

GUIDELINES FOR
THE FORMULATION OF A
STRATEGY & IMPLEMENTATION
PLAN FOR THE PROVISION
OF SANITATION SERVICES IN
INFORMAL SETTLEMENTS



# PURPOSE OF THIS GUIDE

The Constitution of South Africa places an obligation on government to ensure that all South Africans have access to adequate sanitation services. This guideline, produced by the Department of Water Affairs and Forestry, aims to provide guidance to municipalities to formulate an appropriate local strategy and an implementation plan for sanitation services in informal settlements, taking into account the policy principles of the Policy on Basic Household Sanitation (2001).

This guideline should aid decision-making by local authorities when planning services to informal settlement areas within their jurisdiction. In particular the guideline should provide a framework for the allocation of responsibilities as well as procedures for sanitation delivery to low income informal settlements.

The guidelines are not intended to be prescriptive in any way, but rather to outline a process that may be used to address the issues that are presented by local conditions. An attempt has been made to ensure flexibility for different conditions, provide practical guidance on key issues, and to capture previous experience.

# STRUCTURE OF THIS GUIDE

This guide provides a structured approach in respect of the procedures to be followed to ensure appropriate and sustainable sanitation service delivery to informal settlements over time and is for use at local government level. It provides a brief context for the process, and also indicates a step-by-step approach to be followed in formulating a strategy and implementation plan for Sanitation Services at Informal Settlements.

- **Section 1** outlines some of the key issues in urban low-income settlements that will impact on the provision of sanitation services.
- **Section 2** addresses the issues that should be considered in the formulation of a strategy for the provision of sanitation services to informal settlements.
- Section 3 provides guidance on the relevant steps in the development of a sanitation implementation plan.



## 1. THE CONTEXT FOR SANITATION DELIVERY TO INFORMAL SETTLEMENTS

Local government is mandated to provide basic services in all settlements within their area of jurisdiction in accordance with the rights described in the Constitution as well as in the various Acts that guide services delivery at local level. Providing services to informal settlements is one of the most complex issues on the municipal agenda, and must be viewed in the context of the broader spatial development and housing delivery objectives, as well as in terms of poverty alleviation and skills development objectives. The approach adopted by local government will require an integrated approach to service delivery including water, sanitation, energy and transport issues, taking full account of the institutional and social framework of the settlements themselves.

#### 1.1 General Issues in Urban Sanitation Processes

Based on the general characteristics of the sanitation process, a number of core aspects require attention. These include but are not limited to the following<sup>1</sup>:

#### 1.1.1 Social considerations and aspirations of the community

In informal settlements social issues play an important role in terms of ownership, participation and identifying optimum solutions. The following are considered relevant in this context:

- Communities in urban areas have expectations for high levels of municipal services.
- The community's aspirations as to permanency, upgrading of the existing settlement, economic development
  and levels of service are key to planning a participation, communications and awareness strategy that will
  ensure effectiveness and efficiency in the delivery of services.
- There is a need to significantly improve levels of awareness about sanitation, health and hygiene within informal
  settlements, at community level. Such improvements can increase the ability and willingness of communities
  to make informed technology choices, with the result that relevant technology options become more acceptable.
- Elected members of the community should participate in undertaking an assessment of the services within
  the settlement, identifying problems related to the settlement pattern, current pollution and waste disposal
  practices, resource and financial constraints, as well identifying the integrated services requirements and
  possible delivery synergies.
- Poverty and unemployment factors should be fully assessed with the aim of addressing these through skills
  development and job creation within the delivery of services. The community should be made aware of this
  aim so that their participation and commitment can be further secured.
- Issues related to gender, youth and the disabled should also be incorporated into the approach for development
  of urban communities in informal settlements.

#### 1.1.2 Health and hygiene considerations

In informal settlements health and hygiene considerations are vitally important because most settlements are unplanned, with the primary aim of residents being to establish a dwelling unit. The unplanned and uncoordinated disposal of wastes is therefore usually a major threat to the spread of disease in the settlement. The following are considered relevant in this context:

- The waste disposal practices within the settlement should be assessed and where unsafe practices are identified, necessary steps should be taken to prevent disease transmission and environmental pollution:
- If there is no collection service, each household should be assisted to dig a solid waste disposal pit;
- The option of providing communal glass, can, paper and general refuse skips should be fully assessed;
- Grey water disposal at households should be in properly constructed rock-filled soak pits;
- Each household should be enabled to construct a safe toilet.
- There is a need for local government to be involved in the provision of integrated health and hygiene education in informal settlements, supported by community awareness or education processes.
- Whilst women should be the deliberate targets of health and hygiene promotion activities, men should also be targeted and involved to ensure appropriate changes in attitude and behaviour.

Further guidelines can be obtained from the DWAF report on "Managing the water quality effects of dense settlements".

Please refer to Section B4.2 of the National Strategy for Sanitation Services to Informal Settlements – 2002 and Section 3.1 of the Draft Guidelines: Linking Urban Sanitation Agencies with Poor Community Needs in Southern Africa: A study of Zambia, Zimbabwe and South Africa, DIFID (2001) for more information in this regard.

#### 1.1.3 Institutional and related considerations.

- There is a need to establish a community-based management structure to manage sanitation in informal settlements. The municipality should facilitate the establishment of such a structure, and remain a member of the structure as far as is feasible.
- There is a need for good communication between various municipal departments and in particular for the departments to keep the communities in the informal settlements well informed of all relevant strategy, planning, and regulations that affect the settlements.
- Proactive planning for informal settlement is a critical requirement. Sufficient human, financial and technical resources need to be allocated to sanitation in informal settlements areas.

#### 1.1.4 Land use and related considerations

In many cases, informal settlements take place on land not suitable for housing development. In most cases, the social and physical infrastructure and services are lacking. This can lead to significant health, hygiene and environmental problems. The municipality also needs to formulate a longer-term approach to the development of each settlement, with a firm decision on whether the settlement will be permanent, or whether housing will be provided at an alternative site.

The key land use issues are more fully addressed in sections 2.1 and 2.2.

#### 1.1.5 Technology related considerations

The choice of the most appropriate sanitation technology for each informal settlement will depend on a range of factors - including financial, skills levels, institutional, land use and permanency, environmental, and social issues. Ultimately the choice should be based on the most efficient use of funds to ensure sustainable sanitation that is acceptable, safe and does not pollute the environment. These issues are further expanded in sections 2.3 and 2.4.

#### 1.1.6 Financial related considerations<sup>2</sup>

Whilst providers of sanitation serves are concerned about the capital cost and ongoing cost recovery, many of the residents are living in poverty and face a variety of poverty related problems. In practice, whatever sanitation services are provided, the ongoing operation and maintenance costs will be one of the most important factors in the debate to provide sanitation services to a community. In this regard there is a need that:

- The provision of sanitation services should, to the extent possible, result in the maximum employment of community members as builders, material manufacturers and suppliers, and health workers.
- Communities are involved in setting tariffs and annual O&M budgets where appropriate.
- Subsides for both capital and ongoing operation and maintenance costs will be necessary to improve access to sanitation services by the poor. Policy on subsidies should address targeting the poor, equity, sustainability, transparency and administrative efficiency.
- Approaches should be developed to assist communities to select a system and level of service that they can afford, that generates local employment opportunities, and that addresses their needs and the requirements of the local municipality.

#### 1.1.7 Water quality management

Indications are that pollution from densely populated and poorly serviced settlements is one of South Africa's most important and complex water quality problems. Local government has a key role to play in the process to manage the water quality effects of settlements. Please refer to the Guidelines for Local Authority Staff - Managing the Water Quality of Settlements<sup>3</sup>, for more information on this process.

It follows from all the above that any process to provide sanitation services to informal settlements should be well coordinated and integrated with the efforts of other departments, structures and communitybased organisation or groupings to ensure appropriate sustainable services. The focus should be both proactive and reactive by nature.

<sup>2</sup> Sourced form the Draft Guidelines, Linking Urban Sanitation Agencies with Poor Community Needs in Southern Africa: A study of Zambia, Zimbabwe and South Africa: DIFID July 2002 and the Final Draft Sanitation Policy for the Greater Johannesburg Metropolitan Council.

Water Quality Management Series: Operational Guideline U1.6 – Managing the Water Quality Effects of Settlements: Guidelines for Local Authority Staff

### 1.2 Policy Principles

For local government to implement the strategy for sanitation services to informal settlements, they need to take cognisance of the following policy principles (as expressed in a number of government policy documents, including the White Paper on Basic Household Sanitation (2001), and the Strategic Framework for Water Services (2003)):

## 1.2.1 Sanitation improvement must be responsive to community aspirations but with a two way responsibility agreement, supported by an intensive health and hygiene awareness programme

Household sanitation is first and foremost a household responsibility and must be responsive to the needs and aspirations of the households. Users must be in a position to make informed decisions about their sanitation options, even when these are fully or partially subsidised. By facilitating a two way agreement or contract on a subsidised toilet programme, the municipality is able to foster improved commitment and participation of the community, and efficient and effective implementation of the sanitation facilities. For users to benefit maximally, they must also understand the link between their own health, good hygiene and toilet facilities.

#### 1.2.2 Community participation

Community participation means that the local people must be involved in decision making on issues that affect them, including their livelihoods and their environments. The sanitation programme developers must therefore plan to consult with the community and/or their representatives at regular intervals during the inception, planning and implementation of the projects. This is fully in line with the framework of consultation as outlined in the IDP process.

Community participation means that local people should be involved in:

- Identifying and taking joint decisions on issues, needs and problems they consider important or believe need to change (i.e. issues relating to their health and well being, decisions relating to community facilities, such as schools and clinics, sanitation, etc.).
- Implementing projects aimed at changing unacceptable situations in a positive way.
- Evaluating (and adjusting) the projects and processes they have embarked upon in order to see if they are successful in addressing their needs and in changing their circumstances for the better.
- Taking full responsibility for, and control over projects and processes they have embarked upon.
- Communities must participate in decision-making about what should be done and how; contribute to the implementation of the decisions; and share in the benefits of the project or programme.

#### 1.2.3 Integrated planning and development

The health, social, and environmental benefits of improved sanitation is maximised when sanitation is planned for and provided in an integrated way with water supply and other municipal services, as outlined in the IDP. An important requirement is to ensure that levels of service are coordinated with the MIG programmes addressing basic services, housing programmes, and the provision of other services.

The focal mechanism to achieve integrated planning and development is the municipality driven Integrated Development Planning (IDP) process (of which the Water Services Development Plan is a component).

#### 1.2.4 Sanitation is about environment and health

Sanitation improvement is more than just the provision of toilets; it is a process of sustained environment and health improvement. Sanitation improvement must be accompanied by environmental, health and hygiene promotional activities and education (including user education where new technologies are introduced).

## 1.2.5 The development of improved sanitation services must link to municipal policies dealing with indigency

The application of municipal policies and strategies that deal with services to the poor must be integral to the development of sanitation services in informal settlements. Key aspects of these are the provision of free basic services, the use of the equitable share, and the development of skills and the creation of employment opportunities in the development and implementation of services.

Any local government protocol or action plan to implement the Strategy for Sanitation Services to Informal Settlements should not only reflect the policy principles indicated above and the general issues in urban sanitation processes, but should also accommodate local realities and circumstances.

# 2. THE FORMULATION OF A STRATEGY TO ADDRESS SANITATION SERVICES IN INFORMAL SETTLEMENTS

The development of a strategy will follow the standard route for the formulation of sanitation strategies within the Water Service Authority (WSA) as set out in the WSDP guidelines, with the addition of the following aspects within the planning process:

A key component of the formulation of a strategy for the provision of services to informal settlements within the municipal boundaries is the issue of the permanency of the settlements. This impacts on almost all of the other components of the strategy and approach to providing services to a settlement, including the likely level of commitment and participation of the communities themselves.

The National Strategy for Sanitation Services to Informal Settlements (National Sanitation Task Team,

2003) has addressed the following components which may also be relevant in the formulation of the strategy:

- Effective planning and land use
- Reduction of environmental impacts
- Strengthening the delivery approach
- Optimising funding and finance
- Ensuring the health outcomes required
- Building strong institutions
- · Promoting local economic development, and
- Meeting the sanitation target

Although many of these are not specific to informal settlements, they do indicate the areas where strategic planning is required to enable the provision of services in informal settlements not to lag behind the general provision of services to poorer communities.



## 2.1 Land Use Planning and Permanency of Informal Settlements

The land on which the informal settlement is located will probably be the key factor that governs the strategy adopted to address the provision of sanitation services to the community. The proposed use of the land as set out in the "Land Development Objectives" of the municipality should be adhered to as far as possible, since this purpose will usually be the most effective use of the land in the longer term.

The National Strategy states: "There is a need to develop policies and strategies that allow for the progressive improvement of housing development in tandem with the development of water and sanitation infrastructure for low-income urban residents. The promotion of secure tenure coupled with the provision of technical assistance at crucial points in the development process will promote infrastructure and housing development."

This should be further extended to the development of strategies for the sustainable economic development of the municipality as a whole. The provision of secure tenure, housing and services without opportunities for economic growth is not sustainable and will lead to migration to more economically active areas and the possible establishment of new informal settlements.

In addition environmental considerations must also be taken into account when making decisions on the permanency of informal settlements. Land which is environmentally unsuitable (e.g. within river flood basins, in environmentally sensitive catchments, or on unsuitable rock or soil types) should not be used for human settlements.

The WSA is thus left with the following general options regarding the land allocation and permanency of informal settlements:

Table 2.1 Land use considerations where informal settlements have been established

Informal settlement location	Possible situation	Permanency	Sustainable development possibility	Options
Private land	Owner willing to sell	Good possibility if funds available to purchase the land	Good if located near economic centres, otherwise questionable	Purchase land and embark on housing development project <b>or</b> Install temporary services until a more suitable location is developed
Private fanti	Owner unwilling to sell	Uncertain unless either owner willing to develop or can negotiate to sell	Not good since no security of tenure	Support owner to develop acceptable basic services, or Negotiate to purchase and embark on housing development, or Install temporary services until a more suitable location is developed
Environmen- tally	Possible danger to residents (flooding)	Non-permanent unless steps taken to prevent flooding, etc.	Poor since occasional flooding or other factors will mean residents will be unwilling to invest	Install temporary services until a more suitable location is developed or Construct protection systems to prevent flooding or other environmental problems, then embark on housing development project
unsuitable land	Sensitive or protected ecosystems	Non-permanent unless steps taken to save eco-system	Dependent on other factors but good if eco-tourism possibility related to eco-system	Install temporary services until a more suitable location is developed <b>or</b> Construct systems to protect ecosystem, then embark on housing development project
Planned for alternative use (Land Development Objectives and/or IDP)	Formal housing	Good if formal housing is affordable by current residents	Good if located near economic centres, otherwise questionable	Embark on housing development project or Install temporary services until a more suitable location is developed
	Commercial or agriculture	Poor unless development objective scrapped	Poor since unlikely that economic opportunities will be found close to the settlement	Negotiate with residents to move to a more suitable site nearby <b>or</b> Install temporary services until a more suitable location is developed
	Industrial	Poor unless development objective scrapped	Poor since unlikely that economic opportunities will be found close to the settlement	Negotiate with residents to move to a more suitable site nearby <b>or</b> Install temporary services until a more suitable location is developed
	Municipal	Poor unless development objective scrapped	Dependent on other factors but poor if economic opportunities are not close to the settlement	Negotiate with residents to move to a more suitable site <b>or</b> Install temporary services until a more suitable location is developed

Clearly a number of other possibilities exist, and the aim of this table is to indicate the kind of decision making that will need to be considered when considering the development of land on which informal settlements have been established.

From the above considerations municipalities will have the choice of whether to upgrade a settlement to a more formal settlement with services appropriate to the economic and environmental status of the settlement, or to install temporary services until the settlement can be moved, or thirdly to move the settlement as soon as possible without the provision of any additional services in the current location.

## 2.2 Permanency

The choice may be made to move the residents of an informal settlement to a more suitable location. However, it may take many years to prepare an alternative site and there is always the risk that if the current residents are moved, others may come and occupy the land they have just vacated. Alternatively the choice may be made to upgrade the current settlement to become a fully serviced permanent residential area over a period of a few years. Whatever the choice, a decision will need to be made on the approach to the provision of services and the level of services to be installed in both the short and longer term. The following indicate the type of options which may be considered:

Table 2.2 Types of sanitation options for consideration

Land Use Decision on Permanency	Typical time to move residents to an alternative site	Level of services to be provided
Permanent – upgrade to formal housing project	Not applicable	Install long-term services appropriate to economic and environmental conditions
Non-permanent due to alternative development plans for the land	Up to 2 years after new site is prepared, but new settlers may occupy vacant sites	Install temporary services appropriate to environmental conditions
Non-permanent due to environmental unsuitability	Within one year – site should be protected from further land invasions	Short term very temporary services appropriate to environmental conditions or move immediately

## 2.3 Technical Options for Different Levels of Service

The choice of level of service has been addressed above. However, there are a number of technical options under each level of service. The choice of the most appropriate technical options is dependent on a number of factors, including the issue of permanency or temporary nature of the services. The table below provides a guide to the choice of technology for the different circumstances. However the specific factors relevant to each municipality should be considered.

Table 2.3 A guide to the choice of technology for different circumstances

Table 2.3 A guide to the choice of technology for different circumstances					
Decision factor	Long-term permanent services	Temporary services (1 to 5 yrs)	Short term or emergency services (< 1 year)	Comments	
Technical options	VIP, UDS, septic tank and waterborne	Shallow VIP, SanPlat or communal wet block	SanPlat or communal block	The superstructure for temporary services could be prefabricated or less-permanent archloo type.	
Capital costs	R2,500 up to R10,000 per site	R1,500 to R2,500 per site	R1,500 to R2,500 per site	The lower costs for temporary services is dependent on using lower cost construction techniques such as SanPlat slabs, shallow pits, and less rigid superstructures.	
Recurrent costs (O&M)	Minimal for UDS, up to R100/y for VIP, and R25/month for waterborne	Minimal except for communal (±R1000/month for each block)	Minimal except for communal (±R1000/month for each block)	The assumption of O&M costs for communal toilets is that they would be cleaned daily by a community member, and costs include water supply charges.	
Job creation potential	Good with training and skills development	Some with limited skills transfer	Some with limited skills transfer	Longer term programmes can be planned to create jobs and impart useful skills to builders.	
Availability of water	Septic tank and waterborne systems require reliable water supplies on site	Communal toilet blocks will require a reliable supply of water	Communal toilet blocks will require a reliable supply of water	Water should be available for general hygiene. However piped water to each stand is not necessary for the dry sanitation systems.	
Ground conditions (difficulty of construction)	VIP pits may be difficult to dig in rock or loose sand without additional equipment	Minimal problems – shallow pits acceptable for short term	Shallow pits acceptable for short term	See DWAF guideline on "On-site sanitation with difficult ground conditions".	

Decision factor	Long-term permanent services	Temporary services (1 to 5 yrs)	Short term or emergency services (< 1 year)	Comments
Ground conditions (poor drainage)	Septic tanks should be avoided and grey water disposal systems should be properly constructed	Grey water disposal systems should be properly constructed or use communal blocks	Grey water disposal systems should be properly constructed or use communal blocks	If pollution of ground water is a possibility, consult the "Groundwater Protocol (DWAF)"
Operational requirements	Ongoing support services will be required for all sanitation systems, but more extensively for waterborne	Minimal ongoing support except for communal block systems	Minimal ongoing support except for communal block systems	Wet systems (septic tanks, waterborne and communal blocks) require significantly more operational support than dry systems. UDS do need support to ensure householders empty when required and do not misuse.
Settlement Layout	The layout of the settlement may need to be re-planned to allow efficient pipeline installations and access routes	Minimal changes to layout are required. Communal blocks should be positioned to allow convenient access.	Minimal changes to layout are required. Communal blocks should be positioned to allow convenient access.	The density of the settlement will affect the suitability of various options, with higher density favouring communal water borne systems for temporary services, although the layout may need to be "straitened" in the case of retrofitting sewers.

i) Where dry sanitation systems are selected, additional soakpits should be constructed for the disposal of grey water
 ii) More detailed information on the different technical options may be obtained from various DWAF, SABS, CSIR and WRC publications
 (via DWAF regional offices – contacts at end of document)

## 2.4 Financing and Cost Recovery

#### 2.4.1 Capital costs

Financing the capital expenditure of providing sanitation services is governed by a number of considerations, based on sections 2.1, 2.2 and 2.3. Note that the cost ranges for the different technologies that are given in table 2.3.

Where long-term permanent services are provided (i.e. residents will remain on their sites), the financing of services will follow the same strategy as for any other service delivery programme within the municipality. This will usually be related to the standard housing grant incorporating all services, including a toilet.

Where temporary services are provided, (i.e. residents will be moved to a more suitable site), three approaches may be considered. These are:

- Services are provided as communal services only, and hence with no direct subsidy to individual households;
- Basic services are provided directly to households, but are considered temporary and hence are not counted
  as a part of that household's housing subsidy (in which case the full housing subsidy is still available to the
  household for services at the new residential area); or
- Basic services are provided directly to households, but these are counted as part of their housing subsidy and the subsidy available for their future housing is reduced by this amount.

Other considerations regarding the financing of the capital costs of sanitation services to informal settlements are:

- The availability of water services
- The proximity of sewer mains
- The suitability of the soil and geology for the different types of on-site services
- · The availability of local materials and skills
- The actual funds available or that can be sourced through grants and loans

#### 2.4.2 Recurrent costs

The on-going recurrent costs may be financed from various sources. These are as follows:

- The payment of tariffs by the residents benefiting from the services. This is normally minimal from the poor
  residents in the informal settlements, and in general tariffs can only be introduced once the settlement is
  sufficiently developed with both above basic physical infrastructure and competent institutional structures.
- Cross subsidisation from other more affluent residential areas and/or commercial and industrial zones. This
  is usually possible where the municipality is large enough to have at least 95% of its residents paying normal
  tariffs, or where some major industries are contributing significantly to the municipal budget.
- Use of government grants in terms of the "equitable share".
- Making use of a combination of the above.

## 3. FORMULATION OF AN IMPLEMENTATION PLAN

The key starting point in any development plan is to consult existing municipal policy, strategies and development plans to ensure compliance and integration throughout. The next step is to obtain acceptance, participation and buy-in by the community of the strategy that has been formulated. This will usually require a clear understanding of the benefits, required commitments, constraints and available resources.

## 3.1 Securing Community Involvement

The incentives that the residents of an informal settlement may consider appropriate will not necessarily be the same incentives that the municipality has for the development or trans-location of the settlement. It is therefore very important to spend some time initially in consultation with the community to be able to get a clear picture of their aspirations and what incentives would be appropriate.

Generally the incentives of the residents of an informal settlement would include:

- Employment creation
- Improved services (water, sanitation, electricity, roads and storm-water, communications, transport)
- A sense of participation and acknowledgement of their needs
- Safety of their families
- Access to public facilities (schools, shops, etc.)
- Additional opportunities for entrepreneurial development

Through consultation and sensitive listening (not only with the community leaders), the specific incentives that will engender commitment, participation and buy-in will become clear.

## 3.2 Obtaining Consensus on Strategy and Planning Process

#### 3.2.1 Hold preliminary stakeholder workshop and develop preliminary protocol/approach

The aim of this is to arrange a workshop to be attended by the relevant local government officials, politicians, as well as other relevant district and provincial stakeholders to formulate the strategy for sanitation services to informal settlements within the WSA. The national strategy and the development options in section 2 should be presented and discussed in the light of the IDP and WSDP, as well as the relevant benefits identified in the previous step. The outcome of this process should be an agreed protocol or approach to the provision of sanitation services to the informal settlements within the municipalities, and specific actions that will be presented to the communities at the community meetings. The prioritisation of projects to the existing informal settlements should also be discussed, and if possible obtain consensus. In addition, the roles and responsibilities of the various roleplayers should be clarified.

#### 3.2.2 Consult with the community to reach consensus on issues, concerns and proposed approach

Following the initial step of defining the incentives, a follow-up meeting should be held with the community, including stakeholders, key roleplayers, community groups (i.e. civic associations, woman's societies, church groups, burial societies, youth groups, etc.) at a central venue. It is important to note that people need to interact and thoroughly discuss a problem before there is agreement on what problem needs tackling first.

The aim of this and any follow-up meetings with the community is to obtain consensus on the issues of permanency, appropriate levels of service, funding, employment opportunities, community management and other community contributions and involvement. New issues and concerns will be raised and possible solutions identified. A community level sanitation task team or management committee should be established for future interactions and decision making.

### 3.3 Finalise Approach and Implementation Plan

The WSA and municipal officials, together with the members of the "sanitation task team" or "management committee" should review all the information, decisions and minutes of the various meetings and ensure full agreement on the way forward. This should include:

- Current status of sanitation and health/hygiene practices
- The extent of services backlog
- Permanency status
- Appointment of implementing agent and contractors
- Project management responsibilities

- Technology choice
- Tariffs and financing
- Approach to health and hygiene education
- Operation and maintenance responsibilities
- Training and job creation
- Project cost plan

Note that DWAF should be a member of this process to provide guidance and support as required. The municipal officials should document the proposed approach, protocol and implementation plan for ratification by the communities concerned.

### 3.4 Approval of Approach and Implementation Plan

The proposed approach and implementation plan must be submitted to council for a resolution.

## 3.5 Project Registration and Development of an Action Plan

Once the municipal executive committee (Exco) has accepted the proposed protocol/approach, the project should be registered. Where MIG funding is sought, the project must be registered with DPLG or the equivalent department at provincial level for funding through the MIG. After registration, a detailed action plan should be developed to ensure effective and timely implementation of the sanitation project. The action plan should include a time and resource allocation plan, planned implementation milestones, as well as key management activities of reporting, monitoring, progress meetings, submission of invoices, etc.

## 3.6 Check List for Implementation Plan

The following should be included in the implementation plan:

#### 3.6.1 Planning stage

- Approval of the land development objectives
- Establishment or mobilisation of a community development committee
- Assessment of current sanitation situation and health practices, and potential for connection to bulk services
- Assessment of socio-economic and environmental factors
- Assessment of current settlement plan/layout and its impact on service provision
- · Assessment of skills and aspirations of community, and related affordability issues
- · Options for technology choice
- Selection criteria for discussion and choice
- Selection of technology and approach to implementation
- Links to the delivery of other services (water, refuse, roads, electricity, etc)
- Funding of the operation and maintenance of the facilities
- Adherence to the policy principles
- Assesment of services backlog

#### 3.6.2 Design stage

- · Changes to settlement layout where required
- · Setting out of access routes
- Location of communal facilities (where relevant)
- Design of household facilities and other components as planned
- Planning for procurement, materials storage and use of local suppliers

- - Development of training programme
  - Development of health and hygiene education programme
  - Development of project cost plan

#### 3.6.3 Construction stage

- Support and use of local builders
- Support and use of local suppliers
- Quality assurance programme
- Project management
- Monitoring and reporting

#### 3.6.4 Operation and maintenance stage

- Education of users
- · Provision of equipment for local maintenance tasks
- Appointment of local community maintenance team (if required)
- Procedures and cost management for major maintenance activities
- Pit and digester/septic tank emptying procedures (if relevant)

## 4. CONCLUSION

The issue of informal settlements brings together two problems:

The first is how to serve the poor and marginalised communities with effective sanitation services. Secondly, and possibly more important, is the rampant unplanned settlement process. This strategy addresses the first aspect. It is however, vital that the local authorities develop proactive mechanisms to address and to deal with the problem of unplanned settlement development.

## FOR MORE INFORMATION

## **DWAF HEAD OFFICE:**

Chief Directorate: Sanitation

Tel: (012) 336 8811 Fax: (012) 336 7283

## **DWAF REGIONAL OFFICES:**

	Tel:	Fax:
Gauteng	(012) 392 1300	(012) 392 1408
Free State	(051) 405 9000/1	(051) 430 8146
North West	(018) 384 3270	(018) 392 2998
KwaZulu-Natal	(031) 336 2700	(031) 307 7279
Western Cape	(021) 950 7100	(021) 946 3666
Eastern Cape	(043) 604 5400	(043) 604 5587
Northern Cape	(053) 831 4125	(053) 831 5682
Limpopo	(015) 290 1200	(015) 295 3215
Mpumalanga	(013) 759 7300	(013) 755 1678



**FOR MORE INFORMATION** 

**DWAF NATIONAL OFFICE** 

**Chief Directorate: Sanitation** 

Tel: (012) 336 8811 Fax: (012) 336 7283

**DWAF REGIONAL OFFICES** 

**Gauteng Tel**: (012) 392 1300

Fax: (012) 392 1408

Free State Tel: (051) 405 9000/1

Fax: (051) 405 9011

North West Tel: (018) 384 3270

Fax: (018) 392 2998

KwaZulu-Natal Tel: (031) 336 2700

Fax: (031) 307 7279

**Western Cape** Tel: (021) 950 7100

Fax: (021) 946 3666

**Eastern Cape** Tel: (043) 604 5400

Fax: (043) 604 5587

Northern Cape Tel: (053) 831 4125

Fax: (053) 831 5682

**Limpopo Tel:** (015) 290 1200

Fax: (015) 295 3217

**Mpumalanga Tel:** (013) 759 7300

Fax: (013) 755 1678