

POLICY ON THE DISPOSAL OF MEDICAL WASTE

- I. All medical waste must be incinerated for at least 1 second at 800 °C in an incinerator with a valid licence in terms of the Atmospheric Pollution Prevention Act, 1965 (Act 45 of 1965), which has available capacity.
- II. Should there be technological options other than incineration available for the treatment of biohazardous waste (excluding anatomical parts, radioactive waste and chemotherapeutic waste), which will have final results with regard to impacts to the environment and human health similar to, or better than, that of incineration, the Department will consider motivations to use these technologies. This implies that all infection risk/potential should be completely eliminated over time, **and** the waste should no longer be recognisable as of medical origin.

PROCEDURE TO BE FOLLOWED FOR OBTAINING APPROVAL FOR THE UTILISATION OF TECHNOLOGIES ALTERNATIVE TO INCINERATION FOR THE HANDLING OF MEDICAL WASTE

1. An application must be submitted to the Department, and the application must be supported by an extensive motivation report containing a general technical assessment of the technology. The information required in the motivation report/general technical assessment (GTA) must include, but is not limited to, the following:
 - 1.1. A detailed description of the project life cycle (e.g. construction, commissioning, operation etc.)
 - 1.2. A detailed description of the proposed technology;
 - 1.3. A product life cycle: all processes and procedures to be used in the implementation of the proposed technology, including the following:
 - 1.3.1. Types of medical waste to be treated and any methods for sorting this waste
 - 1.3.2. The final products resulting from the proposed technology;
 - 1.3.3. Classification of the final product according to the document *Minimum Requirements for the Handling, Classification, and Disposal of Hazardous waste*,
 - 1.3.4. The location where the final products will be disposed of, including detail regarding any legal obligations and constraints at that location; as well as specific operational procedures and precautions that must be followed by the Site Operator;
 - 1.3.5. Sustainable evidence that the final products resulting from the proposed technology will have effects similar to, or better than, the effects of incineration on the environment and on human health, including reliable tests conducted over time to determine the presence and/or persistence of the following:
 - ◆ *Escherichia coli*
 - ◆ *Streptococcus faecalis*
 - ◆ *Proteus vulgaris*
 - ◆ *Proteus* sp.

- ◆ *Klebsiella aerogens*
- ◆ *Alcaligenes faecalis*
- ◆ *Micrococcus* spp.
- ◆ *Staphylococcus aureus*
- ◆ *Staphylococcus albus*
- ◆ *Pseudomonas aeruginosa*
- ◆ *Candida albicans*
- ◆ Hepatitis B
- ◆ HIV
- ◆ HIV infected cells

- 1.3.6. A water management plan addressing all issues with regard to water quality and quantity (including a detailed water balance),
 - 1.3.7. A detailed mass balance,
 - 1.3.8. If transportation of medical waste from different sources to a central point is required, all precautions necessary to minimise the risk of spillage,
 - 1.3.9. The impacts of the processes, procedures and final products as well as the disposal methods on the environment and on human health; and
 - 1.3.10. A conclusion containing a clear statement by the applicant, supported with reliable evidence, to the effect that this alternative technology will have effects similar to incineration on the environment and on human health.
2. The Department may, during the process of evaluating the application, require any additional information from the applicant that may be necessary to reach a decision.
 3. Should an application to use an alternative technology at a specific Waste Disposal Site be approved by the Department, the Permit Holder of that specific site must be approached by the successful applicant with a request to dispose of the final product resulting from this technology at that Site.
 4. Should the Permit Holder at that Site give his consent to the applicant, in consultation with parties involved in his Site, that the waste resulting from the use of this technology may be disposed on at his Site, the Permit Holder must then submit an application for a Permit amendment to the Department, since all Permits for landfill sites exclude medical wastes to be landfilled, unless it has been incinerated.
 5. The Department will then consider the application for a Permit amendment, as submitted by the Permit Holder of the Site.
 6. Should the application for a Permit amendment be approved, the permit amendment will then include specific conditions to control the disposal of this waste in a manner that is acceptable to all parties.
 7. Only after the Permit Holder has received the approved Permit amendment, may this technology be used to handle medical waste.

Detailed procedure to follow when application is made for approval of alternative technology is attached. (Numbers in brackets correspond to numbers above).

Step in process	Responsible party*
General technical assessment (GTA) of alternative technology*	
Submit GTA (1)	Applicant
Evaluation of GTA (2)	DWAF, DEAT, Dept. of Health
Finalisation of GTA (2)	Applicant
Evaluation of final GTA and letter <i>supporting</i> technology	DWAF, DEAT
Project specific Environmental Impact Assessment (EIA)	
Submit plan of study for scoping	Applicant
Approval of plan of scoping	DEAT
Public participation	Applicant
Submit scoping report	Applicant
Approval of scoping report	DEAT
Submit plan of study for Environmental Impact Assessment Report (EIR)	Applicant
Approval of Plan of study for EIR	DEAT
Conduct EIR	Applicant
Submit draft EIR for comment	Applicant
Comments on draft EIR	Interested and Affected Parties
Receive comments, prepare and submit final EIR	Applicant
Evaluation of final EIA and issuing of EIR authorisation	DEAT
Application for implementation of alternative technology	
Submit application for approval to DWAF (3)	Applicant
Evaluation of application and <i>approval</i> for implementation of alternative technology at specific location (3)	DWAF
Request permission for disposal from Permit Holder of specific site destined to accept final product (3) or Apply for permit in terms of Section 20	Applicant
Consultation with I&AP's at specific site (4)	Permit Holder
Consent to disposal of treated waste (4)	Permit Holder
Submit application for Permit amendment to DWAF (5)	Permit Holder
Evaluate application and amend Permit conditions (6)	DWAF
Implementation of technology (7)	Applicant/Permit Holder

DWAF: Department of Water Affairs and Forestry
DEAT: Department of Environmental Affairs and tourism