

Proposed Addendum to Project Document for

"Sustainable Health Care Waste Management in Gauteng"

April 2003

Introduction and Summary

The project on Sustainable Health Care Waste Management in Gauteng is progressing well and is being implemented in accordance with the Project Document with the agreed adjustments.

However, it is proposed to extend the Project's duration by six months, i.e. until the end of March 2004, in order to increase the impact of the Project. This can be achieved by adjusting the funds already allocated to the Project as well as certain activities in order to meet the current needs of the counterparts without the need for any additional funding.

During the course of the project implementation a number of critical issues have been identified in relation to the sustainability of the Project and, in particular, the institutional capacity of the Gauteng Department of Health to take on the short-term actions required for implementing the next Provincial HCRW management tender effectively. The lack of capacity is critical both at the level of the individual facilities as well as at the central and regional level of the provincial Department of Health and there is a need to ensure that necessary support is provided at all levels of the Department of Health.

The objective of this Addendum to the Project is therefore to improve the Project's anchoring by ensuring that project activities are taken over completely and effectively by the Project's counterparts, in particular the Gauteng Department of Health (GDoH) and DACEL, but also the National Department of Environment and Tourism (DEAT) and the National Department of Health (NDoH).

In the short term there is a need for assistance to the GDoH in tendering, adjudicating and implementing the Health Care Waste Management Tenders for which the work is scheduled to commence on 2003-10-01, thus coinciding with the end of the current project. However, due to institutional challenges in the GDoH it appears likely that the Department may not be able to implement the new tenders that are developed by the project timely and as planned.

Furthermore, there is a need for assisting DACEL in applying the principles developed for the Health Care Waste Management Project to other departmental priorities, in particular the further elaboration of the Health Care Waste Information System (HCWIS) developed for health care risk waste (HCRW), also to include hazardous waste and to support the department through the initial stages of the implementation of the Health Care Waste Management and Waste Information System Regulations.

Finally, the DANIDA funded project on Implementation of the National Waste Management Strategy, originally intended to commence by mid 2002 and proposed to have strong links and coordination with the Gauteng Project that was to serve as a pilot for the national project, was delayed and is currently only foreseen to commence by the middle of 2003. Because of the strong links built into the national project on two of its three main technical components, namely HCW Management and the Waste Information Systems, it would be beneficial if there were a suitable overlap between the two projects for efficient transfer of

experience from the Gauteng project by maintaining the momentum of the Gauteng project during the inception phase and initial implementation of the national project.

The activities proposed in this motivation for an extension to the Gauteng project can be fully funded by the resources already allocated by DANIDA and the counterparts to the Project by means of a well-justified and appropriate re-allocation of the existing budgets.

By extending the Gauteng project by six months, it creates a unique opportunity to ensure the sustainability of the Project, whilst establishing a provincial scale demonstration project that includes approx. 28 provincial hospitals and the approximate 140 provincial clinics. Such a large-scale demonstration on sustainable health care waste management (HCW) management is likely to result in large-scale dissemination of information not only to the other 8 provinces in South Africa, but also to neighbouring countries. Considerable information will therefore be made available for the informed development of national policies and strategies for HCRW management in South Africa and the Southern African region as a whole.

Hence with the proposed Sustainability Support Programme the Project would end 31st of March 2004.

It is recommended that DANIDA and the Project Steering Committee (PSC) endorse this proposal, which is to make provision for the reallocation of the available budgets, thus allowing for a 6 month extended duration of the Project. The proposed extension is expected to significantly improve the sustainability as well as the impact of the project activities not only on provincial level, but also on national level. It will at the same time meet the immediate needs for support to the Counterparts thus allowing for a longer overlap for effective transfer of experience from the Gauteng Project to the coming national project for Implementation of the National Waste Management Strategy.

Critical Gaps Identified that may impact the project's success on the short-term

During the course of the project is has become apparent that there is an urgent need for additional assistance to the project's Counterparts to ensure complete hand-over and sustainability of the implemented activities:

1. Assistance in the Implementation of new Provincial Tender:

Motivation:

This project has for the first time addressed the management of HCRW in the Department of Health and is developing standards and proposed structures to facilitate this improvement. Hence, at the moment and the immediate future There is no central provincial HCW management capacity at the Gauteng Department of Health head office, nor at the level of the individual health care facilities to champion, plan or monitor the implementation of the next health care risk waste management tender. This is seen as a

critical constraint, since in the past the existing HCRW management systems were just retendered and left to the service industry to implement, whereas with the proposed new tender there would be a significant change to the scope of work and improvement in the service level. This, in turn, requires informed and competent management from the Department of Health and the individual health care facilities.

The potentially catastrophic results of disorganised implementation of the new tender at more than 32 hospitals and approximately 140 provincial clinics is cause for serious concern and could jeopardise the impact of the entire project. Successful transition from the current to the much-improved HCRW management system via the provincial HCRW Management tenders is expected to be the key deliverable of the project, as it will provide a full-scale demonstration of what can be achieved at provincial hospitals and clinics.

With the recent loss of momentum in the tender development process as a result of the suspension of the GDoH's key counterpart in the tender development process, it appears likely that the GDoH may not be able to timely undertake the necessary activities that will allow for the new tender to commence on 1 October 2003 as planned. Hence, in view of the institutional shortcomings in the GDoH, it is important that there is a continued presence of the Project's tender specialist to provide assistance and problem solving during the tender letting, tender evaluation, contract negotiations and the management of the transition period until the improved tenders are fully implemented and to ensure anchoring in the Gauteng Shared Service Centre (GSSC) who will be managing the tenders on behalf of the GDoH.

This assistance is deemed critical for the GDoH and the GSSC in the first tender for the new HCRW management system and would at the same time assist in building the capacity to re-tender such services in future both with the Department of Health and the GSSC. It will finally introduce efficient contract and service monitoring tools that will be vitally important for future contract management to be successful.

Proposed Activities:

Hence, the following support for both the provincial/regional and the facility/operational level is considered to be essential for the successful tender letting process and implementation of the improved HCRW management system:

At Provincial and Regional level:

- 1. Assistance to the Department of Health in the tender letting and tender evaluation phase:
 - a. Finalisation of the Final Tender Documents based on the Technical Specifications and tender structure developed by the Project;
 - b. Floating of the tender via advertisements in the press, conducting tender meeting and site visit to pilot facilities to demonstrate the new system as well as addressing queries during the tender period;
 - c. Receipt of Tenders and preparation of Tender Adjudication Report for subsequent evaluation and approval by the Tender Evaluation

Committee and final approval by the Departmental Acquisition Council (DAC). It has been proposed that the Consultant should be a member of the Tender Evaluation Committee.

Output 1: A completed tender letting and tender evaluation for the three contract areas ready for approval by the DAC of Gauteng Health.

- 2. Assistance to the Department of Health in contract negotiations with the three Tenderers nominated for the respective Regions:
 - a. Based on the costing of particular conditions of the individual bids a tender negotiation brief is prepared to assist in the contract negotiations. The brief will include i) costing of conditions, ii) recommended adjustments to be negotiated, iii) provision of sureties and guarantees, etc.

Output 2: Leading assistance to the GSSC and the GDoH in the contract negotiation for the three contract areas ready for implementation by the contractors awarded the work

- 3. Assistance to the Department of Health in supervising the successful bidders' detailed planning of the implementation process for the new tenders including assessment and approval of service providers' roll-out plans for individual facilities:
 - a. Assistance to ensure that the contents of Roll-Out Plans are acceptable. Such plans shall include: i) deployment of equipment in wards, ii) training schedules, iii) reporting systems, iv) liaison routes, v) system transition period, etc.
 - b. Assistance in day-to-day liaison with the planners of the successful bidders.

Output 3: A review and series of communications with the awarded service providers for the improvement and assessment of acceptability of the individual roll out plans for the health care facilities and as applied by the service providers. Benchmarking of roll-out plans and roll-out achievement against other awarded service providers.

4. Establishment of financial contract monitoring and service delivery performance monitoring systems within the Department of Health, among others via tools and reporting systems as well as personal assistance in the initial setting up of such systems. At this stage it is assumed that only limited skilled personnel, if any, can be made available at the central level and that the focus must be on establishing minimum capacity and reporting skills at the level of the individual facilities, possibly via the regional office for groups of smaller clinics. It is envisaged that the Group of Consultants will be assisted by a hiring of student workers or similar to carry out the bulk of the data gathering and assessments for individual facilities for the roll out of the new HCW Services.

- a. Depending on the personnel that can be made available at central, regional and facility levels a tailored monitoring and reporting system will be developed that captures the most pertinent operational data and operational events as well as allows for overall contract monitoring both in the form of overall technical performance as well as financial monitoring and possible invoking of penalties if required;
- b. Drafting and approval of Terms of Reference for a central person of structure receiving and managing reports and to function as a focal point of the HCW Officers' network.
- c. Support and training of service provider consultants to ensure that they able to drive monitoring and reporting at the facility level.
- d. Additional support to provincial OH&S and information sub directorates in the GDoH to ensure participation.
- e. Additional support to ensure external audits of hospitals and CHCs by regional environmental health practitioners
- f. Establishment of lines of communication including a central reporting structure where reports and copies of invoices are received, assessed and general problems identified and addressed;
- g. Developing formats and assistance with the initial assessment of the independent Third Party Auditing that is assumed to be included in the service delivery of the successful bidders.
- h. Assistance in ensuring that the existing PMG, PSC and/or similar forums can continue as a support structure to the Department of Health in ensuring continued development of the HCW Management systems.

Output 4: Development in detail and implementation of a functional financial and service delivery monitoring system for the three HCW Service Contracts that can be managed by the facilities and with a central record keeping function. Setting up of the central record keeping system via on-the-job cooperation during the 6 months duration of this Sustainability Support Programme.

At Health Care Facility level:

5. Additional support to the implementation of the Capacity building programme developed as part of the Project. This includes support to the introduction of training programmes to be facilitated by the appointed service provider, orientation of GDoH management and key role players to the winning HCWM system and additional support to the GDoH health care waste officers appointed in all health facilities and investigation of provincial reporting.

<u>Training programme and print materials</u>

a. Development of dedicated training materials and information packages based on the final contract deliverables by the service providers in cooperation with the service providers awarded the contract GDoH. Majority of print materials to be provided by the Service Providers but the

- proposal includes a provision for some additional print material production and distribution.
- b. Refinement of a Gauteng Code of Practice for Waste in hospitals and clinics based on the final contract deliverables. Adoption of Code of Practice by GDoH.
- c. Training workshop for winning service providers to support the development of training programmes in health facilities and in the regions to be held in collaboration with the GDoH
- d. Preparatory visits to 28 hospital and 21 community health clinics (CHC) and maternity obstetrics units (MOU) to brief management and key departments including Occupational Health and Safety (OH&S) committee and dedicated staff, infection control, cleaning department, procurement and stores. These visits will serve the dual purpose of being a fact-finding visit and to prepare health facilities for the change of system and the introduction of the code of Practice. Information collected during these site visits will then be collated for the new service providers, for the GDoH and for the Gauteng Sustainable Health Care Waste Project.
- e. Programme of presentations to senior GDoH management in the province and the region to introduce the new HCWM system and the Code of Practice.

Output 5.1: A finalised concrete roll out plan for each of the three Regions and Service Contract Areas to be implemented by the awarded Service Providers. The Roll out plan shall include but not be limited to i) training provision, ii) training materials, iii) generic Code of Practice of HCW Management, iv) Service Provider training workshops, and iv) audits of key health care facilities in cooperation with the Department of Health in preparation for the roll-out.

Support to HCW Officer and Assistants

- f. Each Health Care Waste Officer (HCWO) and assistant in a health facility is envisaged to be allocating 15-35% of the working time to implementing and operating the HCRW tenders. Initial the input may be significantly higher. It is envisaged that the Waste Management Officers will be recruited from infection control, occupational health and safety committee members, and the cleaning department seniors or similar. A list of all HCWO and HCWO Assistants will be made with the assistance of the Department of Health. Two workshops will be held with for HCW Officers and Assistants from the hospitals and CHCs to support the introduction of the new system.
- g. Follow-up and monitoring of the effectiveness of the 5-day HCW Management training course for HCW Officers with possible development of adjustments to the course curriculum
- h. Assistance with the implementation of the service delivery monitoring systems developed at provincial level by introducing the tools giving one—on-one assistance during the initial setting up of the systems.

- i. Support and training of service provider's specialised staff to ensure that they able to drive monitoring and reporting at the facility level.
- j. Additional support to OH&S structures at operational level to ensure participation.
- k. Support to Health Care Facilities via the HCW Officers and Assistants in preparing the initial facility specific roll-our plans/preparations to ensure that the facilities are well prepared in liasing and jointly rolling out the new tender in the facilities efficiently.
- I. Development of a benchmarking system for highlighting the different health care facilities success in implementing improved HCW Management systems. Such benchmarking could include quarterly assessment of the segregation efficiency by determining the unit generation rates for HCRW per bed or patient. Also competitions could be run between health care facilities on HCW Management issues.

Output 5.2: Establishment of the group of Waste Management Officers and Assistants to be part of a province wide HCWM Network for mutual information sharing and exchange of experience. An Evaluation Report on the 5 day training course with assessment of the effectiveness of the course and possible improvements to the course curricula and the development of the curricula into a more generic course that would appeal to additional attendees, in particular private facilities and service providers. Also, a benchmarking system with accompanying reporting structures and possible competitions will be developed.

Because of the absence of central capacity for HCW Management at the central level of the Gauteng Department of Health it is deemed most sustainable to focus the efforts on establishing the necessary capacity and tools enabling the individual facilities to efficiently and uniformly manage and monitor the transition period for the implementation of the tenders as well as the operation periods for building the necessary capacity to monitor the service delivery and carry out essential contract monitoring and reporting tasks.

2. Assistance to DACEL in implementing the spin-offs of the Project: *Motivation:*

There are a number of intended and unintended spin-offs from the planned HCW Management Project that has the potential to fast-track or considerably impact on the process of further environmental management improvements that are included in the DACEL business plans.

DACEL has in its business plans for Integrated Waste Management included the further development of a general Waste Information System for all types of waste based on the Health Care Waste Information System developed and piloted via the Project. Planned interventions and improvements to the management of hazardous waste from the industry in Gauteng was also included in the business plan, that could be based on the policy development process and the regulatory tools prepared as part of the Project.

Gauteng is the smallest, but most urbanised and densely populated of the South African provinces. As the economic and industrial hub of South Africa, it is estimated that more than 80% of all hazardous waste in South Africa is generated in Gauteng and that tremendous quantities of hazardous waste is poorly managed at present. This phenomenon is resulting in both short-term as well as unavoidable long-term detrimental effects on the environment, in particular contamination of land and degradation of surface and ground water resources.

Proposed Activities:

- 6. Assistance to Gauteng Health and DACEL in disseminating the developed tender concept and service delivery concept to the local government clinics, in particular in view of the planned devolution of the approx. 140 provincial clinics to the local governments. This with a view to introduce harmonized tendering and service delivery standards for HCW Management at both levels of government.
 - a. Develop Guidelines for Local Government for addressing minor generators of HCRW incl. Home Based Care in the councils
 - b. Conducting Workshops for Local Governments for developing HCRW Plans and applying the Guidelines for development of final local government action plans for HCRW management
 - c. Development of model Local Government HCWM Plans that could include various service delivery schemes and the costs thereof depending on the level of affordability and type of small-scale HCRW generators that exist in particular local authorities. It is envisaged that such plans could include a combination of bring and collection systems and where possible make use of existing infrastructure, e.g. local clinics. Development of model By-laws for local authorities for the management of HCRW;
 - d. Assist in engaging with Gauteng Association of Local Authorities (GALA) in implementing the aforesaid models for local Authorities.
 - e. Assist DACEL in the implementation of the HCW Management Regulations
 - **Output 6:** A Guideline for Local Government for the development and implementation of services for micro and small scale generators of HCRW. Preparation of HCW Tender Guidelines that includes model technical specifications adapted for local governments including input to Waste Bylaws regarding HCW Management
- 7. Further development of the Health Care Waste Information System (HCWIS) to cater for Hazardous Waste and become a comprehensive WIS for various types of waste in support of the development of a Provincial WIS and providing an extended pilot project for the WIS component of the National Waste Management Strategy (NWMS) planned to be implemented nationally via DEAT:

- a. Providing South African and expatriate expertise to develop the HCWIS developed as part of the Project to include additional waste streams in line with the Waste Information Regulations to be promulgated mind 2003.
- b. Assist DACEL in the implementation of the Waste Information System Regulations

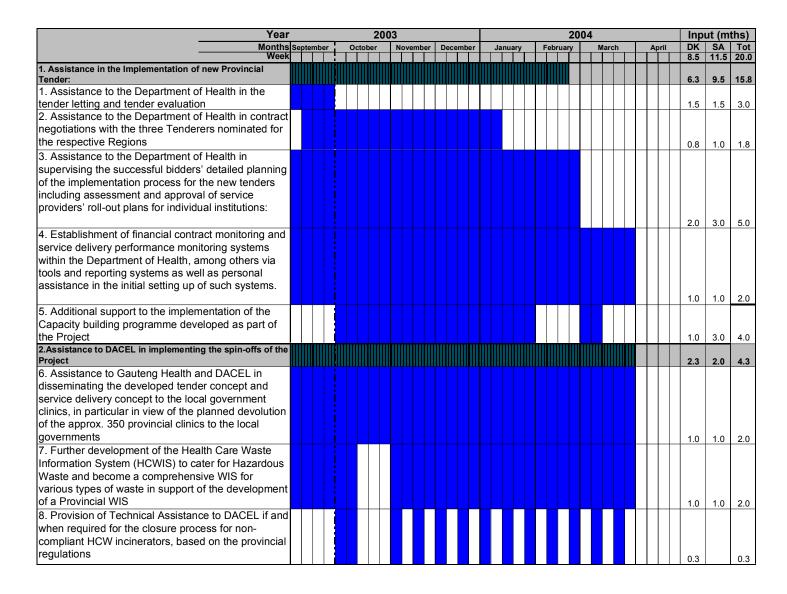
Output 7 An expanded Waste Information System is operational and ready for use and regulation via provincial regulations or similar. Technical Paper for guidance of drafters of provincial regulations for the WIS that includes other waste types than HCRW

- 8. Provision of Technical Assistance to DACEL if and when required for the closure process for non-compliant HCW incinerators, based on the provincial regulations:
 - a. Assist in preparing necessary environmental motivation for calls for upgrading / closure of existing incinerators that do not comply with the emission standards set out in the Gauteng HCW Management Policy.

Output 8: Technical assistance to DACEL when and if needed to ensure closure or upgrading of non-compliant HCRW treatment plants in Gauteng

Proposed Timing of the Sustainability Support

It is proposed that the Sustainability Support shall become an integral part of the overall project "Sustainable Health Care Waste Management in Gauteng". Hence, some of the additional activities proposed in this addendum will commence before 2003-10-01 while some of the activities contained in the currently agreed scope of work could, if subsequently agreed and deemed suitable could be extended to continue during the proposed extended period. At this stage none of the existing activities are deemed necessary to continue after 2003-10-01 other than the activities proposed here.



In the table above the estimate input by South African (SA) and Danish Consultants is included in person-months as well as the estimated total input for each proposed activity.

Proposed Funding of the Sustainability Support

It is possible to fully fund the proposed additional activities by rearranging the already allocated budget to the project.

In the original Project Document a total of DKK 4.0 million was allocated to Short-Term Improvements that where not specified in further detail. At the time of the project design it was envisaged that the improvements of existing or establishment of new HCRW treatment capacity should be achieved via public agencies, for example in the form of a Section 21 Public Utility. However, the local industry and the HCRW treatment market have undergone considerable change and improvement since the design of the project and the inception of the Project. Hence, today there is an over-capacity of environmentally

acceptable HCRW treatment technologies and more plants are expected to come on-line before the end of 2003. Furthermore, it appears to be the public policy to rather outsource and build the private sector rather than establish own waste management utilities. Hence, there is today no need for using project funds for establishing or improving treatment capacity in the Gauteng. In appreciation of this part of the DKK 4.0 million has been allocated to various well-justified project activities to cover various shortcomings such as a Study Tour and a HCW Survey.

The table below shows the current allocations and balance for the DKK 4.8 million budget item for Short-term Improvements, Pilot Projects and the International Conference.

DKK	Budget Items				
4,800,0	4,800,000 Original budget cf. Project Document				
868,2	81 Allocated in Addendum 1 (Capacity Build. & Study Tour)				
	0 Allocated in Addendum 2				
3,931,7	19 Short-term improvements after Addendum 2				
-400,0	00 International HCW Conference, cf. Proj Doc				
-450,0	00 HCW Study, agreed at PSC meeting				
-400,0	00 Pilots, cf. Proj Doc				
-110,0	00 Extra for Study Tour, agreed at PSC meeting				
2,571,7	19 Total remaining from the Short-term improvement budget				

As the table above shows there is a total of DKK 2.57 million unallocated of the original budget item of DKK 4.8 million. It is therefore proposed to make use of that in improving the long-term sustainability of the Project "Sustainable Health Care Waste Management in Gauteng"

Compared to the total contracted amount of DKK 15,615,760 DANIDA has made a total allocation of DKK 15,646,000, which potentially could allow for an additional DKK 30,240 to become available for relevant project activities. It is proposed to allocate that DKK 30,240 as additional contingency funds to be used in agreement with DANIDA and if recommended by the PSC.

Due to the change in prices since the original contract dated April 1999 an increase in fee for both South African and Danish consultants has been estimated at 10%. For the Danish consultants the actual current ABR rate in accordance with the Danish KR-rules will be used.

	Unit price			
Item	Unit price (DKK) MM		Sub-total (DKK)	
Danish Consultants		8.6	1,001,464	
CTA (T. Kristiansen)		5.5		
WIS Spec. (E. Nørby)		0.6		
Tender Spec. (M. K Hansen)		2.5		
SA Consultants		13.3	916,167	
Strategic Planner (K Otto)		3.3		
Capacity Bld Spec (N Coulson)		3.0		
WIS Spec. (L. Godfrey)		4.0		
Env. Health Spec. (J Magner)		3.0		
Cost of maintaining Project (accom, cars, secretary, office supplies etc.) Cf. Addendum 2	56,145	6	336,870	
Assistants for the Roll-out preparations	Lumpsum		100,000	
Training course and materials	Lumpsum		150,000	
International travels (incl. CTA family)	9,000	6	54,000	
Other expenses	Lumpsum		10,000	
Sub-total			2,568,501	
Max available			2,571,719	
Balance (not yet allocated from total consultant's budget)			3,218	
Unused contingencies		59,056		
Possible remaining unallocated funds in the internal DANIDA budge	30,240			
Proposed contingencies to be allocated by PSC if required	89,296			
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The table below shows the proposed budget and input.

				Α	Proposed adjustment				
			Contract April	Addendum 1 Agreed 24 Oct 2001	Addendum 2 Agreed June 2002 Change only	PSC Agreed adjust-ments	Total after agreed changes	Proposed Addendum 3 April 2003 Change only	Total after change
Ref.	Item Name		DKK	DKK	DKK	DKK	DKK	DKK	DKK
A	Expatriate Members of Programme Expatriate Members of Programme Expatricular Expansion (No. 1971) and Programme Expatricular Expatricul	roject Team	4,100,696	185,123	540,452		4,826,271	987,821	5,814,092
В	Local/National Personnel		3,089,000	375,000	211,575		3,675,575	784,449	4,460,024
С	Reimbursable Expenses for Expatriate Team Personnel		2,214,566	24,000	280,725	-170,000	2,349,291	790,870	3,140,161
D	Reimbursable Expenses f Personnel	or Local/National	9,098				9,098		9,098
Е	Project Procurement and some procurement includitems)		0	594,750		110,000	704,750		704,750
F	Specific Project Activities (To be detailed during the course of the Project)	Unallocated Short- term improvements	4,000,000	-868,281		-560,000	2,571,719	-2,563,140	8,579
		Allocated S-term Composition Stu				450,000	450,000		450,000
			400,000			170,000	570,000		570,000
		Conference	400,000				400,000		400,000
		Sub-total	4,800,000	-868,281	0	60,000	3,991,719	-2,563,140	1,428,579
	Total		14,213,360	310,592	1,032,752	0	15,556,704	0	15,556,704
	Contengencies		1,402,400	-310,592	-1,032,752		59,056	30,240	89,296
	Grand Total		15,615,760				15,615,760	30,240	15,646,000

Recommendation for Approval by PSC and DANIDA

With this proposal it is possible to significantly sustain and ensure actual implementation of the developed improvements of the HCW management system within the existing budget allocation by DANIDA.

It is believed that the proposed Sustainability Support represents a very significant, highly relevant and well-motivated optimisation of the getting the greatest possible positive impact by applying the already allocated funds for this Project in the most effective way. Hence, it is believed that the proposed adjustment rather than supporting various short-term improvements in the form of typical "gap-filling" would support the complete implementation of a fully sustainable and functional HCWM system throughout the provincial department of health with significant spin offs for the municipal and private section health care facilities.

It is recommend that the PSC and DANIDA approves the proposed additional Sustainability Support Programme as this is deemed to effectively facilitate strong anchoring of all project outputs within the key organisations of Gauteng Department of Health and the Gauteng Department of Conservation, Environment and Land Affairs. Furthermore, it has become evident that without such additional support the intended impact of the DANIDA project may not be achieved both on the short to long term due to insufficient capacity to take over and manage the immediate activities around specifically the tender process but also around the more continued monitoring and improvement of capacity for health care waste management at the level of individual facilities, government departments as well as the service providers.