

Intractable Waste Disposal Facility, Mt Walton East, Change to Environmental Conditions

Waste Management (WA)

**Section 46 Report and Recommendations
of the Environmental Protection Authority**

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Summary and recommendations

Waste Management (WA) (the proponent) requested a review of the environmental conditions and commitments, and changes to the operational management and transport procedures for intractable waste disposal at Mt Walton East.

The Minister for the Environment requested the Environmental Protection Authority (EPA,) under Section 46 (1) of the *Environmental Protection Act 1986*, to inquire into and report on whether or not the conditions or procedures related to Intractable Waste Disposal at Mt Walton East should be changed.

This report provides the EPA's advice and recommendations to the Minister for the Environment on the conditions and procedures relevant to the proposal in accordance with Section 46(3) of the *Environmental Protection Act 1986*.

Relevant environmental factors

The EPA's assessment of the environmental factors considered in its previous (1988, 1992, 1994 and 2000) assessments of the proposal have not changed as a result of the proponent's request to review the environmental conditions and commitments, and make changes to the operational management of waste at the facility and transport of waste to the facility. Therefore, it is the EPA's opinion that the following are the environmental issues and factors relevant to the request, which require evaluation in the report:

- changes to conditions and commitments;
- consolidation of commitments and conditions;
- changes to operational management at the facility; and
- updating of conditions and commitments to the current practice and environmental protection requirements.

Conclusion

The EPA has considered the request by the Minister for the Environment to review the environmental conditions and commitments, and make changes to operational management and transport of waste to the intractable waste disposal facility at Mt Walton East. The EPA has concluded that the changes to the implementation of the proposal not impact on the environmental factors addressed in the existing four Ministerial Statements and licence conditions for the facility.

The EPA believes that no circumstances have arisen since the proposals for disposal of intractable waste at Mt Walton East were originally assessed that would cause the EPA to reconsider its previous assessments or its previous recommendations as to the environmental acceptability of the project.

In addition to reporting on the review of the environmental conditions and commitments, and proposed changes to operational management and transport of waste to the intractable waste disposal facility at Mt Walton East, the EPA considers that conditions attached to the environmental approvals should be updated to be consistent with current practice and environmental protection requirements. Accordingly, it has also reported on the updating of conditions.

Recommendations

The EPA submits the following recommendations to the Minister for the Environment:

1. That the Minister notes that this report is pursuant to Section 46(3) of *the Environmental Protection Act 1986* and thus is limited to consideration of proposed changes to the original conditions.

2. The Minister notes that the EPA in considering this proposal noted that the proponent has consulted with relevant stakeholders, including the Community Liaison Committee for Mt Walton East.
3. The Minister notes that the proposed change is to review of the environmental conditions and commitments, and make changes to the operational management and transport procedures for intractable waste disposal at Mt Walton East.
4. The EPA recommends that the Minister considers the report on the relevant environmental factors as set out in Section 3.
5. That the Minister for the Environment notes that the EPA has concluded that the existing environmental conditions applied to the operation of the Intractable Waste Disposal Facility at Mt Walton East, as per Ministerial Statements 44, 205, 353 and 533, should be replaced by a consolidated set of Environmental Conditions and Procedures, including proponent commitments, as set out in Appendix 4.
6. The Minister imposes the amended conditions, commitments and procedures recommended in Appendix 4 of this report.

Conditions

The EPA recommends that the following conditions, which are set out in detail in Appendix 4, be imposed if the proposal by Waste Management (WA) is approved for implementation:

1. The existing environmental conditions applied to the project (Ministerial Statements 44, 205, 353 and 533 and licence conditions) be replaced by one Ministerial Statement to:
 - incorporate changes to conditions and commitments;
 - consolidate the conditions and commitments;
 - modify the operational management of the facility; and
 - update the conditions and commitments to reflect the current practice and environmental protection requirements.
2. The commitments made by the proponent to be made legally binding through the environmental conditions set in accordance with Part IV of the *Environmental Protection Act 1986*.
3. The standard proponent, commencement and auditing conditions be imposed in accordance with current practice and environmental protection requirements.

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1. Introduction and background

The Minister for the Environment has requested the Environmental Protection Authority (EPA) to consider and provide advice under Section 46(1) of the *Environmental Protection Act 1986* on the Waste Management (WA) proposal to review the environmental conditions and commitments, and make changes to operational management and transport of waste to the intractable waste disposal facility (IWDF) at Mt Walton East.

The IWDF has been the subject of numerous proposals, changes of proposal and assessments since 1988 resulting in a complex set of Ministerial Conditions and proponent commitments. The original proposal to establish an intractable waste disposal facility was assessed by the EPA in 1988 (Health Department of Western Australia, 1988) at the level of Public Environmental Review (PER) (Ministerial Statement 44). This proposal included the establishment of a PCB incinerator and the disposal of low-level radioactive wastes. In 1991 the EPA recommended approval for the transport of PCBs to the site via road transport (EPA, 1991) (Ministerial Statement 205). Recognising that the incinerator was unlikely to be built a new proposal for the disposal of a range of intractable wastes by full clay containment (shaft entombment or trench burial) (Health Department of Western Australia, 1993) was referred to the EPA for assessment in 1993. This proposal was assessed at the level of Consultative Environmental Review (CER) and, as well as a number of additional commitments, adopted all the conditions and commitments associated with the 1988 proposal (Ministerial Statement 353).

More recently in 1999 the proponent requested an extension of the time limit on approvals. This request was assessed under Section 46 and approved resulting in a fourth Ministerial Statement for the facility (Ministerial Statement 533). Table 1 provides a summary of the EPA assessments and Ministerial Statements associated with the IWDF facility at Mt Walton.

The implementation and auditing of disposal operations at the IWDF has proven to be complex due to overlapping requirements and conflicts between some conditions and commitments associated with each of the individual assessments. As a result Waste Management (WA) (the proponent) has proposed a review and consolidation of all conditions and commitments in the preceding four Ministerial Statements into one Ministerial Statement. This consolidation is proposed to provide a clearer and relevant set of Ministerial Conditions and Commitments for the operation of the IWDF.

In addition, the proponent has also proposed changes to the operational management and transport procedures for intractable wastes to Mt Walton East.

The primary changes include:

- the use of waste acceptance criteria for accepting waste at the IWDF;
- changes to commitments relating to transport operations;
- a description of proposed packaging and containment requirements;
- the changes to fencing and security commitments;
- the new commitment to an Environmental Management System (EMS); and
- the intention not to proceed with the incinerator component of the original proposal.

Table 1: Summary of EPA assessments and Ministerial Statements for the IWDF at Mt Walton.

{PR IVA TE }Date	Proponent	Proposal	Assessment	EPA Bulletin No.	Approval
1988	Health Department of Western Australia	Proposed integrated waste disposal facility eastern goldfields Western Australia	PER	353	Approved by Minister for the Environment on advice from EPA. (Statement 44)
1991	Health Department of Western Australia	Intractable Hazardous Waste Disposal Facility near Koolyanobbing.	S46	572	Proposed location change to a more remote site. Approved by Minister for the Environment on advice from EPA. (Statement 205)
1993	Health Department of Western Australia	Disposal by shaft entombment or trench burial of a range of intractable wastes at the Intractable Waste Disposal Facility Mt Walton, East Shire of Coolgardie.	CER	726	Approved by Minister for the Environment on advice from EPA. (Statement 353)
1999	Waste Management (WA)	Disposal by shaft entombment or trench burial of a range of intractable wastes at the Intractable Waste Disposal Facility Mt Walton, East Shire of Coolgardie - extension of time limit on approval.	S46	954	Extension of time limit for environmental approval granted. (Statement 533)

Further details of the proposal are presented in Section 2 of this Report. Section 3 discusses environmental issues and factors relevant to the proposal. The Conditions and procedures to which the proposal should be subject, if the Minister determines that it may be implemented, are set out in Section 4. Section 5 presents the EPA's conclusions and Section 6, the EPA's Recommendations.

A list of people and organisations that made submissions is included in Appendix 1 and References are listed in Appendix 2. Environmental Condition Statements 44, 205, 353 and 533 published during 1988, 1992, 1994 and 2000 respectively are presented in Appendix 3. The recommended conditions and procedures and proponent's commitments are provided in Appendix 4.

Appendix 5 contains a summary of the public submissions and the proponent's response. The summary of public submissions and the proponent's response is included as a matter of information only and do not form part of the EPA's report and recommendations. The EPA has considered issues arising from this process relating to identifying and assessing relevant environmental issues.

Appendix 6 contains a reconciliation of existing and proposed conditions and commitments for the facility.

2. The proposal

Approved proposal

The IWDF is located in the Goldfields Region within the Shire of Coolgardie, and is 75km north-east of Koolyanobbing and approximately 53km north-east of Jaurdi Station Homestead (unoccupied). The site occupies a 25km² Crown Reserve No. 42001 and is accessed by a 100km long dedicated unsurfaced road (Crown Reserve No. 44102) that extends northward from the Boorabbin Siding on Great Eastern Highway.

Mt Walton East is a Class V (Intractable) landfill that forms an important part of the State's waste management infrastructure, providing a secure and long term disposal option for the State's low-level radioactive, chemical, and other intractable wastes. The facility is only used

when all other practicably available disposal, recycling, and re-use options have been exhausted; and is used only for disposal of wastes generated in Western Australia.

The IWDF was first proposed by the Health Department of Western Australia in 1988, and approved by the then Minister for the Environment on advice of the EPA. Eleven disposal operations have been conducted at the IWDF since 1992. Intractable wastes such as low-level radioactive waste from process equipment and items such as exit signs and smoke detectors, arsenical sheep dip residues, pesticides, DDT and toluene contaminated soil, arsenic trioxide, and PCB contaminated soil have been disposed in an environmentally acceptable manner.

The IWDF has been the subject of numerous proposals and changes of proposals since 1988, which has resulted in a complex set of Ministerial conditions and commitments. The proponent has changed from the Health Department of Western Australia (1988 to 1996), to the Minister for the Environment (1996 to 1998), and is currently Waste Management (WA), a body corporate of the Department of Environmental Protection.

A summary of the key characteristics of the facility and its operations is provided in Table 2.

Table 2: Summary of key proposal characteristics

Element	Description
Site location	The Intractable Waste Disposal Facility (IWDF), Mt Walton East is located approximately 125 kilometres north-west of Kalgoorlie-Boulder in the Shire of Coolgardie.
Potential wastes	The list of potential wastes identified in Appendix 1 of Bulletin 726 "Potential Wastes for Disposal at the IWDF, Mt Walton East", as revised from time to time by the Minister for the Environment on the advice of the Environmental Protection Authority.
Process	Shaft entombment or trench burial of waste capped with water-shedding dome.
Environmental Management Program/Plan	<p>Each application to dispose of intractable wastes identified in Appendix 1 will require the preparation of an Environmental Management Plan (including consideration of alternative destruction technologies) for disposal of those wastes at the IWDF, Mt Walton East.</p> <p>Issues to be considered in the Environmental Management Program include:</p> <ul style="list-style-type: none"> • transportation; • details of packaging; • emergency procedures; • disposal of waste containers and other solid wastes from the facility; and • a monitoring program. <p>For the transport operation the proponent will:</p> <ul style="list-style-type: none"> • establish detailed specifications for waste loading, transfer and unloading areas; • outline specific safeguards for rail containers and their contents; • identify responsibility for the various aspects of transport and transfer operations; • prepare contingency plans for dealing with spillages should they occur; and • liaise with the local communities over emergency procedures.
Reporting	Monitoring reports submitted to Environmental Protection Authority every 6 months and at least every 12 months a report documenting on-going monitoring programs and status of wastes disposed of on site.

A more detailed description of the original proposal is contained in the various EPA assessments of the proposal (EPA, 1988, 1993, 1994 and 1999) and associated proponent documentation (Health Department of Western Australia, 1988 and 1993). The existing environmental conditions imposed on the proposal are contained in Appendix 3.

The proponent

The proponent for the IWDF has changed twice since 1988 as follows:

- Health Department of Western Australia (1988 to 1996);
- Department of Environmental Protection of Western Australia (1996 to 1998); and
- Waste Management (WA) (1 July 1998 to present).

Following amendments to the *Environmental Protection Act 1986* (gazetted 26/6/98, p3369) which took effect on 1 July 1998, and consequent completion of formal documentation in November 1998, Waste Management (WA) a body corporate of the Department of Environmental Protection (DEP), is now the proponent for operation of the IWDF under the Environmental Protection Act. The IWDF is owned and operated by Waste Management (WA) on behalf of the Western Australian Government. The IWDF site is operated under Ministerial Direction and the amendments to the *Environmental Protection Act 1986* require the EPA to monitor, or cause to be monitored, the implementation of any proposal for which Waste management (WA) is the proponent where the Minister has issued a Ministerial Statement or Direction.

Waste Management (WA) is the operator of the IWDF, and senior officers in the Department of Environmental Protection, working for Waste Management (WA), manage the IWDF site.

Proposed changes to environmental conditions

The primary changes to environmental conditions, operational procedures at the IWDF and transport of waste to the IWDF include:

- consolidation of the four existing Ministerial Statements (44, 205, 353 and 533) into a single Ministerial Statement;
- changes to commitments relating to transport operations including making double containment of the waste during transport a standard rather than a mandatory requirement;
- the use of waste acceptance criteria for accepting waste at the IWDF rather than the existing prescriptive list of wastes approved for disposal at the IWDF;
- changes to fencing and security commitments;
- a new commitment to an Environmental Management System (EMS); and
- an intention not to proceed with the incinerator component of the original proposal.

A summary of the revised key characteristics of the facility and its operations is provided in Table 3.

Table 3: Summary of revised key proposal characteristics

Element	Description
Location	Approximately 125 km north-west of Kalgoorlie-Boulder in the Shire of Coolgardie
Area	25 square kilometres
Purpose	For the disposal of intractable wastes for which there is no other practical method of disposal.
Potential waste	Restricted to those that meet the waste acceptance criteria
Disposal method	Burial by shaft entombment or trench, capped with water-shedding dome.
Environmental Management	<p>Environmental Management Plans as listed below:</p> <ul style="list-style-type: none"> • flora and fauna; • water; • air quality; • decommissioning and rehabilitation; • health and safety; • emergency response; • radiation; and • transport. <p>Procedures for each disposal operation developed consistent with Operational Guidelines as listed below:</p> <ul style="list-style-type: none"> • environmental; • waste acceptance; • health and safety and emergency response; • radiation; and • transport.
Reporting	Long term monitoring and operational monitoring to be addressed in Environmental Management Plans

Note: The incinerator component of assessment number 168, will not proceed and has been removed from the description of the proposal.

3. Relevant environmental factors

Section 46(3) of the *Environmental Protection Act 1986* requires the EPA to report to the Minister for the Environment on whether or not the proposed changes to conditions or procedures should be allowed. In addition, the EPA may make recommendations as it sees fit.

For S46 where proposal has changed

Having considered appropriate public and government submissions and the proponent's response to submissions and an Independent Assessor's advice, it is the EPA's opinion that its inquiry into the proposed modification to conditions and commitments associated with the IWDF at Mt Walton should include:

- changes to conditions and commitments;
- consolidation of conditions and commitments;

- changes to operational management of the facility; and
- updating of conditions and commitments to reflect the current requirements and style.

The above issues were identified from the EPA's consideration and review of the environmental issues generated from the Section 46 environmental review document and the public submissions received, in conjunction with the key proposal characteristics (including significance of the potential impacts), the adequacy of the proponent's response and commitments, and the effectiveness of current management.

The environmental significance of the above issues of the proposal and their assessment are discussed in Sections 3.1 to 3.4 of this report. The description of each issue indicates how it relates to the project.

For S46 when request to extend time limit and review of existing conditions

3.1 Review of conditions and commitments

Description

The proponent has conducted a review of the existing four Ministerial Statements associated with the IWDF and concluded that a number of conditions and commitments are redundant due to:

- the introduction of statutory regulations since the IWDF has commenced operation;
- a decision by the proponent not to proceed with the incinerator component of the original proposal; and
- proposed changes to conditions and commitments based on operational experience of the IWDF.

Since the IWDF commenced operations in 1988 the following statutory regulations have been introduced:

- Australian Dangerous Goods Code (1998); and
- Code of Practice for the Near-Surface Disposal of Radioactive Waste in Australia (1992).

The proponent has clearly indicated that the incinerator component of the proposal will not proceed (ATA Environmental, 2000, p50). In addition, the incinerator component of the original proposal only received in-principle approval (EPA, 1988) with additional approval required prior to construction or operation of such a facility. Any future proposal for an incinerator at this facility will require separate referral to the EPA for assessment.

Operational experience of the IWDF has identified a number of conditions and commitments which have proven difficult and, at times impracticable, to implement. These conditions relate to:

- waste acceptance;
- packaging and containment;
- fencing and security;
- management of existing wastes disposed of at the intractable waste disposal facility; and
- the incinerator component of the original proposal.

The proponent has presented a suite of revised commitments to replace the existing conditions and commitments associated with these issues (Appendix 4). The Section 46 Environmental

Review document (ATA Environmental, 2000) presents a detailed discussion on the reasons for the proposed changes including examples of difficulties encountered during the implementation. A summary of the reasons for the proposed changes is presented below.

Waste acceptance

A list of wastes was presented for the first time in the 1993 CER (Health Department of Western Australia, 1993) for which approval for disposal to the IWDF has been granted subject to conditions. This list does not include all wastes that may be suitable for disposal at the IWDF and it times is either too general or too specific, depending of the waste stream being considered, for effective and balanced evaluation of the acceptability of a waste for disposal at Mt Walton.

The existing prescriptive list of wastes is proposed to be replaced with waste acceptance criteria (Commitment 4.1). Each waste can be individually examined at a time closer to its actual disposal to provide improved efficiencies in the level of information provided to the EPA. This also ensures the most up to date information on options other than disposal at the IWDF can be considered with the IWDF being the disposal option of last practicable resort.

Packaging and containment

Currently there is a commitment that states “all waste consigned for transport will be in double containment”. This commitment was incorporated in Ministerial Statement No. 44 in 1988 (44:P10). The commitment related to the 1988 proposal to operate a high temperature incinerator at the site with a separate area for burial of low-level radioactive wastes. The requirement for double containment specifically related to the transport of liquid organochlorine pesticides and PCBs. While the purpose of the IWDF and the nature of the wastes have changed, the commitment has never been amended to reflect these changes. Consequently, the requirement for double containment of all wastes remains, although only solid waste is accepted at the IWDF.

It is proposed that the original commitment (44:P10) be replaced by a new commitment (Commitments 4.4 & 5.2) requiring the proponent to provide details of the packaging, containment, and other transport activities to be approved by the EPA. If the requirements of the EPA are met then the transport operation may proceed.

The effect of the proposed changes is to remove ambiguity relating to the definition of containment and double containment. The appropriate levels of containment can then be applied on a case-by-case basis rather than based on a commitment originally related to the transport of organochlorine liquids. The responsibility for determining the level of containment required in particular cases would rest with the EPA, provided that all other statutory requirements are met. Double containment would remain as a standard requirement, however, although no longer a mandatory requirement.

Fencing and security

The current condition relating to fencing states, “site management will include the provision of fencing and signposting around the site, to discourage access by fauna and unauthorised personnel” (44:P5).

This condition relates directly to the fencing which would be required if an incinerator was operating on the site and was intended to ensure that a fence was erected around the site of the incinerator (including storage areas) so that access to this area could be controlled, and fauna and unauthorised personnel could be excluded. If this condition were to be interpreted as requiring a fence around the IWDF site as a whole this fence would be 20km long and would trap fauna within the site. This is undesirable and would have no beneficial effect in respect of the objectives of the fencing.

The proponent proposes to replace this commitment with another (Commitment 9) that requires fencing and signposting of each discrete disposal cell. The proposed commitment would have no effect on current practices at the IWDF site as fencing is currently erected around each disposal cell.

Existing wastes disposed of at the intractable waste disposal facility

There are some repetitions in the conditions relating to ongoing management activities at the site. Modification and consolidation of these conditions is proposed to reduce their ambiguity and repetitiveness. Some of the conditions also refer to requirements associated with above ground storage and storage associated with an incinerator which do not occur at the site.

Following revision of the various operational conditions and commitments the proponent proposes to omit the requirement for staffing of the IWDF “for a period of three months after the commencement of storage operations” (205:P19). The reason for this omission is that the existing condition refers to the “storage operations” at the IWDF site and present day disposal operations include shaft entombment or trench burial but not storage. This condition is no longer relevant to current use of the site.

In addition Waste Management (WA) proposes to implement an Environmental Management System (EMS) for the site (Commitment 1). Most of the requirements of an EMS are currently undertaken for operations at the site. However, the introduction of an EMS will formalise environmental management at the site in a manner that will facilitate auditing of all management procedures.

Previous incinerator proposal

The original proposal relating to the IWDF included an incinerator as a major component of the site, mainly for the destruction of PCB wastes held in store in the Perth metropolitan region and elsewhere throughout the state. These wastes are currently being dealt with satisfactorily using alternative technologies that replaces the need for an incinerator. Consequently, there are no plans to construct an incinerator at the site.

Approval of the earlier proposal incorporating an incinerator at the IWDF included 24 proponent commitments relating solely to the incinerator. A number of other commitments that relate largely to incinerator operations remain as general commitments today.

As the proponent does not intend to proceed with the incinerator all conditions and commitments relating to an incinerator may be omitted. Should the proponent wish to proceed with the construction of an incinerator at the Intractable Waste Disposal Facility the proponent will be required to prepare a separate referral to the Environmental Protection Authority.

Independent Assessor’s Advice

The review of conditions and commitments has provided the opportunity to remove redundant requirements, provide a clear indication of the type of wastes that are suitable for disposal at Mt Walton. There is opportunity to take better account of advances in waste management technology when considering waste for disposal at Mt Walton through the use of criteria for disposal rather than a prescriptive list, and to introduce procedures to ensure packaging and containment of wastes can take account of the nature and characteristics of the waste while retaining double containment as a standard practice.

The proposed changes to operational management at the facility better reflect the actual operations without compromising the integrity while the introduction of an EMS provides a mechanism for continual improvement of environmental performance.

Having taken into account operational experience at the IWDF the proposed changes to environmental conditions and commitments are consistent with the environmental objectives, intent and requirements of the preceding four Ministerial Statements.

Assessment

Having particular regard to the:

- proposed changes to environmental conditions and commitments;

- the intention and requirements of the preceding four Ministerial Statements and licence conditions;
- Regulations that have been introduced since the facility commenced operations;
- operational experience gained since the facility commenced operations;
- the proponent's intention not to proceed with the incinerator component of the proposal; and
- advice of the Independent Assessor,

it is the EPA's opinion that the proposed revision of conditions and commitments set out in Appendix 4 should replace the existing Conditions and be implemented by the proponent. The revised conditions and commitments would not impact on the environmental factors assessed in the existing four Ministerial Statement and licence conditions for the facility.

3.2 Consolidation of conditions and commitments

The proponent has prepared a consolidated list of commitments to address all of the conditions and commitments contained in the preceding four Ministerial Statements (see Appendix 6, Reconciliation of existing and proposed conditions and commitments). These commitments have been prepared through a process of negotiation with the Executive Officer to the EPA, the Mt Walton-East Community Liaison Committee and release of a proponent environmental review document justifying the proposed changes for public comment.

During the public review period further discussions between the proponent and Executive Officer to the EPA resulted in an additional consolidation of the proposed commitments (see Appendix 4).

The result of the consolidation of conditions and commitments is a reduction from more than 25 conditions and 70 commitments from the preceding Ministerial Statements to one Ministerial Statement containing 15 conditions and 12 commitments.

The IWDF also operates under Ministerial Directive of 7 July 1998, which includes previous licence conditions. The licence conditions contained in this Directive deal with the day to day operation and management of the site and will be components of the proposed conditions and commitments and environmental management procedures, which will require approval by the EPA.

Two key examples of the effect of the consolidation of conditions and commitments are discussed below.

- The conditions/commitments that currently apply to transport operations associated with waste disposal at the IWDF relate to a variety of specific proposals dating back to the PER produced by the Health Department of Western Australia in 1988. The conditions are repetitive and in some cases ambiguous. Some are also waste specific and are not appropriate to be applied to all wastes.

The suggested changes effectively consolidate over twenty conditions dealing with transport into only three commitments. The changes highlight the Transport Operational Guidelines and Procedures as the essential documents for managing transport operations and the minimisation of environmental or community health impacts potentially arising from transport activities.

- The conditions and commitments currently relating to packaging of wastes are quite repetitive and are often waste specific. The proponent proposes to address packaging and containment packaging requirements as part of the Waste Acceptance Operational Guidelines (Commitment 4.1). The effect will be to simplify enforcement and the auditing of waste packaging requirements, with no change to the intent or outcomes of activities associated with packaging. The EPA would ultimately decide on the adequacy of the packaging proposed for a particular operation via approval of the Waste Acceptance Operational Guidelines and Procedures.

Independent Assessor's Advice

The proposed consolidated list of commitments has been reviewed and is consistent with the intent and requirements of the preceding four Ministerial Statements (see Appendix 6, Reconciliation of existing and proposed conditions and commitments). These commitments provide a clear and accountable process for operations relating to disposal of intractable waste at Mt Walton East including a significant component of public scrutiny.

Notwithstanding the above comments, the EPA and proponent will need to be cognisant of the original licence conditions, Ministerial conditions and commitments, including how they relate to the consolidated commitments, to ensure the Operational Guidelines and Procedures that are developed and approved address all of the intended requirements and environmental outcomes. Once the Operational Guidelines and Procedures have been prepared and approved, responsibilities and requirements for implementation and subsequent auditing will be clearly defined and accountable.

Assessment

Having particular regard to the:

- proposed consolidation of environmental conditions and commitments;
- intention and requirements of the preceding four Ministerial Statements and licence conditions; and
- advice of the Independent Assessor,

it is the EPA's opinion that the proposed revision of conditions and commitments set out in Appendix 4 should replace the existing Conditions and be implemented by the proponent. The revised conditions and commitments would not impact on the environmental factors assessed in the existing four Ministerial Statement and licence conditions for the facility.

3.3 Changes to operational management of the facility

Description

The review and consolidation of conditions and commitments has provided an opportunity to formalise and update the structure for environmental management at the IWDF. Waste Management (WA) has proposed an operational strategy which includes:

- preparation and implementation of an Environmental Management System (EMS), with an Environmental Management Program (EMP) including a range of environmental management plans to the requirements of the EPA;
- preparation of a series of guidelines to be used by waste owners in the preparation of their waste for a particular waste disposal operation, to the requirements of the EPA;
- preparation of Operational Procedures for each operation to the requirements of the EPA; and
- preparation of a Close-Out Report within three months of completion of each waste disposal operation, outlining project outcomes and environmental monitoring, and discussing adverse environmental impacts, if any, and how these impacts have, or will, be managed. The process will provide feedback for continuous improvement.

Figure 1 shows the proposed new operational management structure for the Mt Walton facility.

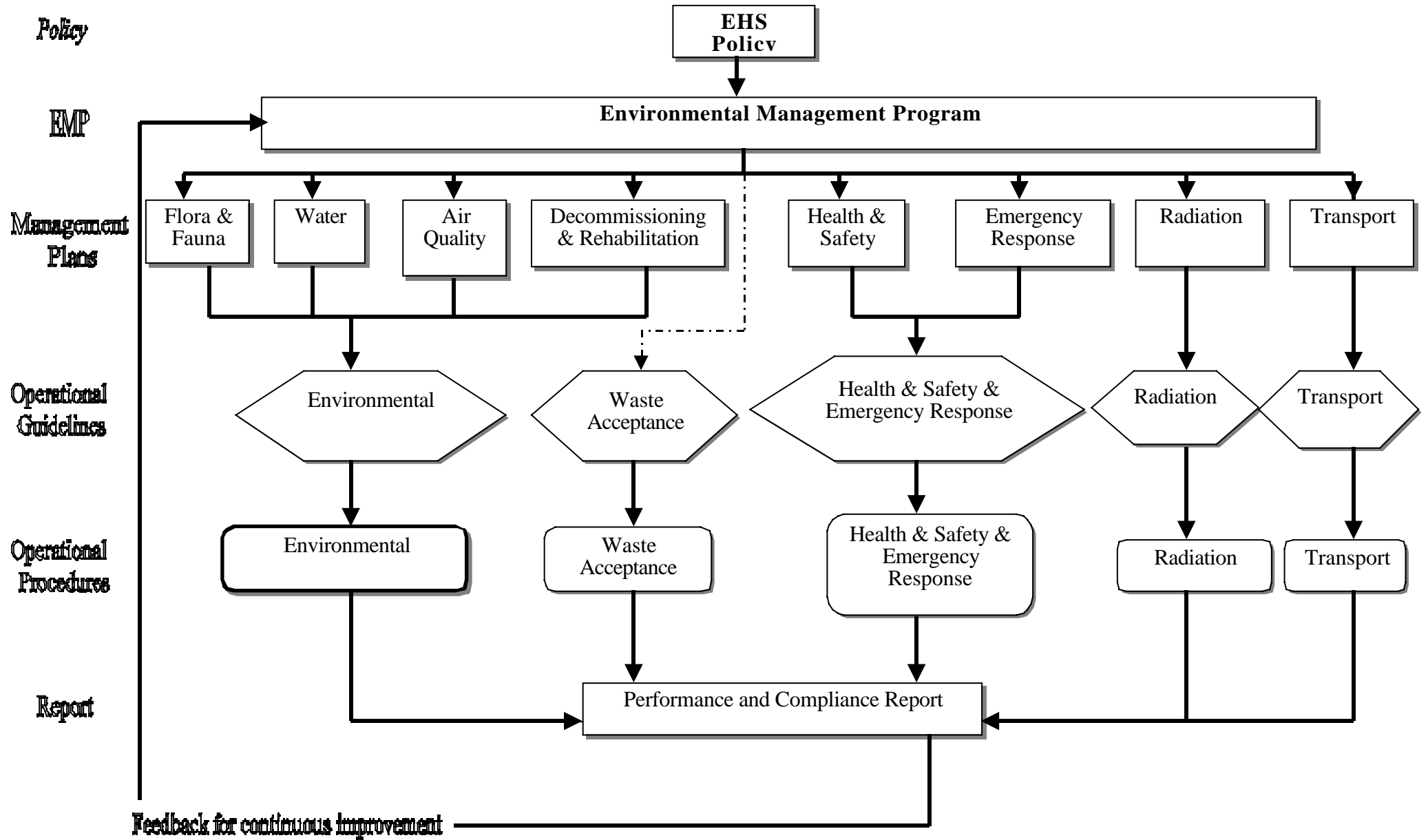


Figure 1: Operational structure of the Mt Walton IWDF

Independent Assessor's Advice

The consolidated list of proponent commitments implemented via the proposed Ministerial Conditions would achieve the same environmental objectives for operation and management of the Mt Walton East IWDF as the existing four Ministerial Statements and licence conditions associated with the facility.

Assessment

Having particular regard to the:

- proposed changes to operational management of the facility;
- intention and requirements of the preceding four Ministerial Statements and licence conditions; and
- advice of the Independent Assessor,

it is the EPA's opinion that the proposed revision of conditions and commitments set out in Appendix 4 should replace the existing Conditions and be implemented by the proponent. The revised conditions and commitments would not impact on the environmental factors assessed in the existing four Ministerial Statement and licence conditions for the facility.

3.4 Additional changes to environmental conditions (not requested by the proponent)

Description

Assessment of this proposal under Section 46 of the Environmental Protection Act 1986 allows the EPA the opportunity to consider the amendment of other environmental conditions.

Assessment

The EPA has taken the opportunity to review the environmental conditions set on this proposal with a view to:

- updating the statement and the wording of conditions to ensure that they are consistent with current practice; and
- ensuring consistency and compatibility with current environmental protection requirements and expectations for best practice environmental management.

The recommended draft conditions provide for adequate protection of the environment and for efficient and effective environmental auditing of compliance.

Therefore, having particular regard to the:

- wording and current format of the Environmental Conditions; and
- need for compatibility with current environmental protection requirements.

it is the EPA's opinion that the proposed revision of conditions and commitments set out in Appendix 4 should replace the existing Conditions and be implemented by the proponent. The revised conditions and commitments would not impact on the environmental factors assessed in the existing four Ministerial Statement and licence conditions for the facility.

4. Conditions and commitments

Section 46(3) of the *Environmental Protection Act 1986* requires the EPA to report to the Minister for the *Environmental Protection Act 1986* on whether or not the proposed changes to conditions or procedures should be allowed. In addition, the EPA may make recommendations as it sees fit.

In developing recommended conditions for each project, the EPA's preferred course of action is to have the proponent provide an array of commitments to ameliorate the impacts of the proposal on the environment.

4.1 Recommended commitments

Waste Management (WA) has made changes to commitments to reflect discussions with the Executive Officer to the EPA and the EPA's Independent Assessor which have been part of the assessment process. The proponent's commitments as set out in the Section 46 environmental review document (ATA Environmental, 2000) and subsequently modified, as shown in Appendix 4, should be incorporated as part of the revised Ministerial Statement of approval.

4.2 Recommended conditions

Having considered the proponent's commitments and the information provided in this report, the EPA recommends that the following conditions be imposed if the proposal by Waste Management (WA) is approved for implementation.

The existing Ministerial Conditions applied to the project (Ministerial Statement 44 205, 353 and 533 published during 1988, 1992, 1994 and 1999 respectively, be subject to modifications necessary to:

- be replaced by a single Ministerial Statement;
- incorporate changes to conditions and commitments;
- consolidate the conditions and commitments;
- modify the operational management of the facility; and
- update the conditions and commitments to reflect the current practice and environmental protection requirements.

The amended conditions and amended Consolidated Commitments statement are presented in Appendix 4.

5. Conclusions

The EPA has considered the request by the Minister for the Environment to review the environmental conditions and commitments, and make changes to operational management and transport of waste to the intractable waste disposal facility at Mt Walton East. The EPA has concluded that the changes to the implementation of the proposal not impact on the environmental factors addressed in the existing four Ministerial Statements and licence conditions for the facility.

The EPA believes that no circumstances have arisen since the proposals for disposal of intractable waste at Mt Walton East were originally assessed that would cause the EPA to reconsider its previous assessments or its previous recommendations as to the environmental acceptability of the project.

In addition to reporting on the review of the environmental conditions and commitments, and proposed changes to operational management and transport of waste to the intractable waste

disposal facility at Mt Walton East, the EPA considers that conditions attached to the environmental approvals should be updated to be consistent with current practice and environmental protection requirements. Accordingly, it has also reported on the updating of conditions.

6. Recommendations(Same as in Summary and Recommendations Section)

The EPA submits the following recommendations to the Minister for the Environment:

1. That the Minister notes that this report is pursuant to Section 46(3) of *the Environmental Protection Act 1986* and thus is limited to consideration of proposed changes to the original conditions.
2. The Minister notes that the EPA in considering this proposal noted that the proponent has consulted with relevant stakeholders, including the Community Liaison Committee for Mt Walton East.
3. The Minister notes that the proposed change is to review of the environmental conditions and commitments, and make changes to the operational management and transport procedures for intractable waste disposal at Mt Walton East.
4. The EPA recommends that the Minister considers the report on the relevant environmental factors as set out in Section 3.
5. That the Minister for the Environment notes that the EPA has concluded that the existing environmental conditions applied to the operation of the Intractable Waste Disposal Facility at Mt Walton East, as per Ministerial Statements 44, 205, 353 and 533, should be replaced by a consolidated set of Environmental Conditions and Procedures, including proponent commitments, as set out in Appendix 4.
6. The Minister imposes the amended conditions, commitments and procedures recommended in Appendix 4 of this report.

Appendix 1

List of Submitters

State/Local Government

- Department of Minerals and Energy

Organisations

- CSBP

Appendix 2

References

ATA Environmental (2000) *Review of Environmental Conditions and Commitments, Changes to Operational Management and Transport of Waste to the Intractable Waste Disposal Facility, Mt Walton East, Western Australia, Environmental Protection Act, Section 46.* Report 99/19, prepared for Waste management (WA), July 2000.

Environmental Protection Authority (1999) *Disposal by Shaft Entombment or Trench Burial of a Range of Intractable Wastes at the Intractable Waste Disposal Facility, Mt Walton East, Western Australia. Extension of Time Limit of Approval via Section 46: Report and Recommendations of the Environmental Protection Authority.* Bulletin 954. Perth: Environmental Protection Authority.

Environmental Protection Authority (1993) *Disposal by Shaft Entombment or Trench Burial of a Range of Intractable Wastes at the Intractable Waste Disposal Facility, Mt Walton East: Report and Recommendations of the Environmental Protection Authority.* Bulletin 726. Perth: Environmental Protection Authority.

Environmental Protection Authority (1991) *Proposed integrated waste disposal facility Eastern Goldfields Western Australia: Report and Recommendations of the Environmental Protection Authority.* Bulletin 572. Perth: Environmental Protection Authority.

Environmental Protection Authority (1988) *Proposed integrated waste disposal facility Eastern Goldfields Western Australia: Report and Recommendations of the Environmental Protection Authority.* Bulletin 353. Perth: Environmental Protection Authority.

Health Department of Western Australia (1993) *Intractable Waste Disposal Facility: Consultative Environmental Review.* Report 93/49 October 1993, prepared by Alan Tingay & Associates.

Health Department of Western Australia (1988) *Proposed Integrated Hazardous Waste Disposal Facility.* Public Environmental Report. Prepared by Maunsell and Partners Pty Ltd.

Appendix 3

Existing Statements of Environmental Conditions of Approval

Appendix 4

Recommended Environmental Conditions and Proponent's Consolidated Commitments

**STATEMENT TO AMEND CONDITIONS APPLYING TO PROPOSALS
(PURSUANT TO THE PROVISIONS OF SECTION 46 OF THE
ENVIRONMENTAL PROTECTION ACT 1986)**

INTRACTABLE WASTE DISPOSAL FACILITY, MT WALTON EAST

Proposals: Integrated Waste Disposal Facility, Eastern Goldfields, Western Australia (Ass No 168) and Disposal by shaft entombment or trench burial of a range of intractable wastes at the Intractable Waste Disposal Facility Mt Walton East, Shire of Coolgardie (Ass No 823)

Proponent: Waste Management (WA)

Proponent Address: Level 4
141 St George's Terrace
PERTH WA 6000

Assessment Number: 1286

Previous Assessment Numbers: 168, 168-1, 823, 1127

Previous Statement Numbers: Statement No. 44 published on 26 October 1988
Statement No. 205 published on 8 January 1992
Statement No. 353 published on 28 April 1994
Statement No. 533 published on 19 January 2000

Report of the Environmental Protection Authority: Bulletin 1005

Previous Reports of the Environmental Protection Authority: Bulletin 353,
572, 726, 954

The implementation of the proposal to which the above reports of the Environmental Protection Authority relate is now subject to the following conditions and procedures which replace all previous conditions and procedures:

1 Implementation

- 1-1 Subject to these conditions and procedures, the proponent shall implement the proposal as documented in schedule 1 of this statement.
- 1-2 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment determines, on advice of the Environmental Protection Authority, is substantial, the proponent shall refer the matter to the Environmental Protection Authority.
- 1-3 Where the proponent seeks to change any aspect of the proposal as documented in schedule 1 of this statement in any way that the Minister for the Environment determines, on advice of the Environmental Protection Authority, is not substantial, those changes may be effected.

2 Proponent Commitments

- 2-1 The proponent shall implement the environmental management commitments of 25 October 2000 as documented in schedule 2 of this statement.
- 2-2 The proponent shall implement subsequent environmental management commitments which the proponent makes as part of the fulfillment of conditions and procedures in this statement.

3 Proponent

- 3-1 The proponent for the time being nominated by the Minister for the Environment under section 38(6) or (7) of the Environmental Protection Act 1986 is responsible for the implementation of the proposal until such time as the Minister for the Environment has exercised the Minister's power under section 38(7) of the Act to revoke the nomination of that proponent and nominate another person in respect of the proposal.
- 3-2 Any request for the exercise of that power of the Minister referred to in condition 3-1 shall be accompanied by a copy of this statement endorsed with an undertaking by the proposed replacement proponent to carry out the proposal in accordance with the conditions and procedures set out in the statement.
- 3-3 The proponent shall notify the Environmental Protection Authority of any change of proponent contact name and address within 30 days of such change.

4 Commencement

- 4-1 The proponent shall provide evidence to the Minister for the Environment within five years of the date of this statement that the proposal has been substantially commenced.
- 4-2 Where the proposal has not been substantially commenced within five years of the date of this statement, the approval to implement the proposal as granted in this statement shall lapse and be void. The Minister for the Environment will determine any question as to whether the proposal has been substantially commenced.
- 4-3 The proponent shall make application to the Minister for the Environment for any extension of approval for the substantial commencement of the proposal beyond five years from the date of this statement at least six months prior to the expiration of the five year period referred to in conditions 4-1 and 4-2.
- 4-4 Where the proponent demonstrates to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority that the environmental parameters of the proposal have not changed significantly, then the Minister may grant an extension not exceeding five years for the substantial commencement of the proposal.

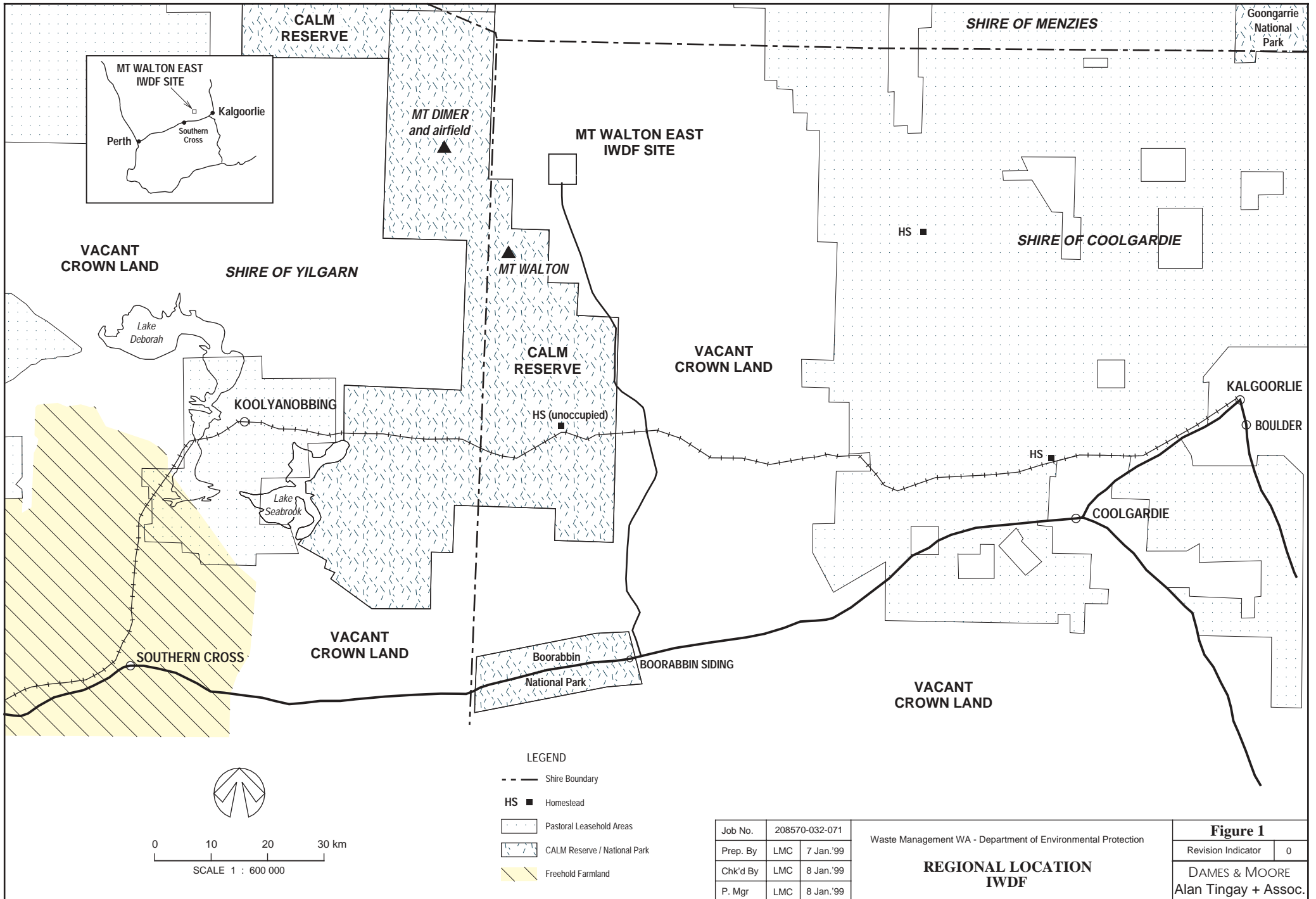
5 Compliance Auditing

- 5-1 The proponent shall submit periodic Compliance Reports, in accordance with an audit program prepared in consultation between the proponent and the Environmental Protection Authority.
- 5-2 Unless otherwise specified, the Environmental Protection Authority is responsible for assessing compliance with the conditions, procedures and commitments contained in this statement and for issuing formal written advice that the requirements have been met.
- 5-3 Where compliance with any condition, procedure or commitment is in dispute, the matter will be determined by the Minister for the Environment.

Schedule 1 - Summary of key proposal characteristics.

Element	Description
Location	Approximately 125 km north-west of Kalgoorlie-Boulder in the Shire of Coolgardie
Area	25 square kilometres
Purpose	For the disposal of intractable wastes for which there is no other practical method of disposal.
Potential waste	Restricted to those that meet the waste acceptance criteria
Disposal method	Burial by shaft entombment or trench, capped with water-shedding dome.
Environmental Management	<p>Environmental Management Plans as listed below:</p> <ul style="list-style-type: none"> • flora and fauna; • water; • air quality; • decommissioning and rehabilitation; • health and safety; • emergency response; • radiation; and • transport. <p>Procedures for each disposal operation developed consistent with Operational Guidelines as listed below:</p> <ul style="list-style-type: none"> • environmental; • waste acceptance; • health and safety and emergency response; • radiation; and • transport.
Reporting	Long term monitoring and operational monitoring to be addressed in Environmental Management Plans

Note: The incinerator component of assessment number 168, will not proceed and has been removed from the description of the proposal.



Schedule 2 - Proponent's Environmental Management Commitments of 25 October 2000

NO	TOPIC	ACTION	OBJECTIVE/S	TIMING	TO REQUIREMENTS OF	ADVICE	MEASUREMENT/ COMPLIANCE CRITERIA
1	<u>Environmental Management System</u>	<p>(1.1) Demonstrate that there is in place an Environmental Management System that includes the following elements:</p> <p>(a) an environmental, health and safety policy and corporate commitment to it;</p> <p>(b) mechanisms and processes to ensure:</p> <ul style="list-style-type: none"> • Planning to meet environmental, health and safety requirements; • Implementation and operation of actions to meet environmental, health and safety requirements; • Measurement and evaluation of environmental, health and safety performance; and <p>(c) review and improvements of environmental, health and safety outcomes.</p>	To effectively and comprehensively manage all matters relating to environmental protection and to fulfil the requirements of the conditions, procedures and commitments for the proposal.	Prior to the next disposal operation.	Environmental Protection Authority		Completed Environmental Management System
		(1.2) Implement the Environmental Management System required by commitment 1.1.	To effectively and comprehensively manage all matters relating to environmental protection and to fulfil the requirements of the conditions, procedures and commitments for the proposal.	Prior to the next disposal operation	Environmental Protection Authority		Performance and Compliance Report

NO	TOPIC	ACTION	OBJECTIVE/S	TIMING	TO REQUIREMENTS OF	ADVICE	MEASUREMENT/ COMPLIANCE CRITERIA
2	<u>Environmental Management Program</u>	(2.1) Prepare an Environmental Management Program. (2.2) Advertise and make the approved Environmental Management Program required by commitment 2.1 publicly available.	To include but not be limited to the following: <ul style="list-style-type: none">• environmental management plans (see commitment 3); and• operational guidelines (see commitment 4). To inform the community.	Prior to the next disposal operation. Prior to the next disposal operation.	Environmental Protection Authority Environmental Protection Authority		Approved Environmental Management Program Performance and Compliance Report
		(2.3) Implement the Environmental Management Program required by commitment 2.1.	To ensure that requirements specified in the approved Environmental Management Program are adhered to.	During all disposal operations.	Environmental Protection Authority		Performance and Compliance Report
3	<u>Environmental Management Plan</u> Flora and Fauna	(3.1) Prepare a Flora and Fauna Management Plan.	To ensure that the abundance, species diversity, geographic distribution and productivity of vegetation communities and terrestrial fauna are maintained by monitoring against existing baseline survey data.	Prior to the next disposal operation.	Environmental Protection Authority		Approved Environmental Management Plan

NO	TOPIC	ACTION	OBJECTIVE/S	TIMING	TO REQUIREMENTS OF	ADVICE	MEASUREMENT/ COMPLIANCE CRITERIA
	Transport Management Plan	<p>(3.2) Prepare a Transport Management Plan that describes the general principles of managing the transportation of wastes to the Intractable Waste Disposal Facility. The plan will include but not limited to:</p> <ul style="list-style-type: none"> • emergency preparednes; • contractor responsibilities; • procedures; • communications; and • emergency response recovery. 	To ensure that risk to the community, waste owners, contractors, employees, personnel and members of the emergency response services, property and the environment is minimised.	Prior to the next disposal operation.	Environmental Protection Authority		Approved Environmental Management Plan

NO	TOPIC	ACTION	OBJECTIVE/S	TIMING	TO REQUIREMENTS OF	ADVICE	MEASUREMENT/ COMPLIANCE CRITERIA
3 cont	Water Management Plan	(3.3) Prepare a Water Management Plan.	<p>To detail procedures and strategies to monitor:</p> <ul style="list-style-type: none"> • for the presence of groundwater and if groundwater is present, groundwater will be analysed to determine whether it has been contaminated by leachate from disposed waste; and • surface water to ensure that if surface water is likely to run off the site it will be analysed to determine whether it has been contaminated if there has been a spillage of waste. • If contamination has occurred, a contingency plan that forms part of the Water Management Plan will be implemented. 	Prior to the next disposal operation.	Environmental Protection Authority		Approved Environmental Management Plan
	Emergency Response Plan	(3.4) Prepare an Emergency Response Management Plan.	<p>To ensure that in the case of an incident at the Intractable Waste Disposal Facility:</p> <ul style="list-style-type: none"> • all practicable measures are taken to ensure the welfare and amenity of the community; and • the environment is not adversely affected. 	Prior to the next disposal operation.	Environmental Protection Authority		Approved Environmental Management Plan

NO	TOPIC	ACTION	OBJECTIVE/S	TIMING	TO REQUIREMENTS OF	ADVICE	MEASUREMENT/ COMPLIANCE CRITERIA
3 cont	Health and Safety Management Plan	(3.5) Prepare a Health and Safety Management Plan. The Plan will include but not limited to: <ul style="list-style-type: none"> • procedures for training; and • procedures for monitoring. 	To ensure that all practicable measures are taken to safeguard the welfare and amenity of personnel and the community at the Intractable Waste Disposal Facility.	Prior to the next disposal operation.	Environmental Protection Authority		Approved Environmental Management Plan
	Air Quality Management Plan	(3.6) Prepare an Air Quality Management Plan.	To detail monitoring procedures and strategies to suppress dust and odour adequately to ensure that dust and odour emissions do not adversely affect the environment, or health, welfare and amenity of personnel at the Intractable Waste Disposal Facility.	Prior to the next disposal operation.	Environmental Protection Authority		Approved Environmental Management Plan
	Radiation Management Plan	(3.7) Prepare a Radiation Management Plan which will include but not be limited to: <ul style="list-style-type: none"> • environmental radiation monitoring; • periodic reporting to the Environmental Protection Authority and Radiological Council (Western Australia); • procedures for compliance with the Code of Practice for the Near-surface Disposal of Radioactive Waste in Australia (1992); • personnel radiation monitoring; and • reporting of the monitoring results to the Community Liaison Committee. 	To detail procedures and strategies to ensure that risk of exposure to radiation is kept within public health standards and as low as reasonably achievable for the community, waste owners, contractors, employees, personnel and members of emergency response services, and the environment.	Prior to the next disposal operation.	Environmental Protection Authority	Radiological Council (WA)	Approved Environmental Management Plan

NO	TOPIC	ACTION	OBJECTIVE/S	TIMING	TO REQUIREMENTS OF	ADVICE	MEASUREMENT/ COMPLIANCE CRITERIA
3 cont	Decommissioning and Rehabilitation Management Plan	<p>(3.8) Prepare a Decommissioning and Rehabilitation Management Plan to include but not be limited to:</p> <ul style="list-style-type: none"> • removal or, if appropriate, retention of infrastructure; • rehabilitation of all disturbed areas to a standard suitable for agreed future land use/s; and • identification of disposal areas, including provision of evidence of notification to relevant statutory authorities. 	To ensure that the proposal is decommissioned and rehabilitated to a standard suitable for the future landuse/s.	At least six months before decommissioning.	Environmental Protection Authority	Radiological Council (WA)	Approved Environmental Management Plan
		<p>(3.9) Make the draft Environmental Management Plans required by commitment 3.1 to 3.8 available for a four week limited stakeholder review to the:</p> <ul style="list-style-type: none"> • IWDF Community Liaison Committee; • The Chamber of Minerals and Energy of Western Australia; and • Chamber of Commerce and Industry of Western Australia; <p>prior to the Environmental Protection Authority finalising its consideration of the Plans.</p>	To obtain stakeholder input to the Environmental Management Plans.	Prior to the next disposal operation.	Environmental Protection Authority		Approved Environmental Management Plan
		(3.10) Advertise and make the approved Environmental Management Plans required by commitments 3.1 to 3.8 publicly available.	To inform the community.	Prior to the next disposal operation.	Environmental Protection Authority		Performance and Compliance Report

NO	TOPIC	ACTION	OBJECTIVE/S	TIMING	TO REQUIREMENTS OF	ADVICE	MEASUREMENT/ COMPLIANCE CRITERIA
		(3.11) Implement the Environmental Management Plans required by commitments 3.1 to 3.8.	To ensure that requirements specified in the approved Environmental Management Plans are adhered to.	During each disposal operations.	Environmental Protection Authority		Performance and Compliance Report
4	<u>Operational Guidelines</u> Waste Acceptance Environmental Safety/Emergency Response Transport Radiation	(4.1) Prepare the Waste Acceptance Operational Guidelines. (4.2) Prepare the Environmental Operational Guidelines. (4.3) Prepare the Safety/Emergency Response Operational Guidelines. (4.4) Prepare the Transport Operational Guidelines. (4.5) Prepare the Radiation Operational Guidelines.	All relevant Operational Guidelines are to be used as guidance to proponents in the preparation of the Operational Procedures for each particular disposal operation (see commitments 5.1 and 5.2). The Operational Guidelines give guidance to proponents on the means for achieving environmental outcomes required by a particular waste disposal operation.	Prior to the next disposal operation.	Environmental Protection Authority		Approved Operational Guidelines

NO	TOPIC	ACTION	OBJECTIVE/S	TIMING	TO REQUIREMENTS OF	ADVICE	MEASUREMENT/ COMPLIANCE CRITERIA
		<p>(4.6) Make the draft Operational Guidelines required by commitments 4.1 to 4.5 available for a four week limited stakeholder review to the:</p> <ul style="list-style-type: none"> • IWDF Community Liaison Committee; • The Chamber of Minerals and Energy of Western Australia; and • Chamber of Commerce and Industry of Western Australia; <p>prior to the Environmental Protection Authority finalising its consideration of the Plan.</p>	To obtain stakeholder input to the Operational Guidelines.	Prior to the next disposal operation.	Environmental Protection Authority	Radiological Council (WA)	Approved Operational Guidelines
		(4.7) Advertise and make the approved Operational Guidelines required by commitments 4.1 to 4.5 publicly available.	To inform the community.	Prior to the next disposal operation.	Environmental Protection Authority		Performance and Compliance Report
		(4.8) Implement the Operational Guidelines required by commitments 4.1 to 4.5.	To ensure that requirements specified in the approved Operational Guidelines are adhered to.	Prior to the next disposal operation.	Environmental Protection Authority		Performance and Compliance Report
5	<p><u>Operational Procedures</u></p> <p>Environmental, Waste Acceptance, Radiation, Health and Safety</p>	(5.1) Prepare the Environmental, Radiation, Health and Safety Operational Procedures in accordance with the Operational Guidelines.	To ensure that risk to the community, waste owners, contractors, employees, personnel and members of the emergency response services, and the environment is minimised.	Prior to each disposal operation.	Environmental Protection Authority	Radiological Council (WA)	Approved Operational Procedures

NO	TOPIC	ACTION	OBJECTIVE/S	TIMING	TO REQUIREMENTS OF	ADVICE	MEASUREMENT/ COMPLIANCE CRITERIA
	Transport	<p>(5.2) Prepare the Transport Operational Procedures in accordance with the Operational Guidelines to include but not limited to:</p> <ul style="list-style-type: none"> • details of waste loading and transport activities, and emergency response training for personnel; • identification of responsibility for the various aspects of transport, loading and unloading operations; • contingency plans for dealing with fire safety, accidents, spillages, vehicle breakdowns and other incidents should they occur; and • the procedure for liaison with the local community and emergency services. <p>(The Operational Procedures documents referred to in commitments 5.1 and 5.2 will be the detailed working documents specific to each waste disposal operation).</p>	To achieve environmental outcomes required by the Environmental Management Program in the conduct of a particular waste disposal operation (see commitment 2).				
		(5.3) Advertise and make the approved Operational Procedures required by commitments 5.1 and 5.2 publicly available.	To inform the community.	Prior to each disposal operation.	Environmental Protection Authority		Performance and Compliance Report

NO	TOPIC	ACTION	OBJECTIVE/S	TIMING	TO REQUIREMENTS OF	ADVICE	MEASUREMENT/ COMPLIANCE CRITERIA
5 cont		(5.4) Implement the Operational Procedures required by commitments 5.1 and 5.2.	To minimise the possibility of a waste disposal operation adversely affecting the environment.	During each particular waste disposal operation.	Environmental Protection Authority (Should any incident occur during each particular waste disposal operation it is to be reported immediately to the EPA)		Performance and Compliance Report
6	<u>Performance and Compliance Report</u>	(6.1) Prepare the Performance and Compliance Report at the conclusion of each waste disposal operation. (6.2) Advertise and make the approved Performance and Compliance Report required by commitment 6.1 publicly available.	To outline the project outcomes and the environmental monitoring, and discuss adverse environmental impacts, if any and how these environmental impacts have been or will be managed. The process will provide feedback for continuous improvement to the Environmental management Program. To inform the public.	Within three months following completion of each specific waste disposal operation. Within 4 weeks of obtaining approval for the Performance and Compliance Report.	Environmental Protection Authority Environmental Protection Authority	Radiological Council (WA) in relation to radiation issues	Approved Performance and Compliance Report Approved Performance and Compliance Report
7	Waste	(7.1) Limit disposal of waste at the Intractable Waste Disposal Facility to waste generated in Western Australia (see commitment 4.1).	To comply with State Government requirements.	Prior to the each disposal operation.	Environmental Protection Authority		Environmental, Radiation, Health and Safety Operational Procedures
		(7.2) Ensure that approval to dispose of any specific waste is conditional on a review of currently practicably available waste treatment, disposal or management alternatives in Australia (see commitment 4.1).	To ensure that only wastes for which there is no currently practicably available destruction, disposal or management technologies in Australia are disposed of at the site and to maintain the site as a facility of last resort.	Prior to the each disposal operation.	Environmental Protection Authority		Environmental, Radiation, Health and Safety Operational Procedures

NO	TOPIC	ACTION	OBJECTIVE/S	TIMING	TO REQUIREMENTS OF	ADVICE	MEASUREMENT/ COMPLIANCE CRITERIA
7 cont		(7.3) Prepare a waste register data base to be maintained, updated and made publicly available at the office of the proponent or on the World Wide Web.	To show the method of disposal, source, type, quantity and location of all waste disposed of at the Intractable Waste Disposal Facility to enable future land users to take account of the deposited wastes and protect future users from adverse impacts on health and amenity.	Prepare the waste register data base within six months of the issuing of the Minister's Statement that the proposal may be implemented and update the register within three months of completion of each disposal operation.	Environmental Protection Authority		Performance and Compliance Report
8	Community Liaison	Convening a minimum of four meetings a year of the Community Liaison Committee.	To ensure that the community remains informed of activities at the Intractable Waste Disposal Facility.	Following the Minister's Statement that the proposal may be implemented.	Environmental Protection Authority		Performance and Compliance Report
9	Fencing and Signposting	Fence and signpost each discrete disposal cell.	To discourage access by: <ul style="list-style-type: none"> • fauna; • unauthorised personnel; and • the public. 	Prior to demobilisation of each waste disposal operation following the Minister's Statement that the proposal may be implemented.	Environmental Protection Authority		Performance and Compliance Report
10	Water	Demonstrate that there are at least 5 metres of clay between the base of any disposal cell and bedrock.	To allow for the possible establishment of a groundwater table in the future without impinging upon the disposal cells.	Prior to the each disposal operation.	Environmental Protection Authority		Performance and Compliance Report

NO	TOPIC	ACTION	OBJECTIVE/S	TIMING	TO REQUIREMENTS OF	ADVICE	MEASUREMENT/ COMPLIANCE CRITERIA
11	Transport and Packaging	Where transport and packaging is to be undertaken by a party other than the proponent, the proponent will ensure that the packaging and transport requirements specified in the Operational Transport Guidelines and Waste Acceptance Guidelines are adhered to through the use of contracts and other controls as necessary (see commitments 4.1 and 4.4).	To ensure that risk to the community, waste owners, contractors, employees, personnel and members of the emergency response services, property and the environment is minimised.	Prior to the commencement of transportation activities during each disposal operation.	Environmental Protection Authority		Approved operational Transport Procedures
12	Decommissioning and Rehabilitation	Implement the requirements of the Decommissioning and Rehabilitation Management Plan until the Minister for the Environment determines that decommissioning and/or rehabilitation is/are complete.	To ensure that the proposal is decommissioned and rehabilitated according to the requirements specified in the approved Decommissioning and Rehabilitation Management Plan (refer commitment 3).	During decommissioning and/or rehabilitation.	Minister for the Environment		Determination by the Minister for the Environment that decommissioning and/or rehabilitation is/are complete.

Appendix 5

Proponent's Response to Public Submissions

Proponent's response to public submissions

WESFARMERS CSBP(CSBP)

Item 1 *Section 2.3 Consolidated List of Proponent Commitments – Development of Waste Acceptance Guidelines*

CSBP supports the proponent's proposal to only accept waste that conforms with the Waste Acceptance Guidelines, but believes that currently agreed wastes should still be permitted to access the site.

Response 1

Waste Acceptance Guidelines will provide potential waste disposers with a guide to what waste types may be acceptable for disposal at the IWDF. This will be based on waste acceptance criteria that will include categories of waste that are not acceptable such as gases, liquids and wastes for which there are no currently practicably available destruction, disposal or management technologies in Australia.

Prior to each disposal operation all wastes proposed for disposal will undergo a waste acceptance assessment based on these guidelines, even if a waste has previously been accepted at the site.

Item 2 *Section 5.3 Containment during Transport*

CSBP supports the concept of double containment as a standard requirement rather than a mandatory requirement with the EPA determining whether double containment is required on case-by case basis.

Response 2

Support for the proposal to have double containment as a standard requirement, rather than mandatory is acknowledged.

Item 3 *Commitments 5, 7, 8, and 9. Public consultation*

CSBP supports the commitment to public consultation but believes that it will add to the cost and/or complexity of the site

Response 3

Although there may be additional costs associated with public consultation, WMWA is committed to keeping the general public in particular the Coolgardie community, informed of operational and environmental aspects related to the site.

This commitment to community consultation is already current practice.

Item 4 *Section 3 Waste Acceptance*

CSBP supports the intent of the proposal to ensure that only wastes for which there are no currently practicably available destruction, disposal or management technologies in Australia are disposed of at the IWDF. However CSBP believes that there should be the capacity for one technology review to be accepted for a term period (perhaps 5 years).

Response 4

It is not the intention of WM(WA) to request that the EPA give the approval for particular wastes to be disposed of at the IWDF beyond a single disposal operation.

Prior to each disposal operation all wastes proposed for disposal will undergo a waste acceptance assessment. This will include a review of alternatives to disposal (including treatment technologies available). This will ensure that only wastes for which there are no currently practicably available destruction, disposal or management technologies in Australia are disposed of at the IWDF

Since the release of the Section 46 review document, WM(WA) has undertaken discussions with the Executive Officer to the EPA. During these discussions it was agreed that minor changes would be made to the proponents commitments. These changes are essentially formatting changes. The only substantial change is to Commitments 3 and 4 (new numbers), where the draft plans and guidelines will now be made available for limited stakeholder review for a four week period. Please find attached the revised proponent commitments and the Principal IWDF Environmental Management System Documents Flowchart.

Appendix 6

Reconciliation of existing and proposed conditions and commitments

Existing Conditions and Commitments	Original Proposed Commitments *	Revised Proposed Commitments **	Theme of existing condition/commitment
44:M1			Standard adherence to proposal requirement
44:M2	P18	P10	Drilling program to determine depth of clay
44:M3	P13	P3	Biological surveys
44:M4			Cleared
44:M5	P26	P5	Preparation of environmental management programme
44:M5	P27	P5	
44:M5	P3	P2	
44:M5	P36	P11	
44:M5	P4	P2	
44:M5	P5	P2	
44:M6	P32	P3	Transport management issues
44:M6	P33	P4	
44:M6	P34	P4	
44:M6	P35	P5	
44:M6	P36	P11	
44:M7	P30	P6	Reporting results of monitoring program
44:M7	P31	P6	
44:M8			Related to the incinerator which will not proceed
44:M9	P21	P7	Determining wastes suitable for disposal at Mt Walton
44:M10	P14	P3	Decommissioning
44:M10	P15	P3	
44:M11	P14	P3	Prepare decommissioning plan
44:M11	P15	P3	
44:M12			Related to the incinerator which will not proceed
44:M13	P19	P4	Prepare environmental management program
44:M13	P21	P7	
44:M13	P26	P5	
44:M13	P27	P5	
44:P1	M3		Nomination of Proponent
44:P2	M3		Nomination of Proponent
44:P3	P6	P7	WA wastes only
44:P4			Cleared - biological and archaeological surveys
44:P5	P10	P9	Fencing
44:P6	P16	P3	Related to the incinerator which will not proceed
44:P7	P12	P3	Storage and handling of wastes
44:P7	P22	P4	

Existing Conditions and Commitments	Original Proposed Commitments *	Revised Proposed Commitments **	Theme of existing condition/commitment
44:P7	P26	P5	
44:P7	P35	P5	
44:P8			Superseded by later Ministerial Statements - Transport by rail
44:P9			Related to the incinerator which will not proceed
44:P10	P22	P4	Double containment
44:P10	P26	P5	
44:P10	P27	P5	
44:P10	P36	P11	
44:P11			Related to the incinerator which will not proceed
44:P12			Related to the incinerator which will not proceed
44:P13			Related to the incinerator which will not proceed
44:P14			Related to the incinerator which will not proceed
44:P15			Related to the incinerator which will not proceed
44:P16			Related to the incinerator which will not proceed
44:P17			Related to the incinerator which will not proceed
44:P18			Related to the incinerator which will not proceed
44:P19			Related to the incinerator which will not proceed
44:P20			Related to the incinerator which will not proceed
44:P21			Related to the incinerator which will not proceed
44:P22	P11	P3	Emergency services
44:P22	P22	P4	
44:P22	P26	P5	
44:P23	P11	P3	
44:P23	P22	P4	
44:P23	P26	P5	
44:P24			Related to the incinerator which will not proceed
44:P25			Related to the incinerator which will not proceed
44:P26			Related to the incinerator which will not proceed
44:P27			Related to the incinerator which will not proceed
44:P28			Related to the incinerator which will not proceed
44:P29			Related to the incinerator which will not proceed
44:P30			Related to the incinerator which will not proceed
44:P31			Related to the incinerator which will not proceed
44:P32	P12	P3	Handling of waste during storage and transport
44:P32	P22	P4	
44:P32	P26	P5	
44:P33	P11	P3	Tracing of Personnel
44:P33	P12	P3	

Existing Conditions and Commitments	Original Proposed Commitments *	Revised Proposed Commitments **	Theme of existing condition/commitment
44:P33	P22	P4	
44:P33	P26	P5	
44:P34	P11	P3	Medical surveillance programme
44:P34	P12	P3	
44:P34	P22	P4	
44:P34	P26	P5	
44:P35	P11	P3	First aid measures
44:P35	P12	P3	
44:P35	P22	P4	
44:P35	P26	P5	
44:P36	P12	P3	Protective clothing
44:P37			Related to the incinerator which will not proceed
44:P38	P20	P3	Managing radioactive wastes
44:P38	P24	P4	
44:P38	P28	P5	
44:P38	P29	P5	
44:P39			Cleared - baseline radiation survey
44:P40	P16	P3	Dust concentration
44:P40	P20	P3	
44:P40	P24	P4	
44:P40	P25	P4	
44:P40	P28	P5	
44:P40	P29	P5	
44:P41	P20	P3	Radiation monitoring
44:P41	P24	P4	
44:P41	P25	P4	
44:P41	P28	P5	
44:P41	P29	P5	
44:P42	P20	P3	Radiation base limits
44:P42	P24	P4	
44:P42	P28	P5	
44:P42	P29	P5	
44:P43	P20	P3	Duration of radiation monitoring
44:P43	P24	P4	
44:P43	P28	P5	
44:P43	P29	P5	
44:P44	P20	P3	Duration of radiation monitoring
44:P44	P24	P4	

Existing Conditions and Commitments	Original Proposed Commitments *	Revised Proposed Commitments **	Theme of existing condition/commitment
44:P44	P28	P5	
44:P44	P29	P5	
44:P45	M5		Annual Reports
44:P46	P7	P8	Related to the incinerator which will not proceed
44:P47	P7	P8	Community Liaison Committee
205:M1	M1		Implementation
205:M2		P10	Drilling program to determine depth of clay
205:M3			Biological surveys
205:M4			Cleared - Aboriginal surveys
205:M5			Preparation of environmental management programme
205:P1	M3		Nomination of Proponent
205:P2			Institutional Control Period (Nomination of Proponent)
205:P3	P6	P7	WA waste only
205:P4	P32	P3	Transport procedures
205:P4	P33	P4	
205:P4	P34	P4	
205:P4	P35	P5	
205:P4	P36	P11	
205:P5	P32	P3	Notification of transport operations
205:P5	P33	P4	
205:P5	P35	P5	
205:P5	P36	P11	
205:P6			Now a statutory requirement - transport of dangerous goods
205:P7	P20	P3	Inspection of containers prior to transport
205:P7	P24	P4	
205:P7	P28	P5	
205:P7	P29	P5	
205:P8	P24	P4	Packaging of radioactive waste
205:P8	P28	P5	
205:P8	P29	P5	
205:P9			Now a statutory requirement - labeling of trucks transporting dangerous goods
205:P10	P11	P3	Escort vehicle
205:P10	P12	P3	
205:P10	P20	P3	
205:P10	P32	P3	
205:P10	P33	P4	
205:P10	P35	P5	

Existing Conditions and Commitments	Original Proposed Commitments *	Revised Proposed Commitments **	Theme of existing condition/commitment
205:P10	P36	P11	
205:P11			Related to the incinerator which will not proceed
205:P12	P11	P3	Emergency procedures for transport
205:P12	P32	P3	
205:P12	P33	P4	
205:P12	P35	P5	
205:P13	P12	P3	Radiation monitoring program
205:P13	P20	P3	
205:P13	P24	P4	
205:P13	P28	P5	
205:P13	P29	P5	
205:P14			Related to the incinerator which will not proceed
205:P15	P12	P3	Warning and safety signs
205:P15	P22	P4	
205:P15	P26	P5	
205:P16	P20	P3	Construction of disposal cells for radioactive waste
205:P16	P24	P4	
205:P16	P28	P5	
205:P16	P29	P5	
205:P17	P8	P7	Records of waste disposal
205:P17	P9	P7	
205:P18	P12	P3	Personnel training requirements
205:P18	P22	P4	
205:P18	P26	P5	
205:P19			Staffing of IWDF for 3 months - no longer required
205:P20	P20	P3	Radiation surveillance program
353:M1	M2		Implementation Commitments
353:M2			Implementation of proposal
353:M3	M3		Nomination of Proponent
353:M4	P8	P7	Register of wastes
353:M4	P9	P7	
353:M5			Superseded by later Ministerial Statements - time limit
353:M6	M4		Compliance auditing
353:P1	P12	P3	Training for staff
353:P1	P22	P4	
353:P1	P26	P5	
353:P1	P27	P5	
353:P2	M4		Standard auditing condition

Existing Conditions and Commitments	Original Proposed Commitments *	Revised Proposed Commitments **	Theme of existing condition/commitment
353:P3	P22	P4	Procedures for packaging, transport and disposal of waste
353:P3	P26	P5	
353:P3	P27	P5	
353:P3	P35	P5	
353:P3	P36	P11	
353:P4	P26	P5	Inform EPA of disposal operations
353:P5	P26	P5	Inform EPA of quantity and type of waste proposed for disposal
353:P6	P12	P3	Conduct monitoring programs
353:P6	P16	P3	
353:P6	P17	P3	
353:P6	P20	P3	
533:M2	M1		Standard implementation condition
533:M5	P19	P4	Acceptable wastes
533:M7	P21	P7	Environmental Management Plan
533:M7	P22	P4	
533:M7	P24	P4	
533:M7	P26	P5	
533:M7	P27	P5	
533:M7	P28	P5	
533:M7	P29	P5	
533:M7	P3	P2	
	P1	P1	
	P2	P1	
	P23	P4	

* Commitments contained in proponent Environmental Review released for public review in 2000

** Commitments revised during public submission period in consultation with the Executive Officer of the EPA

Note: Implementation, proponent commitments, proponent, commencement, and compliance auditing Ministerial Conditions are included in the recommended environmental conditions in Appendix 4.