



Report and recommendations of the Environmental Protection Authority



**Red Hill Waste Management Facility Extension
– inquiry under section 46 of the
Environmental Protection Act 1986
to amend Ministerial Statement 274**

Eastern Metropolitan Regional Council

Report 1675

May 2020

Inquiry under section 46 of the *Environmental Protection Act 1986*

The Minister for Environment has requested that the Environmental Protection Authority (EPA) inquire into and report on the matter of changing commitment 7.7 of condition 1 in Ministerial Statement 274 relating to water monitoring for the Red Hill Waste Management Facility Extension.

Section 46(6) of the *Environmental Protection Act 1986* (EP Act) requires the EPA Report to include:

- (a) a recommendation on whether or not the implementation conditions to which the inquiry relates, or any of them, should be changed
- (b) any other recommendations that it thinks appropriate.

The following is the EPA's Report and Recommendations to the Minister pursuant to s. 46(6) of the EP Act.



Dr Tom Hatton
Chairman

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1. The proposal

The Eastern Metropolitan Regional Council (EMRC) currently operates the Red Hill Waste Management Facility Extension, located about 12 kilometres north east of Midland on Toodjay Road, Red Hill. The Environmental Protection Authority (EPA) assessed the proposal at the level of Consultative Environmental Review, releasing its Report and Recommendations (Bulletin 569) in August 1991. In this report, the EPA considered the following key environmental factors required detailed evaluation in its Report and Recommendations to the Minister for the Environment:

- Water quality
- Dust
- Noise
- Odour
- Dieback and hygiene
- Traffic movements
- Visual impact
- Industrial sludge disposal
- Decommissioning and post-closure management
- Planning aspects.

In applying the *Statement of Environmental Principles, Factors and Objectives* (EPA 2020b) these factors are now represented by:

- Inland Waters
- Social Surroundings
- Flora and Vegetation.

The EPA concluded in Bulletin 569 that the proposal can proceed without causing unacceptable environmental impacts, subject to the recommendations in the report.

The then Minister for Environment approved the proposal for implementation, subject to the implementation conditions of Ministerial Statement 274 (15 July 1992).

Previously approved changes to proposal and conditions

On 21 November 1997, the then Minister for Environment approved a proposal to establish Class IV waste disposal cells at the existing Red Hill Waste Management Facility through Ministerial Statement 462. On 24 April 2018, the EMRC requested a change to proposal to incorporate part Lot 12 for the construction and operation of future landfill cells and leachate ponds into the Red Hill Waste Management Facility as approved through Ministerial Statement 274. On 26 June 2018, the change to proposal was approved under s. 45C of the *Environmental Protection Act 1986*. There have been no changes to the implementation conditions since the publication of Ministerial Statement 274.

2. Requested changes to conditions

In March 2020, the EMRC requested the following change to the implementation conditions of Ministerial Statement 274:

- change to the frequency of groundwater monitoring required by commitment 7.7 of condition 1.

In April 2020, the Minister for Environment requested that the EPA inquire into and report on the matter of changing the implementation conditions of Ministerial Statement 274 for the Red Hill Waste Management Facility Extension proposal. This report satisfies the requirements of the EPA's inquiry.

3. Inquiry into changing conditions

The EPA has discretion as to how it conducts this inquiry. In determining the extent and nature of this inquiry, the EPA had regard to information such as:

- the currency of its original assessment (Bulletin 569)
- Ministerial Statement 274 and 462
- information provided by the proponent
- advice from relevant decision-making authorities
- any new information regarding the proposal's potential impacts on the environment.

These documents are instructive in determining the extent and nature of the inquiry under s. 46 of the EP Act.

EPA procedures

The EPA followed the procedures in the *Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures 2016* (State of Western Australia 2016) and the *Environmental Impact Assessment (Part IV Divisions 1 and 2) Procedures Manual* (EPA 2020a).

4. Inquiry findings

The EPA considered that Inland Waters is the key environmental factor relevant to the change to conditions.

4.1 Inland Waters

The EPA's environmental objective for this factor is *to maintain the hydrological regimes and quality of groundwater and surface water so that environmental values are protected.*

Conclusions from EPA Bulletin 569

In the EPA's original assessment of this proposal, impacts on water quality, industrial sludge disposal, and decommissioning and post-closure management were considered. In its assessment, the EPA noted that there was potential for the landfill to cause groundwater and surface water pollution, and that potential sensitive receivers included the Swan River, John Forrest National Park and numerous private water supply bores.

The original assessment considered the suitability of the operations due to its location at the top of a hill and the geology and soils, including the impervious clays present at the site which provide a physical barrier to the movement of water into and out of the individual cells within the landfill.

The EPA considered that appropriate safeguards and construction techniques would be required to reduce the risk of water pollution from proposal activities. This included appropriate effluent disposal design, monitoring, management and contingency strategies to ensure potential on-site and off-site impacts including contamination of groundwater and surface water resources did not arise or could be mitigated.

To manage impacts to groundwater and surface water resources, the EPA recommended commitment 7.7 of condition 1, which included the requirements to:

- Monitor surface and groundwater at three monthly intervals to ensure its compatibility for release to the environment. Water that has been contaminated to an unacceptable level will be recirculated on site.
- Surface water from active areas of the site will be controlled with retention basins and drains. Water retained will be monitored at three monthly intervals to ensure it is of satisfactory quality to release. Water that has been contaminated to an unacceptable level will be recirculated on site.
- Groundwater will be monitored at three monthly intervals to check the integrity of the groundwater and leachate control system. If unacceptable contamination is found, remedial action will be taken to recirculate contaminated water or intercept its movement.

Assessment of the proposed change to conditions

The EPA considers that the following current environmental policy and guidance is relevant to its assessment of the proposal for this factor:

- *Environmental Factor Guideline – Inland Waters* (EPA 2018).

Since the EPA's original assessment, the proponent has undertaken monitoring to characterise the nature and extent of groundwater contamination at the site. The EPA has received advice from the Department of Water and Environmental Regulation that due to extensive groundwater monitoring data and associated modelling, groundwater contamination is reasonably understood and appears to present a low risk to human health and the environment. Monitoring data over an extended period of time indicates that groundwater conditions are relatively stable and not subject to significant seasonal variation. As the Red Hill Waste Management Facility will continue to operate, the EPA considers it would be prudent for groundwater monitoring to continue, but at a reduced frequency.

There has been no change in the Inland Waters receptors since the original assessment, and the proponent is not proposing any changes to the proposal that would change the potential impacts to Inland Waters. The EPA is satisfied its objective for this factor can continue to be met with a reduction in the frequency of groundwater monitoring from three months to six months.

The EPA notes that the proponent has prepared a *Surface Water and Groundwater Environmental Management Plan: Red Hill Waste Management Facility* (MSGM 2020), which contains details on the monitoring requirements for surface water and groundwater. The plan incorporates the proposed reduction in frequency of groundwater monitoring from three months to six months and the continuation of three monthly surface water monitoring.

The EPA recommends a new condition (condition 9) to replace commitment 7.7 of condition 1 (Ministerial Statement 274) which requires the implementation of an approved Surface Water and Groundwater Environmental Management Plan, to ensure that impacts to surface and groundwater are minimised.

5. Conclusions and recommendations

Change to commitment 7.7 of condition 1

The proponent has requested to change the groundwater monitoring frequency as required by commitment 7.7 of condition 1. The EPA considers it is appropriate to reduce the frequency of groundwater monitoring from three months to six months and that surface water monitoring will remain at three monthly intervals. The EPA recommends that management of surface water and groundwater occur through a new condition (condition 9) requiring implementation of an approved surface and groundwater environmental management plan.

Conclusions

In relation to the environmental factors, and considering the information provided by the proponent and relevant EPA policies and guidelines, the EPA concludes that:

- there are no changes to the proposal
- there is no significant new or additional information that changes the conclusions reached by the EPA under any of the relevant environmental factors since the proposal was assessed by the EPA in Bulletin 569 (August 1991)
- no new significant environmental factors have arisen since the EPA assessment of the proposal
- the impacts to the key environmental factor is considered manageable, based on the requirements of existing conditions, and the imposition of the attached recommended conditions.

Recommendations

Having inquired into this matter, the EPA submits the following recommendations to the Minister for Environment under s. 46 of the EP Act:

1. While retaining the environmental requirements of the original conditions of Ministerial Statement 274, it is appropriate to delete the monitoring requirements in relation to surface water and groundwater in commitment 7.7 of implementation condition 1, and replace it with a new condition requiring:
 - a) the implementation of a Surface Water and Groundwater Management Plan.
2. After complying with s. 46(8) of the EP Act, the Minister may issue a statement of decision to delete the monitoring requirements in relation to surface water and groundwater required by commitment 7.7 of implementation condition 1 of Ministerial Statement 274 and replace it with condition 9 in the manner provided for in the attached recommended Statement (Appendix 1).

References

EPA 2018, *Environmental Factor Guideline – Inland Waters*, Environmental Protection Authority, Perth, WA.

EPA 2020a, *Environmental Impact Assessment (Part IV Division 1 and 2) Procedures Manual*, Environmental Protection Authority, Perth, WA.

EPA 2020b, *Statement of Environmental Principles, Factors and Objectives*, Environmental Protection Authority, Perth, WA.

MSGM 2020, *Surface Water and Groundwater Environmental Management Plan: Red Hill Waste Management Facility (Version 6)*, prepared for Eastern Metropolitan Regional Council, Perth, WA.

State of Western Australia 2016, *Western Australian Government Gazette*, No. 223, 13 December 2016.

Appendix 1: Identified Decision-Making Authorities and recommended environmental conditions

Identified Decision-Making Authorities

The following decision-making authorities (DMAs) have been identified for the purposes of s. 45 as applied by s. 46(8) of the *Environmental Protection Act 1986*:

Decision-Making Authority	Legislation (and Approval)
1. Minister for Water	<i>Rights in Water and Irrigation Act 1914</i> (Water licence and permit)
2. Minister for Planning	<i>Planning and Development Act 2005</i> (Planning approval)
3. Chief Executive Officer, Department of Water and Environmental Regulation	<i>Environmental Protection Act 1986</i> (Works approval and licence)
4. Chief Executive Officer, Department of Planning, Lands and Heritage	<i>Planning and Development Act 2005</i> (Planning approval)

Note: In this instance, agreement is only required with DMAs 1 and 2 since these DMAs are Ministers.

Recommended Environmental Conditions

STATEMENT TO CHANGE THE IMPLEMENTATION CONDITIONS APPLYING TO A PROPOSAL (Section 46 of the *Environmental Protection Act 1986*)

RED HILL WASTE MANAGEMENT FACILITY EXTENSION

Proposal: Extension to the existing Red Hill Waste Disposal Facility

Proponent: Eastern Metropolitan Regional Council
Australian Business Number 89 631 866 056

Proponent Address: 226 Great Eastern Highway BELMONT WA 6050

Report of the Environmental Protection Authority: 1675

Preceding Statement/s Relating to this Proposal: 274

Pursuant to section 45 of the *Environmental Protection Act 1986*, as applied by section 46(8), it has been agreed that the implementation conditions set out in Ministerial Statement No. 274, be changed as specified in this Statement.

Commitment 7.7 of condition 1 of Ministerial Statement 274 relating to monitoring requirements or surface water and groundwater is deleted and replaced with:

9 Water Monitoring

9-1 The proponent shall implement the proposal to meet the following environmental objective:

(1) ensure that impacts to surface and groundwater quality are minimised.

9-2 In order to meet the requirements of condition 9-1, the proponent shall implement the *Surface Water and Groundwater Environmental Management Plan: Red Hill Waste Management Facility* (Version 6, January 2020), or any subsequent revisions as approved by the CEO.

9-3 The proponent shall continue to implement the *Surface Water and Groundwater Environmental Management Plan: Red Hill Waste Management Facility* (Version 6, January 2020), or any subsequent revisions as approved by the CEO, until the CEO has confirmed by notice in writing that the plan meets the objective specified in condition 9-1.

Note: "CEO" means the Chief Executive Officer of the Department of the Public Service which is responsible for the administration of section 48 of the *Environmental Protection Act 1986*, or his delegate.