



Our Ref: SU006201

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Dear Mr Maffei

Guidance on regulatory requirements for site closures relating to the Commonwealth Contract for Closure program

Further to your preliminary discussions with EPA staff, please find attached a package of information developed to assist you in understanding your regulatory requirements for site closure relating to the Commonwealth Contract for Closure program.

This information has been compiled to provide guidance to generators and other Government agencies by clarifying the key processes under the *Environment Protection Act 1970* (EP Act) relating to potential power station closure and future site use. It includes an overview of relevant aspects of works approval and licensing processes; contaminated land management processes and relevant standards.

The information is of a general nature only, and should be used as a starting point for further site-specific discussions.

A copy of this information is being provided to the Victorian Department of Primary Industries and the Commonwealth Department of Resources, Energy and Tourism.

If you would like further information, please do not hesitate to contact Kate Gavens, Manager, Policy and Regulation Unit (9695 2763).

Yours sincerely

A handwritten signature in black ink, appearing to read 'John Merritt'.

JOHN MERRITT
CHIEF EXECUTIVE OFFICER

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Power station closure and future site use

Overview of key processes under the *Environment Protection Act 1970*

1. Introduction

This document provides an overview of the key processes under the *Environment Protection Act 1970* (EP Act) that are relevant to Victorian power station operators seeking to shut down part or all of the site's generation capacity.

The document is structured as follows:

1. Introduction
2. Works approvals and licences
 - Overview of power station licences
 - Decommissioning
 - Shutdown and licence surrender
 - Licence amendments and works approvals
3. Contaminated land management
 - Environmental auditing of contaminated sites
 - Environmental site assessment
 - What do audit requirements look like?
 - When does EPA require an audit for site closure?
 - Planning scheme amendments
4. Summary of relevant standards
 - Guidelines for environmental auditing
 - Standards for land and groundwater remediation
 - Greenhouse gas emissions and climate change
5. Figure 1: Power station closure; site assessment and audit; and future site use (overview of key processes under the *Environment Protection Act 1970*)

The information provided is of a general nature only and requirements for each site will vary depending upon the site characteristics, proposed works, and the site's existing obligations. It is strongly recommended that generators begin discussions with EPA as soon as possible once a closure plan is proposed.

Note: All references to legislation are to the EP Act unless stated otherwise.

2. Works approvals and licences

Key points:

- Works approval under the EP Act is required for increasing or altering emissions or the types of wastes handled or the method or equipment used on scheduled premises.
- A decrease in emissions may not require works approval (provided the proposed change is not anticipated to result in an environmentally deleterious alteration in emissions or discharges). A generator may wish to apply for a licence amendment to reflect the decreased emissions.

This section provides: general background information to works approval and licence system under the EP Act that should be considered when planning for closure and future site use.

Overview of power station licences

6. The *Environment Protection (Scheduled Premises and Exemptions) Regulations 2007* (SPE Regulations) are designed to ensure that premises that conduct activities posing significant environmental risk are managed and monitored effectively through works approval and/or licensing.
7. Power stations requiring works approval and licensing are defined in Schedule 1 of the Regulations as “Category K01 – fuel-based facilities with a rated capacity of more than 5 MW of electrical power”. Gas-fired turbines with a rated capacity of less than 20MW are exempt from licensing.
8. EPA licences regulate emission and discharge limits, not generation capacity.
9. EPA licences do not currently include emission limits or standards for GHG emissions.
10. EPA licences for power stations are typically triggered by a number of scheduled premises categories including power generation (K01), landfill (A05) and mining (C01), as applicable.
11. A number of current EPA licences for power stations are Accredited Licences (under ss 26A, 26B). Accredited Licences provide licence holders who can demonstrate high environmental performance and an ongoing capacity to maintain and improve performance with more flexible works approval obligations (see EPA Publication 424).

Decommissioning

12. Depending on the proposed decommissioning process, a site may need to seek approval for temporary emissions or discharges which would otherwise be an offence under the EP Act or the site’s normal licence conditions.
13. This approval is granted by EPA under section 30A of the EP Act, and may last up to 120 days.
14. Requirement for 30A approval should be discussed with EPA as soon as possible in the process.

Shutdown and licence surrender

15. A licence is no longer required once all emissions and discharges to the environment cease.
16. Once all emissions and discharges to the environment cease, a site may apply to surrender its licence under section 23A.
17. EPA may revoke a licence under section 20(9). EPA’s approach to licence revocation is outlined in EPA’s Compliance and Enforcement Policy (EPA Publication 1388). Licence revocation is used as an enforcement response to a combination of serious risk or harm to the environment and serious culpability of the offender. In the case of plant shutdown, licence surrender is the preferred approach.
18. EPA has been asked whether “moth-balling” of a site would be permitted (e.g. process shutdown, with the plant secured with restricted access but left to remain unmanaged). Sites used for power generation are highly likely to contain materials such as asbestos or chrome refractory materials that have the potential to pose a significant environmental or human health hazard over time. “Moth-balling” is not likely to be an appropriate way of managing these risks, and EPA can require removal or management of such risks. Further, WorkSafe Victoria may impose requirements to manage the safety risks of such an approach.
19. If ongoing management of contamination resulting from previous activity is required, EPA may issue a statutory notice such as a Pollution Abatement Notice (section 31A) or Clean Up Notice (section 62A). These may be issued to both licensed and unlicensed sites.
20. Further information on management of contamination is provided in Section 3. See also Figure 1.

Works approval

21. A works approval permits the construction of a plant, the installation of equipment or modification of process for activities scheduled under the SPE Regulations.
22. An application for works approval is required to demonstrate, among other things, that the proposal is consistent with the relevant statutory policy requirements. These include the best practice requirements for the management of greenhouse gas emissions. See Section 4.
23. A works approval is required for:

- Premises that are, or will become, scheduled premises, as defined by the SPE Regulations, or
- Increasing or altering emissions or the types of wastes handled or the method or equipment used on scheduled premises.

To clarify, in relation to licensed sites:

- Works approval is required for proposals relating to retrofitting of 'dormant' plant for which a licence has been previously surrendered, in accordance with the requirements outlined above.
24. All emissions and discharges are site-specific and are not necessarily linearly proportional to generation capacity, i.e. changing the output of a unit may result in changes to efficiency relating to a number of parameters (e.g. water, energy or waste emissions and various discharges).
 25. Works approvals are issued or refused by EPA based on their merits, against the legislation current at the time of the decision. For an overview of relevant standards, see Section 4.
 26. EPA is required to issue or refuse a works approval application within 4 months of accepting the application (s19B(7)).
 27. If a planning scheme requires a planning permit to be obtained, any works approval issued by EPA does not take effect until the planning permit is granted (s19B(7A)).
 28. Guidance for works approval applicants is provided in EPA's Works Approval Guidelines (Publication 1307).

Licence amendment

29. Subsequent to works approval and construction of the site, the operator of a scheduled premises is required to hold an EPA licence for operation of the premises.
30. EPA licences specify waste discharge limits for air, water and land based on statutory policy requirements and the works approval assessment.
31. For existing licence holders, a works approval is likely to lead to a licence amendment to reflect the new operating conditions.
32. A decrease in emissions resulting from decommissioning or capacity withdrawal may not require works approval, provided the proposed change is not anticipated to result in an environmentally deleterious alteration in emissions or discharges. A generator may wish to apply for a licence amendment to reflect the decreased emissions.

3. Contaminated site management

Key points:

- Environmental audits are used to ensure that sites are suitable for current or proposed use, and that any issues regarding environmental management or contamination are addressed properly.
- There are a number of ways to understand the extent of contamination and required remediation of a site, including various levels of site assessment and/or statutory audit.
- It is expected that the licence holder will commence discussions with EPA to understand the information available on the site's environmental status and scope any site assessment or audit requirements.

This section provides: an overview of the environmental auditing system under the EP Act and EPA's approach to environmental auditing of complex sites considering closure.

Environmental auditing of contaminated land

33. Broadly speaking, a statutory audit may be required to:
- a) Satisfy a planning authority issuing a planning permit that allows the use or development of potentially contaminated land that the land is suitable for that use;
 - b) Confirm whether a site is suitable for its existing use;
 - c) Manage, and/or assess the adequacy of, works to clean up polluted sites; or
 - d) Satisfy EPA that concerns regarding environmental management or contamination have been addressed appropriately.
34. Statutory audits are undertaken by auditors who are appointed under the EP Act and are engaged by the site owner/occupier.
35. A list of environmental auditors is available on EPA's website. Typically, audits of contaminated sites require a 'Contaminated Land Auditor'; however 'Industrial Facilities Auditors' may also be able to assist depending on their individual expertise and the scope of the audit.

Statutory audits

36. There are two types of statutory audit under the EP Act:
- a) "53V audit" – an audit under section 53V of the EP Act; undertaken to ascertain the risk posed to the environment from an activity.
 - The scope of a 53V audit is variable and specific to the site and activities being audited.
 - The outcome of a 53V audit is a set of recommendations that need to be complied with to ensure the site and any activities occurring at the site do not present a risk of harm to human health or the environment. EPA may issue a statutory notice requiring implementation of audit recommendations.
 - b) "53X audit" – an audit under section 53X of the EP Act; undertaken to ascertain a holistic understanding of the environmental condition of a site, commonly required by a planning authority in accordance with Ministerial Direction No. 1.
 - The scope of a 53X audit is consistent and requires holistic consideration of the environment at the site and any impacts it may be having on neighbouring sites.
 - The outcome of a 53X audit may be the issue of a Certificate or Statement of Audit, indicating the auditor's opinion of any restrictions of the use of the site, subject to any further conditions or limitations related to its use and management.

Environmental site assessment

37. There are also various levels of (non-statutory) site assessment that can assist a site to understand the nature of any contamination present, which need not be undertaken through a statutory process.

38. Environmental site assessments may be undertaken voluntarily at any time with no need for an EPA-appointed auditor.
39. EPA may require that a site assessment be undertaken (in accordance with Australian Standard 4482.1 and EPA guidelines), in order to begin the process of delineating site contamination and assist the scoping of audit requirements, if needed.
40. Information gathered in a site assessment can usually be used in a subsequent audit.

What do audit requirements look like?

41. Remediation requirements may be reflected in any number of statutory notices, including:
 - a) Licences
 - b) Audit Statements
 - c) Pollution Abatement Notices
 - d) Clean Up Notices
42. Remediation requirements may include the involvement of environmental auditors, various levels of site assessment or characterisation, remediation planning, modelling, remediation works and reporting.
43. Remediation requirements vary significantly from site to site. They may be of a long-term nature, and may not always have a confirmed completion date.
44. Confirmation of the status of a site's compliance with regulatory requirements at any time may be undertaken by EPA or an EPA-appointed auditor depending on the nature of the statutory notice in which they are reflected.

When does EPA require an audit for site closure?

45. EPA needs to be assured that historical contamination is managed properly. Closure of a complex site, such as a site with many or complex contaminants, complex site use, or sensitive nearby beneficial uses, is likely to require consideration of historical contamination as part of the closure process. For closure of such complex sites, it is expected that the licence holder will commence discussions with EPA to understand the information available on the site's environmental status and scope any site assessment or audit requirements.
46. Proposed partial closure may also result in the need for an environmental audit of ongoing activity to understand the site's ongoing environmental management and performance.
47. Regardless of closure processes, EPA expects that any site should not impact on beneficial uses of any segment of the environment.

Planning scheme amendments

48. Land that is proposed for sensitive use or rezoning may require a more stringent level of assessment or audit to satisfy the planning authority that the land is fit for use. See *Ministerial Direction No. 1 – Potentially Contaminated Land*.
49. It is recommended that licence holders liaise with their local council to identify any planned future land uses or relevant planning strategies.
50. Table 2 of DSE's General Practice Note Potentially Contaminated Land identifies the assessment and audit requirements for various proposed land-uses. The higher the potential for a past activity to have contaminated land, the more stringent the suggested assessment and/or audit requirements are. "Electricity generation / power stations" are noted as being a type of land use with high potential for contaminating land.

4. Summary of relevant standards

Key points:

- State environment protection policies (SEPP) establish in law the uses and environmental values to be protected in Victoria and define the environmental quality objectives needed to protect these beneficial uses.
- SEPPs can be found on EPA's website, under 'About EPA', 'Environmental Legislation'.
- EPA provides a number of guidelines that explain the environmental audit process.

This section provides: an overview of statutory policies and guidelines that are relevant to power station closure and future site use, including standards relating to greenhouse gas emissions that may be relevant for sites considering future power generation activity.

Guidelines for environmental auditing

51. Some useful EPA references for environmental audit processes include:

- Environmental Audit of Contaminated Land (EPA Publication 860)
- Environmental Auditing in Victoria (EPA Publication 902)
- Environmental Auditor (Contaminated Land) Guidelines for Issue of Certificates and Statements of Environmental Audit (EPA Publication 759.1)
- A list of Auditors appointed under the EP Act is available on EPA's website <http://www.epa.vic.gov.au/envaudit/auditors.asp>
- Ministerial Direction No.1 – Potentially Contaminated Land
- Department of Sustainability and Environment, General Practice Note, *Potentially Contaminated Land* (June 2005)
- Australian Standard 4482.1 – Guide to the investigation and sampling of sites with potentially contaminated soil

Standards for land and groundwater remediation

52. Two key SEPPs relevant to remediation requirements are:

- State Environment Protection Policy (Prevention and Management of Contamination of Land) 2002, and
- State Environment Protection Policy (Groundwaters of Victoria) 1997 (SEPP (GoV))

53. Other SEPPs may also be relevant depending on the specific of the site, for example, SEPP (Waters of Victoria).

Standards for air quality

54. The State environment protection policy (Air Quality Management) (SEPP (AQM)) requires that all generators of air emissions, including greenhouse gas emissions, manage their emissions in accordance with best practice, continuous improvement and the waste hierarchy.

55. The *Climate Change Act 2010* (CC Act, section 14) introduced a requirement for EPA to consider the potential impacts of climate change and the potential contribution to Victoria's greenhouse gas emissions of works approval and licensing decisions. EPA's Works Approval Guidelines are being updated to reflect these requirements.

56. The requirement for best practice under SEPP (AQM) remains unchanged.

57. The CC Act Review and Government response result in no changes in EPA's role in regulation of greenhouse gas emissions.

58. The Victorian Minister for Energy and Resources has announced (27 March 2012) that the Victorian Government would not proceed with the introduction of an emissions intensity standard for power generation.

Figure 1: Power station closure; site assessment and audit; and future site use
 Overview of key processes under the *Environment Protection Act 1970*

Licence and works approval

Current licence

- If partial shutdown proposed, site to discuss licence amendments with EPA.
- If complete shutdown proposed, site surrenders licence under section 23A when all emissions to the environment from the operation of the scheduled activity cease.

Decommissioning & shutdown

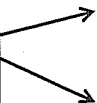
- For both partial and complete shutdown, section 30A approval for decommissioning activities may be required. To be discussed with EPA.

Works approval

- Works approval is required for construction of new scheduled premises.
- Works approval is required for retrofitting of existing plant for which a licence has been previously surrendered.
- Works approval is required for increasing or altering emissions or the types of wastes handled or the method or equipment used on scheduled premises.
- If a planning scheme requires a planning permit to be obtained, any works approval issued by EPA does not take effect until the planning permit is granted (s19B(7A)).

Discussions between the site and EPA to outline processes and timing for any required:

- works approvals and licence amendments
- site assessment, and/or
- environmental audits.



Environmental assessment and statutory audit

- To better understand the environmental status of the site and the nature of any audit requirements, EPA may request that a site assessment be undertaken (as distinct from a statutory audit).
- The scope of any site assessment or statutory audit will depend on a number of considerations, including:
 - The site's environmental status;
 - The nature of the proposed shutdown;
 - Consultation with the local planning authority; and
 - To some extent, any proposed future use of the site (e.g. if the proposed future use involves a 'sensitive use', a more stringent audit may be required by the local planning authority).
- EPA can issue a statutory notice requiring implementation of audit recommendations.
- The licence holder will need to engage an EPA-appointed auditor if a statutory audit is required.

Environmental objectives

- Ensure that the condition of the site does not cause detriment to the beneficial uses on or off the site.
- Land quality of the site suitable for relevant planning zone (SEPP (Prevention and Management of Contaminated Land) may require consultation with local council).
- Groundwater quality to meet State environment protection policy (Groundwaters of Victoria).
- Surface water quality to meet State environment protection policy (Waters of Victoria).