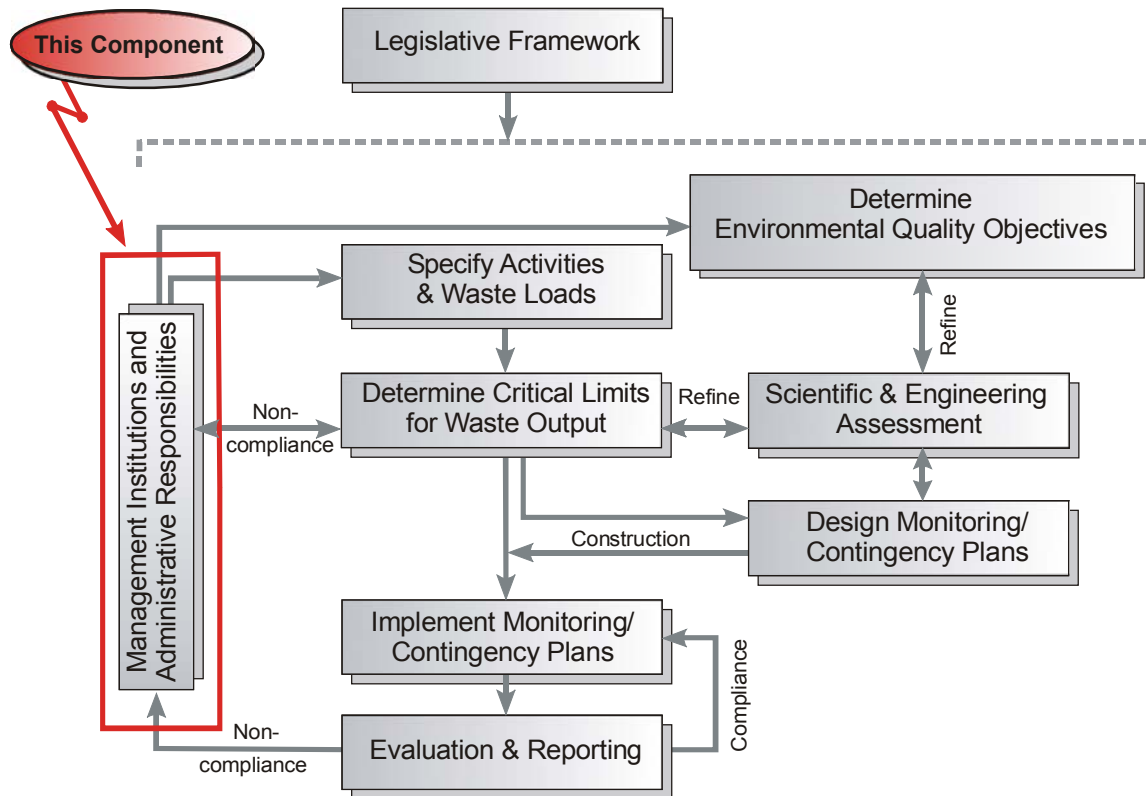


SECTION 3:

MANAGEMENT INSTITUTIONS AND ADMINISTRATIVE RESPONSIBILITIES

SECTION 3: MANAGEMENT INSTITUTIONS AND ADMINISTRATIVE RESPONSIBILITIES



PURPOSE:

The purpose of this component is to identify the management and administrative responsibilities pertaining to the disposal of wastewater to the marine environment. These include:

- *The licence authorisation process (under section 21 of the National Water Act 36 of 1998)*
- *Appointment of local management institution, including all role players.*

3.1 LICENCE AUTHORISATION PROCESS

The disposal of land-derived wastewater to the marine environment is currently governed under the National Water Act 36 of 1998. In the context of this operational policy, water use authorisation, under section 21 of the National Water Act, will be required for:

- New applications to dispose of land-derived wastewater to the marine environment
- Existing discharges of land-derived wastewater to the marine environment that are not classified as existing lawful water use in terms of Section 32 of the NWA
- Upgrading or extension of existing WWTW or industries discharging to the marine environment that were not approved in terms of the original authorisation.

NOTE:

If for instance, an industry or WWTW applies for a licence knowing that there will be future, planned expansions, these could be catered for in the application in order to avoid going through the whole process of applying for a new licence for the actual expansion. Future, planned expansions should also be catered for as part of the EIA process to ensure alignment between the two processes.

- Change in effluent volume or composition (a licence is issued based on a specific effluent volume and composition, therefore if these change, the discharger legally needs to re-apply).

These activities would typically also be subject to the EIA process (DEAT, 1998).

NOTE:

All existing (lawful) discharges of land-derived wastewater to the marine environment should comply with the Basic Principles and Ground Rules of this Operational policy (as set out in Operational policy for the disposal of land-derived water containing waste to the marine environment of South Africa [RSA DWAF Water Quality Management Sub-Series 13.2]).

Therefore, where the potential impact of an existing lawful wastewater discharge has not been assessed properly or where there is reason to believe that such discharge has a negative impact on the receiving marine environment, the responsible authority or organisation will be requested to engage in specific studies within the management framework as set out in this document. The extent of such investigations will depend on the potential risks and sensitivity of the receiving marine environment.

An EIA, as such, will not necessarily be needed in such instances, unless upgrades are involved. Unacceptable impacts or water demand in the catchment could lead to a revision of decisions made during the licence authorisation process and a possible “no go” decision. These issues need to be addressed in the five-yearly revisions of licences. Revisions will be motivated on grounds of impact to environment and compliance to licence conditions.

To assist applicants in the authorisation process, the DWAF has compiled a manual entitled *Water Use Authorisation Process for Individual Applications* (RSA DWAF, 2000), which describes the administrative procedures and parties to be involved at different stages of the process. Also, to assist applicants with the preparation of the water quality management reports to support the licence application, the DWAF has compiled an Aide Mémoire (RSA DWAF 2003a). These documents provide a detailed listing of the type of data and information that needs to be included in the reports for pre-assessment and detailed investigations.

Note that this operational policy provides guidance on aspects related to the disposal of land-derived wastewater to the marine environment that are primarily addressed in *Final Waste Disposal Evaluation* of the water quality management report.

Another important aspect that needs to be addressed in the water management report concerns the details on *Management Systems and Pollution Prevention Methods*, which judge the applicant's ability to effectively manage the proposed wastewater disposal facility.

Links between the authorisation process and specific components in the management framework are illustrated in Figure 3.1.

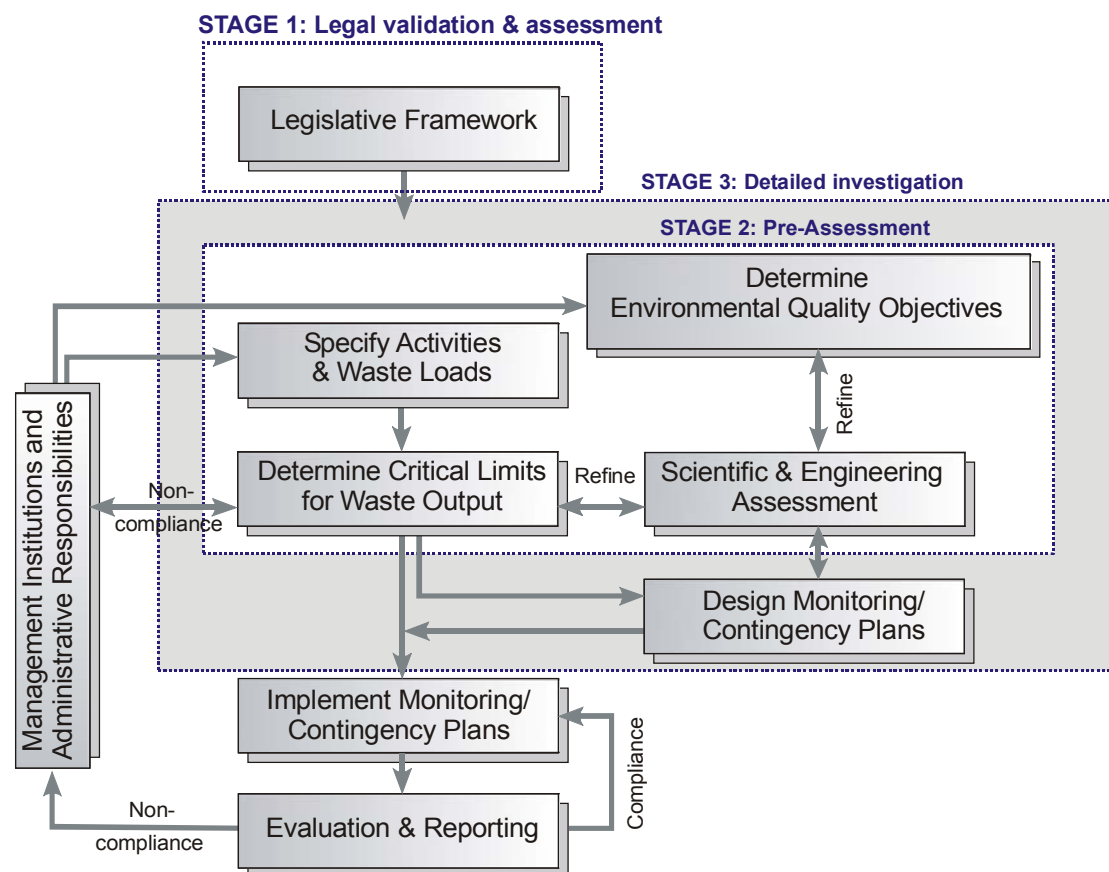


FIGURE 3.1: Links between the authorisation process and specific sections in the management framework

A linear progression of the generic stages in the authorisation process and its alignment with the Environmental Impact Assessment Regulations promulgated under Sections 21, 22 and 26 of the Environment Conservation Act (DEAT, 1998) is illustrated in Figure 3.2.

An overview of the procedures and responsibilities relevant to the authorisation process for the *disposal of land-derived wastewater to the marine environment* is provided in the following sections. These were extracted from the generic manual on the authorisation process of the DWAF (RSA DWAF, 2000).

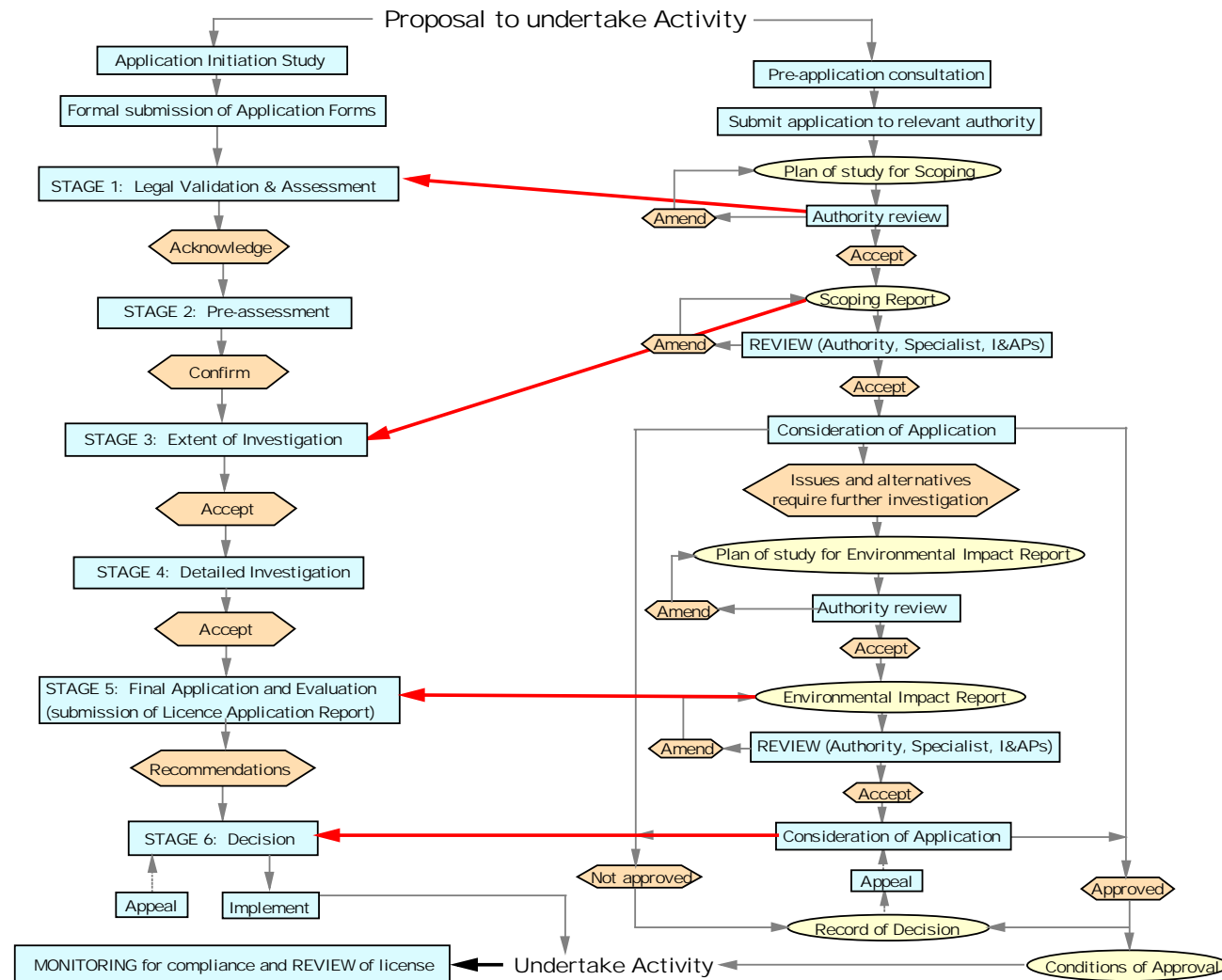
DWAF AUTHORISATION PROCESSEIA PROCEDURES

FIGURE 3.2: Linear progression of the stages of the licence application process, as well as an indication of the levels at which different government departments need to be involved (adapted from RSA DWAF, 2000). Also indicated are the links between the DWAF Authorisation Process and the EIA Procedures

NOTE:

An EIA authorisation cannot replace a water use licence application, since the former does not address all the requirements of the National Water Act. For example, the EIA process often excludes the legal validation (Stage 1) and pre-assessment (Stage 2) stages of the licence authorisation process under the National Water Act.

The granting of an authorisation under the EIA regulations does not necessarily mean that a water use licence will be granted (RSA DWAF, 2000). As there are overlaps in the types of outputs required at certain stages of these processes (refer to Figure 3.2), it is very important that the applicant be aware of these and that action to prevent duplication or unnecessary work.

3.1.1 Initiation of application**PURPOSE:**

To ensure that:

- *Discussions take place with the correct official in the DWAF*
- *Application is legally necessary*
- *Involvement of other authorities is clarified*
- *All legal provisions that are, or could be, applicable to the (proposed) activity are identified, e.g. application of EIA regulations*
- *Correct documentation is provided to the applicant to provide guidance*

The initiation of an application involves initial consultation taking place between the **potential applicant** and the correct official in the **Regional Office of DWAF** or the **CMA**. Alternatively, the DWAF can make an enquiry to undertake such actions (usually to an existing use).

NOTE:

Although all licence applications should be dealt with in an efficient and effective way so as to conclude the process in the shortest possible time, it is important to realise that the evaluation of licence applications should be timeous and, therefore, applications must be submitted promptly.

Once an enquiry has been lodged with the Regional Office of DWAF or the CMA, the official responsible is required to:

- Consult with the *lead water use directorate* in the DWAF, which in this case is the **Manager: Waste Discharge and Disposal**, and obtain all the relevant *procedural and information requirements and process guidelines* (NOTE: guidelines should include those of all relevant sub-directorates, e.g. Industries, Urban Development and Agriculture, and Waste Management)
- Inform the **potential applicant**, in writing, regarding the need to apply for a licence from a legal perspective. In cases where no licence is required or instances where licensing will not be allowed, a written response must also be made to the enquiry, which can be signed by the Regional Director (NOTE: Where an application form has been submitted by an applicant the latter needs to be signed by the delegated authority in the DWAF, in this case the **Manager: Water Use**)
- Provide the **potential applicant** with the relevant *procedural and information requirements and process guidelines and the relevant authorisation process guidelines* relevant to the disposal of land-derived wastewater to the marine environment, as well as the relevant *authorisation process guidelines*.

- Request the **potential applicant** to apply for a licence on the correct and most recent forms (obtainable from the DWAF website <http://www.dwaf.gov.za>)
- Request the **potential applicant** to initiate discussions with other identified Departments for associated authorisations, e.g. Provincial Department of Environmental Affairs *re* implementation of EIA regulations or Department of Minerals and Energy *re* preparation of Environmental Management Plans.

3.1.2 Formal submission of application form

PURPOSE:

*The formal authorisation process is initiated by the submission of a completed licence application form by the **applicant** to the **Regional Office of DWAF**. These forms submitted need to be accompanied by the appropriate fee.*

The official responsible in the Regional Office of DWAF or the CMA is responsible to ensure that the form is handed to the correct DWAF Registry. This Registry ensures that the application form is date-stamped, that a numbered sticker is placed on the form, that the sticker number is recorded on each page of the application form and on the receipt given to the applicant for the application fee.

NOTE:

Where there is a lack of capacity in the Regional Office to handle a specific licence application, the Regional Office may request assistance from the Manager: Waste Discharge and Disposal, in which case an official will be tasked to assist in this regard. The Regional Office will however remain primarily responsible for the licence application.

The Registry then forwards the date-stamped application forms to the Regional Director for signing. The Regional Director then allocates responsibility to the appropriate official, preferably the same official that initiated discussion with the applicant, referred to as the primary responsible officer (**PRO**). Where no official in the Regional Office can fulfil this role, the Regional Director forwards the application to the *Lead Water Use Directorate* in the DWAF, in this case the **Manager: Waste Discharge and Disposal**, who then assigns such duties to one of the officials in the directorate.

Responsibilities of the **PRO**, as part of this step, are to:

- Ensure that application form is completed correctly from an administrative perspective and that desired time frames are included.
- Where applications require revision, return forms to the applicant with of a letter indicating such shortcomings.
- Where applications are correct, ensure that details are recorded on file.

3.1.3 Stage 1: Legal validation and assessment

PURPOSE:

The purpose of the legal validation and assessment stage is to:

- *Formally validate the application against legal requirements of the DWAF*
- *Confirm whether legislation of other Government departments is, or could be, applicable to the water use to ensure cooperative governance, including:*
 - *National Department of Environmental Affairs and Tourism re legislation pertaining to the protection and conservation of the marine environment, e.g. under the National Environmental Management Act, Marine Living Resources Act*
 - *Provincial Department of Environmental Affairs re EIA regulations promulgated under sections 21, 22 and 26 of the Environment Conservation Act*
 - *Department of Minerals and Energy re statutory requirements under the Minerals Act (only applies to disposal of land-derived wastewater associated with mining activities)*
 - *Department of Health re statutory requirements pertaining to human health issues under the Health Act (e.g. recreational use).*
 - *Department of Trade and Industry re statutory requirements pertaining to industries (only applies to disposal of land-derived wastewater associated with industrial activities).*

The **PRO** is required to:

- Verify the water use by confirming with the *Lead Water Use Directorate* in the DWAF (**Manager: Waste Discharge and Disposal**), who will be responsible for the administration and the preparation of the final submission for decision-making regarding the licence by the delegated authority, in this case the **Manager: Water Use**
- In the case of discharges to estuaries, write a letter to the **Manager: Resource Directed Measures** to establish if the appropriate level of Reserve determination has been done. In other cases, a Reserve determination is not requested at this stage, since the outcome of the legal assessment [this stage] or the pre-assessment [next stage] could indicate that the application will not be successful. The purpose of the letter is merely to alert the directorate to a potential need to incorporate a Reserve determination into their prioritisation process, depending on the specific circumstances associated with the application.
- Once the status of the Reserve has been received, to discuss the application with the relevant parties in the DWAF, which may include:
 - **Directorate: Waste Discharge and Disposal** (advising on water use authorisation)
 - **Directorate: Water Allocation** (administering water use licence applications and review; accessing or providing legal advice and support to the Manager: Water Use on water use authorisations and appeals - DWAF, P&R and Ops Restructuring, Head Office Organisational Design, Version 5.2, March 2003)
 - **Directorate: Options Analysis** (analysis of national strategic options to meet future water requirements – especially in terms of re-use of water discharged to the sea through marine outfalls - DWAF, P&R and Ops Restructuring, Head Office Organisational Design, Version 5.2, March 2003).

- Once the potential use has been verified against DWAF requirements, the **applicant** could be requested (in writing) to conduct a legal assessment to determine the legislation applicable by other government departments. This is important since the **PRO** may not be aware of all activities associated with the application, or any associated legal provision that may even prohibit such activities.

Where the applicant has submitted a legal assessment, it needs to be evaluated by the **PRO** and relevant parties of the DWAF. If applicable, the **PRO** can also request written comment from other government departments.

Guidance on the legislative framework for the disposal of land-derived wastewater to the marine environment is provided in Section 2 of this document.

Once legal validation of the application has been completed one of the following decisions is made regarding the status:

- Terminated, in which case the **PRO** forwards the application, with the reasons for the termination, through the *Lead Water Use Directorate (Manager: Waste Discharge and Disposal)* to the delegated authority (**Manager: Water Use**) for a decision
- On hold, in which case the **PRO** requests, in writing, that the **applicant** revise the application, specifying the required information
- Proceed, in which case the **PRO** informs the **applicant** in writing that the application may proceed from a legal perspective.

3.1.4 Stage 2: Pre-assessment

PURPOSE:

The overriding purpose of the pre-assessment stage is to establish the Best Practical Environmental Option of dealing with the proposed water use, in this case, to dispose of land-derived wastewater to the marine environment.

The **PRO** is required to:

- Determine, together with the **Manager: Waste Discharge and Disposal** and all **other relevant managers**, requirements for the pre-assessment (note that in the case of wastewater discharges to estuaries, a Reserve and Resource Quality Objectives must be determined)

NOTE:

A preliminary Ecological Reserve determination on a Rapid level only provides an estimate of the Ecological Category and the recommended Ecological Flow Requirements Scenario. It does not provide Resource Quality Objectives - a key requirement for the review of existing lawful discharges of land-derived wastewater to estuaries (i.e. it provides the Environmental Quality Objectives).

- Establish parties, both within the Department of Water Affairs and Forestry as well as other government departments, that are to be involved in the evaluation of the pre-assessment, and obtain the information required from them. In the case of disposal of land-derived wastewater to the marine environment, these may include:

- **National Department of Environmental Affairs and Tourism** re legislation pertaining to the protection and conservation of the marine environment, e.g. under the National Environmental Management Act, Marine Living Resources Act
- **Provincial Department of Environmental Affairs** re EIA regulations promulgated under section 26 of the Environment Conservation Act
- **Department of Minerals and Energy** re statutory requirements under the Minerals Act (only applies to disposal of land-derived wastewater associated with mining activities)
- **Department of Health** re statutory requirement pertaining to human health issues under the Health Act (e.g. recreational use)
- **Department of Trade and Industry** re statutory requirements pertaining to industries (only applies to disposal of land-derived wastewater associated with industrial activities)
- **Local authority** re local statutory requirements pertaining to land use and infrastructural aspects on which the wastewater disposal scheme may have an influence.

(However, the pre-assessment may also include other departments, for example, where alternative technologies are involved in disposal to a landfill site or atmospheric disposal.)

Guidance on aspects that need to be addressed as part of a pre-assessment for marine disposal of land-derived wastewater is discussed in further detail in Section 6: Scientific and Engineering Assessment of this document.

- Where a pre-assessment is required, inform the **applicant** in writing of the information requirements of the different parties (see above) and request the **applicant** to conduct the pre-assessment.
- Where a Reserve determination is required (i.e. involving an estuary), request the **Manager: Resource Directed Measures** in writing to conduct a Reserve determination.

The **applicant** is required to conduct the pre-assessment. Amongst requirements from other government departments, a pre-assessment needs to include:

- Substantiation for the purpose, objectives, efficiency and actual need for the proposed discharge of water containing waste to the marine environment (taking into account future water demand and supply)
- Investigation showing that the proposed discharge of water containing waste to the marine environment is the best alternative (i.e. Best Practical Environmental Option), by addressing source directed measures such as:
 - Re-use or recycling
 - Pollution prevention and waste minimisation
 - Cleaner technologies
 - Other waste disposal options, e.g. to land or air.

Once the applicant has submitted the pre-assessment to the **Regional DWAF Office** or the CMA, the **PRO** is required to:

- Request comments in writing from the different parties (see above) to evaluate the pre-assessment so as to determine:
 - the need for the water use
 - the applicable water use/s
 - if such use/s are deemed necessary
 - the purpose and objectives of each (proposed) use.

Based on the above, one of the following decisions is made regarding the status:

- *Terminate*, in which case the **PRO** forwards the application, with the reasons for the termination, through the *Lead Water Use Directorate* (**Manager: Waste Discharge and Disposal**) to the delegated authority (**Manager: Water Use**) for a decision
- *On hold*, in which case the **PRO** requests, in writing, that the **applicant** revise the application, specifying the information required. (For example, in the execution of the pre-assessment, the applicant may find that irrigation using wastewater is a more appropriate option than disposal to the marine environment, in which case the water use change and the application details need to be revised.)
- *Proceed* (i.e. where the pre-assessment indicates an acceptable water use), in which case the **PRO** informs the **applicant** in writing confirming:
 - the water use that applies
 - that there appears to be an actual physical need for an application of a water use licence
 - that the DWAF is satisfied with the purpose and objectives of each water use applied for in the pre-assessment.

3.1.5 Stage 3: Extent of Detailed Investigation

PURPOSE:

Where Stage 2: Pre-assessment indicated that wastewater disposal to the marine environment is possibly the Best Practical Environmental Option, potential impacts associated with that option need to be evaluated. The purpose of determining the extent of such detailed investigations is:

To establish whether detailed investigations are required

If so, determine what such detailed investigations should entail, who will conduct such investigations, and in what time frames.

The **PRO** is required to:

- Determine, together with the relevant **Directorate within the DWAF** (in the case of wastewater discharges to estuaries, the Reserve and Resource Quality Objectives need to be determined) if a detailed investigation is required.
- Obtain the information requirements and guidelines for the detailed investigation from the **DWAF parties**, if a detailed investigation is required.

Guidance on aspects that need to be addressed as part of a detailed investigation for marine disposal of land-derived wastewater is discussed in further detail in Section 6: Scientific and Engineering Assessment of this document.

- Where a Reserve determination would be required (i.e. involving an estuary), request the **Manager: Resource Directed Measures** in writing to establish the extent of the investigations pertaining to the determination of Resource Directed Measures, including the Reserve and Resource Quality Objectives.
- Provide in writing to the **applicant**:
 - the information requirements of the **DWAF parties** (refer to box above)
 - a request the applicant to obtain information from **other government departments** that could be involved in aspects relating to the application
 - the instruction, if necessary, to immediately publish the application details, also specifying the media (i.e. involving **Interested and Affected Parties**).

The **applicant** is required to:

- If applicable, obtain information requirements from other relevant legislative authorities. In the case of disposal of land-derived wastewater to the marine environment these could include:
 - **National Department of Environmental Affairs and Tourism** *re* legislation pertaining to the protection and conservation of the marine environment, e.g. under the National Environmental Management Act, Marine Living Resources Act
 - **Provincial Department of Environmental Affairs** *re* EIA regulations promulgated under Sections 21, 22 and 26 of the Environment Conservation Act
 - **Department of Health** *re* statutory requirements pertaining to human health issues under the Health Act (e.g. recreational use)
 - **Department of Minerals and Energy** *re* statutory requirements under the Minerals Act (only applies to disposal of land-derived wastewater associated with mining activities).
 - **Department of Trade and Industry** *re* statutory requirements pertaining the industries (only applies to disposal of land-derived wastewater associated with industrial activities)
 - **Local authority** *re* local statutory requirements pertaining to land use and infrastructural aspects, on which the wastewater disposal scheme may have an influence.
- If required, publish the application in the specified media (e.g. newspaper or notice in local library), detail and record the responses and information requirements from **Interested and Affected Parties**.
- Determine the extent of the detailed investigations based on:
 - information requirements from **DWAF parties** (refer to box on *page 6-10*)
 - information requirements from other appropriate **government departments** or **legislative authorities** (e.g. refer to box on *page 6-10*)
 - issues and concerns raised by any relevant **Interested and Affected Parties**.
- Prepare a report and submit it to the **PRO**, in a format understandable to lay persons. The Report will include the following:
 - Name and address of applicant
 - Description of information requirements of the various authorities and issues raised by Interested and Affected Parties

- Description of proposed wastewater disposal activity, including (a) concept design of the wastewater disposal system, as well as a description of any proposed phases in development and implementation, and (b) details on waste loads (both in terms of volume and constituent composition)
- Description of sensitive ecosystems and other beneficial uses in the study area (this information should be available from the pre-assessment stage)
- Description of the additional scientific and engineering studies that will have to be performed to meet information requirements
- An indication of time frames for finalising the detailed investigations.

NOTE:

This report will be similar to the 'Scoping Report' that would have had to be submitted as part of the EIA process. For activities that are subject to the Minerals Act (e.g. disposal of wastewater from mining activities on land to the marine environment), this report will serve the same purpose as the 'Aide Mémoire'

After submission of the above-mentioned report by the **applicant**, the **PRO** is required to:

- Obtain a report from the **Manager: Resource Directed Measures** containing the extent of the department's detailed investigations, as well as the time frames that are required to conduct the department's investigations, if a Reserve determination is required (e.g. if an estuary is involved)
- Ensure that all relevant **legislative authorities** and **Interested and Affected Parties** (if applicable) evaluate the extent of the detailed investigations and that such authorities or parties submit a report stating if a detailed investigation will be necessary and whether their information requirements will be met (all legislative authorities must confirm acceptance of the extent of the detailed investigations to prevent additional information from being requested from the applicant at a later stage, thus delaying the process)
- Together with the **DWAF parties** (identified at the onset of this stage), decide whether to:
 - *Terminate the application*, in which case the **PRO** forwards the application, with the reasons for the termination, through the *Lead Water Use Directorate (Manager: Waste Discharge and Disposal)* to the delegated authority (**Manager: Water Use**) for a decision
 - *Put the application on hold*, in which case the **PRO** requests, in writing, that the **applicant** revise the application, specifying the information required
 - *Proceed without a detailed investigation* (e.g. information gathered during the pre-assessment stage sufficed), in which case the **PRO** informs the **applicant** in writing and requests the applicant to prepare a final licence application.
 - *Proceed, but where a detailed investigation* (refer to box on page 6-10) would be necessary to reach a final decision (and where the extent of the detailed investigation provided by the applicant meets all requirements), the **PRO**:
 - Develops and records a work schedule for the execution of the detailed investigation, based on the extent of detailed investigations and time frames of the applicant and the **Manager: Resource Directed Measures**
 - Provides the work schedule, in writing, to both the **applicant** and the **Manager: Resource Directed Measures**, hereby accepting the extent of detailed investigations.

3.1.6 Stage 4: Detailed Investigation

PURPOSE:

With regard to the marine disposal of land-derived wastewater, the aim of this stage is to investigate potential impacts of the proposed wastewater disposal system on the receiving marine environment. It is the responsibility of the applicant to demonstrate technically (at the appropriate level of detail) that the proposed activity will result in negligible harm.

The **applicant** is required to:

- Conduct the detailed investigations (refer to box on page 6-10), in consultation with qualified environmental consultants
- Prepare and submit a report containing the findings of the detailed investigation to the **PRO**.

The **Manager: Resource Directed Measures** is required to:

- Conduct the determination of the Reserve, in consultation with qualified environmental consultants (where applicable)
- Submit a report on the Reserve determination to the **PRO**.

The **PRO** is required to:

- Monitor the progress of these investigations and request updates for time frames where these appear to deviate from those proposed in the work schedule
- Where applicable, request the **applicant** to submit the report/s to other **relevant legislative authorities** for evaluation

NOTE:

These reports serve the same purpose as the detailed specialist studies required as part of the EIA process.

- Evaluate the detailed investigations, in consultation with the relevant **DWAF parties**, to determine if requirements and issues were addressed adequately. Based on the outcome the application is either:
 - *Terminated*, in which case the **PRO** forwards the application, with the reasons for the termination, through the *Lead Water Use Directorate (Manager: Waste Discharge and Disposal)* to the delegated authority (**Manager: Water Use**) for a decision
 - *Put on hold*, in which case the **PRO** requests, in writing, that the **applicant** revises the application, specifying the information required
 - *Allowed to proceed*, in which case the **PRO** accepts by informing the **applicant** in writing.

3.1.7 Stage 5: Final Licence Application & Recommendations

PURPOSE:

The purpose to this stage is to compile a final licence application report and to make recommendations regarding the application of the water use, in this case the disposal of land-derived wastewater to the marine environment in consultation with Interested and Affected Parties.

The **PRO** is required to:

- Provide the information obtained from the detailed investigation, including the Reserve to the **applicant**
- Request, in writing, that the **applicant** prepare a summary integrated licence application report and, if applicable, revise the original licence application forms.

The applicant is required to:

- Prepare the summary integrated licence report, revise the licence application forms, and update the forms where necessary with information obtained from the detailed investigation. This report will contain:
 - Revised licence application forms
 - A summary of the outcome of the detailed investigation, including an estimation of the impact on the Reserve and Resource Quality Objectives (e.g. where estuaries are involved)
 - Detailed plans that are associated with the implementation of the wastewater disposal system, e.g. monitoring plans and contingency plans

Guidance on the monitoring and contingency planning, to be undertaken as part of licence conditions for the disposal of land-derived wastewater to the marine environment, is provided in Section 7 and 8 of this document, respectively.

- A plan on the allocation of financial resources for proper construction and sustainable operations of the proposed marine disposal facility, including resources related to contingencies.
- Submit the report to the **PRO**.

NOTE:

Where the EIA regulations are applicable, this report will serve the same purpose as the Environmental Impact Report, and where the Minerals Act is applicable, this report should also address the requirements of the Environmental Management Plan Report.

On receiving the summary integrated licence report, the **PRO** is required to:

- Check the revised licence application forms and the content of the summary report, inform the **applicant**, in writing, of any shortcomings and request a revision of aspects as required, and also ensure that the final and revised applications are recorded
- Evaluate, together with the relevant **DWAF parties** (identified at the onset of Stage 3), the final, acceptable application and the content of the summary integrated licence report against technical criteria, in accordance with section 26 of the National Water Act

- Evaluate the application on the basis of socio-economic criteria in accordance with sections 22 and 27 of the National Water Act, in consultation with relevant **DWAF parties**, other **relevant government departments** and **Interested and Affected Parties**
- Ensure that all decisions, recommendations and any conditions established during the technical and socio-economic evaluations are recorded in a **Record of Decisions**. If the issue of a licence is not recommended the **PRO** also needs to record the reason in the Record of Decisions.

3.1.8 Stage 6: Decision

PURPOSE:

The purpose of this stage is to ensure cooperative governance and compliance with all legal requirements associated with the activity.

Where the issue of a licence is recommended to the **Manager: Water Use**, the PRO is required to:

- Ensure that any charges relevant to the disposal of land-derived wastewater to the marine environment are applied (e.g. the policies *re* waste discharge charges)
- Request proof from the **applicant**, in writing, that all other (non-National Water Act) legislation has been complied with (refer to Appendix B in the *Operational Policy for disposal of land-derived water containing waste to the marine environment of South Africa: Appendices* [RSA DWAF Water Quality Management Sub-Series No. 13.4]).
- Compile a draft licence with conditions and distribute that to the relevant **DWAF parties**, and on receiving comments, prepare the final draft licence (reasons for including and excluding of comments must be recorded in a **Decision of Record** and provided to the relevant DWAF parties). In the case of wastewater discharges, a licence should, for example, include:
 - Specifications on the volume (flow rate) and constituent concentrations of the wastewater

Guidance on specification of wastewaters is provided in Section 5 of this document.

- Specification on monitoring programmes
- Time frames of submission of monitoring reports.

Guidance on the design of monitoring programmes, to be undertaken as part of licence conditions for the disposal of land-derived wastewater to the marine environment, is provided in Section 7 of this document.

- Submit the following documentation to the **Manager: Waste Discharge and Disposal**:
 - Record of Decisions
 - Licence application forms
 - Summary integrated licence application report
 - Final draft licence
 - Routing form indicating all relevant DWAF parties.

On receiving the above submission, the **Manager: Waste Discharge and Disposal** is required to:

- Verify all documentation
- Submit all verified documentation to the delegated authority in the DWAF, in this case the **Manager: Water Use**, for a decision via the routing form to the **relevant DWAF parties**.

The **Manager: Water Use** decides, on the basis of the information provided, whether to issue the licence or not. The approved/disapproved application for the licence and the Record of Decision and all other relevant documentation is then returned to the **PRO**.

Once the decision has been made, the **PRO** is required to:

- Inform, in writing, the **applicant**, all other **relevant DWAF parties**, and any **other person** who has objected to the application, of the outcome
- Record the status of the application
- Manage objections to the decision, and must refer appeals to the Water Tribunal or to any other applicable appeal mechanisms
- Ensure that the licence is issued to the **applicant**, together with non-DWAF authorisations as decided during the licence application process
- Review the licence according to the National Water Act provisions, i.e. every five years.

3.1.9 Monitoring and review

After the licence has been issued, the **licence holder** (both existing and new) is required to:

- Construct and operate the wastewater disposal system in accordance with licence conditions
- Conduct ongoing monitoring of the wastewater disposal system (the 'source') and the receiving marine environment (the 'resource'), as stipulated in the licence, and implement appropriate management strategies and actions in the case of non-compliance, after consultation with the DWAF through the **PRO**.

A detailed Monitoring Report must be supplied to the DWAF, other relevant authorities (where and if required) and the local management institution clearly stipulating the following:

- List of Monitoring objective/s
- Details of the design and implementation of the monitoring programme
- Evaluation of the monitoring data in relation to related monitoring objectives
- Statement on whether the monitoring objectives have been complied with
- Management strategies and actions required to address non-compliance
- Recommendations on refinements to the monitoring programme
- Appendices containing, for example, laboratory reports, raw data tables etc.

A reporting schedule needs to be negotiated with the DWAF, as well as with the local management institution, but it is feasible to expect Monitoring Reports after each set of monitoring surveys, e.g. on an annual basis.

Where components of the monitoring programme are conducted at shorter time scales, e.g. microbiological monitoring programmes at a recreation area, these need to be submitted to the DWAF as, for example, monthly interim reports, clearly highlighting preliminary indications of non-compliance to monitoring objectives as well as management strategies and actions that will be taken to address the issue in good time.

Further guidance on monitoring associated with disposal of land-derived wastewater to the marine environment is provided in Section 7 of this document.

In accordance with provisions in the NWA, the PRO is responsible for initiating the review process of a licence every five years. As part of the review process, the following needs to be taken into account:

- Compliance with all licence conditions
- Re-assessment of the activity's alignment with Policy pertaining to the disposal of land-derived wastewater to the marine environment, and in particular, whether the licence conditions could still be considered as the *Best Practical Environmental Option*
- Review of monitoring reports to assess if, for example, the critical limits and performance of the wastewater disposal system are still meeting the desired environmental quality objectives.
- Based on the outcome of the above, the applicant could be requested to conduct further investigations for confirmation, on the basis of which the licence may be withdrawn, revised or maintained
- Refinement of monitoring programmes, where applicable.

NOTE:

As a standard condition in licences, non-compliance must be reported to the Regional Director of the DWAF and actions taken to ensure compliance. The policy of the DWAF is to work together with water users in order to improve compliance but directives could be issued to the licensee for non-compliance. Only after failure to react to such a directive, will prosecution follow. DWAF works together with the Police Service and Public Prosecutor in order to prosecute a case of non-compliance or pollution. Evidence is needed for a successful prosecution. Samples must be taken in the presence of a witness and analysed in order to obtain evidence of a pollution incident. Once evidence is collected the Police Service will take over the investigation, which is often a lengthy process and can take a year or longer before it comes to court.

3.2 LOCAL MANAGEMENT INSTITUTIONS

Although the DWAF is responsible for the overarching management and administration of the disposal of land-derived wastewater to the marine environment, a key element in the successful implementation of this operational policy is the establishment of local management institutions, representing all the role players in a designated area, and which fulfil the role of 'local watchdogs' or 'custodians'. Local management institutions will play a leading role in identifying non-compliance (i.e. they will become the local 'watchdogs'), based on information provided by scientifically sound monitoring programmes. In the case of non-compliance, this information will provide the local management institution with an informed, scientific base from which to challenge the responsible authority (e.g. DWAF) to respond appropriately (e.g. prosecuting the offender) where such authorities are reluctant to do so. However, water services providers (operating WWTW) and industries are ultimately responsible in terms of their individual licence agreements with the DWAF.

Where multiple developments and activities occur in a study area, it is usually extremely difficult and financially uneconomical to manage marine environmental issues in isolation because of, for example, their potential cumulative or synergistic effect on the receiving environment. Collaboration is often best achieved through a joint local management institution. Local management institutions are also considered the appropriate platform for facilitating the joint funding of studies (such as impact assessments and monitoring) where two or more developments/activities may be responsible for pollution in a particular area.

It is essential that the local management institution include all relevant interested and affected parties or stakeholders in order to facilitate a participatory approach in decision-making. These stakeholders include, for example, representatives from:

- Department of Water Affairs and Forestry (regional office)
- Department of Environmental Affairs and Tourism
- Department of Health (where applicable)
- Department of Minerals and Energy (where applicable)
- Department of Transport (where applicable)
- National Ports Authorities (where applicable)
- Provincial Department of Environmental Affairs
- Nature Conservation Board
- Local authorities (municipalities)
- Industries
- Tourism Board and recreation clubs
- Local residents, e.g. ratepayers association
- Non-government organisations.

Institutions that are already partly fulfilling the role envisaged for the local management institutions include:

- Catchment management forums
- Pipeline monitoring committees
- Pipeline advisory committees
- Pipeline forums (e.g. KZN coastline)
- Water quality forums (e.g. Saldanha Bay and False Bay/Table Bay)
- Pipeline technical steering committees (e.g. Hout Bay).

Although such institutions could be initiated from local level it is, however, crucial that these be coordinated from a national (or regional) level by the responsible government authorities, such as the DEAT and DWAF. It is therefore recommended that the responsible government departments jointly investigate a legal route whereby local management institutions can be formally constituted to assist in the integrated management and control quality of marine water resources in South Africa. Towards enforcing the involvement of local role players, the DWAF already requires the establishment of a local monitoring committee, as a licence condition for the disposal of land-derived wastewater to the marine environment.