of 2017	DFS' comments are reflected in the report.

<sup>1</sup> Critical recommendations address critical and/or pervasive deficiencies in governance, risk management or control processes, such that reasonable assurance cannot be provided with regard to the achievement of control and/or business objectives under review.

<sup>2</sup> Important recommendations address important (but not critical or pervasive) deficiencies in governance, risk management or control processes, such that reasonable assurance may be at risk regarding the achievement of control and/or business objectives under review.

## Management Response

## Audit of the Department of Field Support's guidance and oversight of wastewater management in peacekeeping operations

Rec. no.	Recommendation	Critical <sup>1</sup> / Important <sup>2</sup>	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
3	DFS should dedicate adequate resources to finalize the baseline wastewater survey and implement enhanced mechanisms for the regular and systematic collection, monitoring and reporting of data on waste management activities of field operations and their compliance with applicable policies and other requirements.	Important	Yes	USG, DFS	First quarter of 2017	DFS' comments are reflected in the report.
4	DFS should develop quantitative and qualitative targets for supporting and monitoring wastewater management activities by including the development of a performance monitoring and reporting framework as part of its reviews of the Environmental Policy and the baseline study of wastewater management	Important	Yes	USG, DFS	First quarter of 2017	DFS' comments are reflected in the report.