



Report and recommendations of the Environmental Protection Authority



Boodarie Waste to Energy and Materials Recovery Facility, Port Hedland – inquiry under section 46 of the *Environmental Protection Act 1986* to amend Ministerial Statement 935

New Energy Corporation Pty Ltd

Report 1650

September 2019

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 the implementation conditions in relating to the Boodarie Waste to Energy and Materials Recovery Facility, Port Hedland (Ministerial Statement 935).

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

1. a recommendation on whether or not the implementation conditions to which the inquiry relates, or any of them, should be changed
2. 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 *Environmental Protection Act 1986*.



Dr Tom Hatton
Chairman

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1. The proposal

The Boodarie Waste to Energy and Materials Recovery Facility, Port Hedland (the proposal), involves the development and operation of a waste management facility located in the Boodarie Strategic Industrial Area approximately 13 kilometers south-west of Port Hedland. The nominated proponent for the proposal is New Energy Corporation Pty Ltd.

The Environmental Protection Authority (EPA) assessed the proposal at the level of Public Environmental Review, releasing its Report and Recommendations (Report 1469) in April 2013. In this report, the EPA considered that the key environmental factor of Air Quality required detailed evaluation in its Report and Recommendations to the Minister for the Environment.

The EPA concluded in Report 1469 that:

- it was likely the EPA's objectives would be achieved, provided there was satisfactory implementation of the EPA's recommended advice
- the Works Approval and Licensing process undertaken by the former Department of Environment and Conservation (now Department of Water and Environmental Regulation) under Part V of the *Environmental Protection Act 1986* (EP Act) is the most appropriate process for regulating air emissions.

The then Minister for Environment approved the proposal for implementation, subject to the implementation conditions of Ministerial Statement 935 (21 May 2013).

Previously approved changes to conditions

On 14 November 2017 the then Minister for the Environment asked the EPA to inquire into, and report on the adequacy of operating conditions placed on approved waste-to-energy facilities under s. 46 of the EP Act.

The EPA concluded in Report 1623 that:

- the definition of residual waste is consistent with the waste hierarchy as described in section 5 of the *Waste Avoidance and Resource Recovery Act 2007*
- additional conditions are required to ensure the development, submission, approval and implementation of a waste acceptance system plan and a waste acceptance monitoring and management plan.

The then Minister for Environment agreed that the implementation conditions set out in Ministerial Statement 935 be changed in accordance with Ministerial Statement 1091 (5 March 2019).

2. Requested changes to conditions

Conditions 2-2 and 2-3 of Ministerial Statement 935 state that the proponent shall not commence implementation of the proposal after the expiration of five years from the date of the Statement (being 21 May 2013), and any commencement, within this five year period, must be substantial. The proposal has not yet substantially commenced.

In February 2018, the proponent requested a change to conditions 2-2 and 2-3 of Ministerial Statement 935 to extend the authorised timeframe for substantial commencement of the proposal by a minimum of two years. The proponent has not proposed any changes to the proposal, or to the other conditions of Ministerial Statement 935.

In response to the proponent's request, on 21 June 2018 the Minister for Environment requested that the EPA inquire into and report on the matter of changing the implementation conditions of Ministerial Statement 935 for the proposal. This report satisfies the requirements of the EPA's inquiry.

3. Inquiry into changing conditions

The EPA typically recommends the Minister sets conditions on significant proposals that require them to be substantially commenced within a specified timeframe. Extending this timeframe requires the Minister to change the relevant conditions under s. 46 of the EP Act, and provides for the EPA to review and consider the appropriateness of the implementation conditions relating to the proposal.

The EPA has discretion as to how it conducts an inquiry under s. 46. The currency of the initial assessment and issue of the Ministerial Statement (that is, when it was published) is also instructive in determining the extent and nature of the inquiry.

In conducting this inquiry, the EPA reviewed the information provided by the proponent and considered the original EPA assessment of the proposal detailed in Report 1469, the previous s. 46 Report 1623 and the corresponding Ministerial Statements 935 and 1091. In considering whether it should recommend an extension of the authorised timeframe for substantial commencement of the proposal, the EPA considered whether there was any change to, or new information relating to, the key environmental factors relevant to the proposal. The EPA also considered if any new key environmental factors had arisen since its original assessment of the proposal.

EPA policy and procedures

The EPA followed the procedures in the *Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures 2016* (EPA 2016a) and the *Environmental Impact Assessment (Part IV Divisions 1 and 2) Procedures Manual 2016* (EPA 2018). The EPA had particular regard to *Environmental Factor Guideline: Air Quality* (EPA 2016b).

4. Inquiry findings

The EPA considered that the Air Quality is the key environmental factor relevant to the change to conditions.

4.1 Air Quality

The EPA's environmental objective for this factor is *to maintain air quality and minimise emissions so that environmental values are protected.*

The proposed facility would accept various wastes and recover materials that could be economically recycled via the materials recovery facility and converted to the suitable remaining waste to electrical power, in a waste-to-energy (WTE) plant. The WTE plant consists of gasifiers, gas storage, gas burner, heat exchanger and a steam generation unit and a steam turbine.

Air pollutants produced by the proposed gasification process and the burning of the resultant syngas would produce a number of air pollutants originating from the waste feed and/or formed during the combustion process. To minimise the discharge of pollutants the proposal would include an air quality control system and a continuous emissions monitoring system to monitor various air emissions.

EPA Report 1469

The EPA assessed the proposal on the basis of the preliminary design. The EPA noted that components such as heat exchangers, boilers, generation plants and air pollution control systems are robust, well-proven technologies for WTE facilities. These technologies have been used elsewhere; however, the size and configuration proposed will be particular to the Boodarie plant. The assessment also determined the materials considered acceptable for processing, and materials excluded from processing.

The EPA concluded that the works approval and licensing process under Part V of the EP Act was the most appropriate process for:

- requiring a comprehensive commissioning plan
- ensuring a rigorous and staged commissioning process
- setting and regulating air emissions.

The EPA provided recommendations to the then Department of Environment and Conservation, including stack emission limits and a staged commissioning approach, specifying that operating parameters should be continuously monitored. The EPA did not recommend any specific ministerial conditions for this proposal, although it did place requirements on the facility's design through parameters in the schedule within the recommended Ministerial Statement.

EPA Report 1623

The EPA previously conducted an inquiry under s. 46 of the EP Act into the adequacy of operating conditions placed on approved WTE facilities. The purpose of the inquiry was to investigate the types of waste to be used by approved WTE proposals, ensuring that waste feedstocks at these facilities were restricted to 'residual waste' in accordance with the *Waste Avoidance and Resource Recovery Act 2007* (WARR Act). A key aspect of this inquiry was to provide a clear and consistent definition for 'residual waste' for application to WTE facilities.

In Report 1623 (October 2018) the EPA recommended defining residual waste consistent with the waste hierarchy as described in section 5 of the WARR Act and recommended the following conditions:

- Condition 4 – 'Compliance Reporting' to ensure the proponent provides compliance assessments with regards to residual waste (condition 6) and waste acceptance monitoring and management (condition 7).
- Condition 5 – 'Public Availability of Plans and Reports' to ensure that all environmental plans and reports are made publically available.
- Condition 6 – 'Residual Waste' to ensure that accepted waste meets the requirements of Table 3 (should be Table 2) in Schedule 1.
- Condition 7 – 'Waste Acceptance Monitoring and Management' to demonstrate that waste types not permitted for processing, detailed in Table 2 of Schedule 1, are not accepted or processed.

Assessment of the proposed change to conditions

In consideration of the information provided by the proponent, the existing management required by Ministerial Statement 935 and relevant EPA policies and guidelines, the EPA considers that:

- there is no significant or additional information that justifies the reassessment of issues raised by the original proposal.

The EPA is therefore satisfied that the extension of Time Limit for Proposal Implementation for five years continues to meet the EPA's objective.

5. Conclusions and recommendations

The proponent has requested extending the Time Limit for Proposal Implementation for a minimum of two years (to 21 May 2020).

Under current legislation the proponent has been unable to gain access to the North West Interconnecting System to distribute and retail power. New regulations are scheduled to allow third party access to the system in 2020.

The EPA notes that introducing new technology rules to an electricity network takes time and the Time Limit for Proposal Implementation condition requires substantial commencement of the project. Given the above, the EPA considers that a five year extension of the time limit for proposal implementation is appropriate.

The EPA also notes an administrative error in Statement 935 where the condition for Time Limit for Proposal Implementation was not properly numbered. To rectify this, the EPA considers this condition should be numbered as condition 3, with its two sub-clauses (formerly 2-2 and 2-3) numbered as 3-1 and 3-2.

Conclusions

In relation to the environmental factor, and in consideration of the information provided by the proponent and relevant EPA policies and guidelines, the EPA concludes that:

- The proposal has not changed since the EPA's original assessment.
- 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 Report 1469 (April 2013) and Report 1623 (October 2018).
- No new key environmental factors relevant to the proposal have arisen since the EPA's original assessment.
- The potential impacts to the key environmental factor can be adequately managed by the existing implementation conditions of Ministerial Statements 935 and 1091.

Recommendations

Having inquired into the matter of changing the implementation conditions relating to the Boodarie Waste to Energy and Materials Recovery Facility, the EPA submits the following recommendations to the Minister for Environment under s. 46 of the *Environmental Protection Act 1986*:

1. That, while retaining the environmental requirements of the original conditions of Ministerial Statement 935, it is appropriate to change implementation conditions 2-2 and 2-3, and replace them with new implementation conditions extending the authorised timeframe for substantial commencement of proposal for a further five years, to 21 May 2023.

2. That, after complying with s. 46(8) of the *Environmental Protection Act 1986*, the Minister issues a statement of decision to change conditions 2-2 and 2-3 of Statement 935 in the manner provided for in the attached recommended Statement (Appendix 1).
3. That, the Time Limit for Proposal Implementation condition be numbered 3 and conditions 2-2 and 2-3 renumbered 3-1 and 3-2 respectively.

References

EPA 2016a, *Environmental Impact Assessment (Part IV Divisions 1 and 2) Administrative Procedures 2016*, Environmental Protection Authority, Perth, WA.

EPA 2016b, *Environmental Factor Guideline – Air Quality*, Environmental Protection Authority, Perth, WA.

EPA 2018, *Environmental Impact Assessment (Part IV Divisions 1 and 2) Procedures Manual 2018*, Environmental Protection Authority, Perth, WA.

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

Identified Decision-Making Authorities

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

1. Chief Executive Officer, Department of Water and Environmental Regulation
2. Chief Executive Officer, Town of Port Hedland

RECOMMENDED ENVIRONMENTAL CONDITIONS

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

BOODARIE WASTE-TO-ENERGY AND MATERIALS RECOVERY FACILITY, PORT HEDLAND

Proposal: The proposal is to develop a waste management facility located in the Boodarie Strategic Industrial Area approximately 13 kilometres south-west of Port Hedland.

Proponent: New Energy Corporation Pty Ltd
Australian Company Number 16 139 310 053

Proponent Address: Suite 1, 12 Parliament Place
WEST PERTH WA 6005

Report of the Environmental Protection Authority: 1650

Previous Assessment Number: 1911 and 2159

Previous Report Number: 1469 and 1623

Preceding Statements Relating to this Proposal: 935 and 1091

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. 935, be changed as specified in this Statement.

Conditions 2-2 and 2-3 of Ministerial Statement 935 are deleted and replaced with:

3 Time Limit for Proposal Implementation

3-1 The proponent shall not commence implementation of the proposal after 21 May 2023, and any commencement, within this period, must be substantial.

3-2 Any commencement of implementation of the proposal, on or before 21 May 2023, must be demonstrated as substantial by providing the CEO with written evidence, on or before 21 May 2023.