

# Environmental auditor guidelines for appointment and conduct



Environment  
Protection  
Authority Victoria

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Guideline

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## 1. Definitions

Unless the context requires otherwise, an expression or phrase that is used in these guidelines and in the *Environment Protection Act 1970* (the Act) has, in these guidelines, the same meaning as in the Act (whether or not a particular meaning is assigned to it in the Act).

Unless otherwise stated the term 'environmental audit' used in these guidelines refer to an environmental audit undertaken in accordance with Part IXD of the Act.

## 2. Essential measures

The Environment Protection Authority (EPA Victoria, EPA or the Authority) appoints environmental auditors pursuant to section 53S of the Act.

Environmental auditors are appointed to carry out statutory duties pursuant to the Act or other acts<sup>1</sup>, which include:

- conducting environmental audits of segments of the environment
- issuing certificates or statements of environmental audit relating to segments of the environment

- conducting environmental audits of the risk to the beneficial uses of the environment associated with industrial processes or activities
- other activities related to the statutory duties and functions of the Authority and other government agencies.

In exercising functions and duties pursuant to the Act or other acts, an environmental auditor is expected to act in a manner consistent with the intent of the Act or other acts. Specifically, environmental auditors owe a primary duty of care to the environment and to the people of Victoria above all others (including their client). The expected conduct of an environmental auditor is described in detail in section 9 of these guidelines.

These guidelines also set out the processes followed by the Authority when making, suspending and revoking appointments as environmental auditors.

The Authority may appoint individuals to one or more categories of environmental auditor as described in the attached schedules. Each category of environmental auditor has been established in recognition of the need for specific expertise in the conduct of environmental audits of particular segments of the environment or of activities that may impact upon it. Such environmental audits may be required to address the needs of various industries or to contribute to the programs of natural resource managers.

The Authority's role is to ensure that an acceptable quality of environmental auditing is attained and maintained. The processes the Authority uses to do this are set out in these guidelines, and in the attached schedules.

These guidelines should be read in conjunction with the Act (in particular Part IXD) and other environmental auditor guidelines published by the Authority.

<sup>1</sup>Other acts' means legislation other than the *Environment Protection Act 1970*, for example, the *Port Services Act 1995* and the *Mineral Resources (Sustainable Development) Act 1990*.

## 3. Applications for initial appointment

### 3.1 Advertisements

The Authority will advertise its intention to appoint environmental auditors, and call for applications.

### 3.2 Applications

All applicants must complete the following form:

- Application Form 1 - General Criteria: This form applies to all categories.

Additionally, applicants must also complete the associated form(s) relevant to the category or categories for which appointment is sought, as described below:

- Application Form 2 - Schedule A: Applicants seeking appointment in the category of Contaminated Land
- Application Form 3 - Schedule B: Applicants seeking appointment in the category of Industrial Facilities
- Application Form 4 - Schedule C: Applicants seeking appointment in the category of Natural Resources.

All forms are available from the forms section of EPA's website ([www.epa.vic.gov.au/forms](http://www.epa.vic.gov.au/forms)). The forms require the applicant to provide detailed information addressing the following selection criteria:

- (i) clear indication of the category or categories for which appointment is sought (refer to the attached schedules in these guidelines)
- (ii) evidence of relevant qualifications. For example, a relevant bachelor's degree awarded by a recognised tertiary institution
- (iii) a current, detailed curriculum vitae must be attached, including full name, address, phone number, email and any other requirements as outlined in Application Form 1 - General Criteria
- (iv) demonstrated commitment to ongoing training and professional development relevant to the technical competencies of the category or categories of appointment sought. Applicants should provide details and evidence of training or other professional development undertaken and learning outcomes. Applicants should be able to demonstrate how up-to-date knowledge is maintained about developments in the scientific, technical, regulatory and legal fields relevant to the category or categories for which appointment is sought
- (v) evidence of individual membership of and/or accreditation from one or more relevant professional societies. In addition, applicants should also be able to demonstrate membership and/or accreditation of professional associations where relevant to nominated category or categories for which appointment is sought
- (vi) demonstrated knowledge and understanding of relevant provisions of the Act plus associated statutory policies, regulations and guidelines relevant to the category or categories of appointment sought

- (vii) demonstrated thorough understanding of the principles of, and methods for, conducting environmental audits
- (viii) environmental auditing experience relevant to the category or categories for which appointment is sought
- (ix) two or more 'audit-like'<sup>2</sup> environmental reports or studies prepared by the applicant whereby:
  - (a) the role of the applicant in conducting the studies and in preparing the reports must be clearly indicated
  - (b) the applicant clearly demonstrates expertise in their selected category and their written communication skills
  - (c) the applicant must have substantially prepared the example report(s)
  - (d) the report(s) must clearly support the statements and the information provided in the application forms
  - (e) the report(s) were prepared no more than two years prior to the date of application
  - (f) consent to release the report(s) to EPA must be obtained from the client(s) before the application is submitted.

Note: All reports will be treated as confidential and will be returned to the applicant.

- (x) summary information about additional reports and studies undertaken may be presented in tabular form, indicating the title of the project, the role of the applicant and the purpose of the project
- (xi) demonstrated experience and expertise of the applicant (or his or her expert support team) in the areas listed in the attached schedules of these guidelines for the category or categories for which appointment is sought
- (xii) evidence of the applicant's ability to exercise professional judgment, reach opinions independently and have not been unduly influenced by views or actions of others
- (xiii) demonstrated experience and expertise as outlined below:
  - (a) at least eight years' experience relating to the category of appointment being sought
  - (b) at least three years' experience in environmental assessment and auditing
  - (c) at least two years of relevant work in Australia and two years in the role of project manager involving a multidisciplinary team approach in an area relevant to the category of appointment sought
  - (d) experience should be broadly based in terms of the scale of work undertaken and the scope of work performed

<sup>2</sup>Examples of 'audit-like' environmental reports include; Remedial Action Plans, Clean Up Plans, Environmental Management Plans, Construction Environmental Management Plans, Due Diligence Audits, Phase 1 and 2 Environmental Site Assessment, and Sampling and Analysis Plan.

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- (e) experience in forming and managing multidisciplinary teams, which contain the appropriate balance of expertise for complex assessments.
- (xiv) the applicant must nominate an expert support team formed by persons with technical expertise in areas outlined in the attached schedule for the category of appointment sought in areas beyond the applicant's area of expertise. In setting out details of this expert support team, the applicant should also indicate those areas in which he or she claims expertise.

The capabilities of expert support personnel must be demonstrated and be available at any time at the Authority's request. Expert support team members should have relevant qualifications and expertise in the areas nominated for support and at least eight years' experience in the area of expertise claimed. The applicant must provide the following for each expert support team member:

- (a) a current, detailed curriculum vitae demonstrating expertise in the area(s) nominated including:
  - a degree and or equivalent qualification relevant to an area of expertise claimed
  - clearly demonstrated and detailed description of relevant project experience in the area of expertise claimed
  - number of years of relevant experience in the expertise claimed
  - membership of a professional association relevant to the area of expertise claimed
  - be currently working in the field of expertise
- (b) listing of any relevant publications
- (c) a signed agreement to provide expert support from nominated team members who are not employed by the same company as the applicant. The area of expertise in which support will be provided must be clearly indicated.

Further information on expert support requirements are provided in Appendix Two.

- (xv) an undertaking from the applicant that he or she will obtain, or that his or her employer will obtain on the applicant's behalf, professional indemnity insurance. The professional indemnity insurance should specifically cover the applicant for environmental auditor activities undertaken pursuant to the Act. Applicants should satisfy themselves as to the level and duration of insurance cover that will be adequate to cover their activities as an environmental auditor. Applicants should also satisfy themselves that expert support team members hold adequate professional indemnity insurance. (Application Form 1 – General Criteria requires a signed declaration to this effect.)
- (xvi) full disclosure of any circumstances that may affect the applicant's independence or objectivity

in acting as an environmental auditor appointed pursuant to the Act (Application Form 1 – General Criteria) requires a signed declaration to this effect

- (xvii) nomination of two referees who are not directly associated with the applicant or the company employing the applicant, who have direct and recent knowledge of the applicant and can confirm the applicant's experience and expertise
- (xviii) a National Police Records Check.

Each application must contain the documents as specified in the following table. Attachments to the application must be clearly labelled as indicated in the application forms.

Requirements	Number of copies required
Application forms – hard copy	One
Application forms – electronic copy (CD or USB)	One
Audit-like environmental report – hard copy *	One (of each report)

\* The application must include two or more sample reports.

#### Forward applications to:

The Manager, Environmental Audit Unit  
 EPA Victoria  
 GPO Box 4395  
 MELBOURNE VIC 3001

## 4. Initial selection and appointment

The selection process has a number of stages, which include written application, written examination and panel interview.

### 4.1 Selection for examination

The authority will invite applicants to sit an examination based upon the applicant's ability to address the assessment criteria set out in section 3 (including the relevant schedules) of these guidelines.

### 4.2 Examination

The examination will address legislative, technical and policy aspects of environmental auditing based on the applicant's selected category of appointment. The applicant's responses will be assessed upon ability to demonstrate understanding and knowledge including, but not limited to, the following:

- (i) legislative understanding
- (ii) auditing skills
- (iii) technical competencies.

Successful applicants will be selected for interview with an interviewing panel.

### 4.3 Panel

The Authority will appoint a panel from time to time, whose task will be to make recommendations regarding the appointment of environmental auditors. Each panel will assess applicants against the criteria set out in section 3 (including the relevant schedules) of these guidelines. Separate panels may be used for the different categories of environmental auditor detailed in the attached schedules.

All panels will be formed by panelists with appropriate and sufficient expertise in the relevant category of environmental auditing and chaired by a person appointed by the authority. The Authority will seek panelists from a broad range of backgrounds.

### 4.4 Selection for interview

The Authority will select applicants for interview using examination results and the assessment criteria set out in section 3 (including the relevant schedules) of these guidelines.

### 4.5 Interview

The panel will interview those applicants, selected in accordance with section 4.4 of these guidelines, using a case study as the basis for that interview. The applicant will be given time to review the case study and will then be asked to address a series of questions in relation to the case study. The applicant's response will be assessed for soundness of basic technical knowledge, ability to identify the key risks posed to the environment in the segment being audited and the logical basis of the decision-making process.

### 4.6 Appointment decisions

The panel will make a recommendation to the Authority regarding the appointment of each applicant based on the outcome of the application process and other relevant matters that the EPA may be aware of. The Authority will determine any application for appointment as an environmental auditor after considering the panel's recommendations.

Successful applicants will be required to provide a recent digital, passport-style photograph.

### 4.7 Notice of Appointment

An appointed environmental auditor will receive a Notice of Appointment and an identification card that bears a photograph of the environmental auditor.

### 4.8 Initial term of appointment

The initial term of appointment will ordinarily be 24 months.

### 4.9 Conditions of appointment

Appointment will be conditional upon the applicant:

- (i) making payment of the prescribed fee
- (ii) undertaking continuing professional development
- (iii) maintaining an expert support team acceptable to the Authority and in accordance with these guidelines.

The Authority may limit the activities of the environmental auditor to one or more of the categories of environmental auditor.

The Authority may impose other condition(s) on the appointment it considers necessary.

### 4.10 Fees

The environmental auditor's appointment only takes effect upon payment of the appointment fee referred to in section 53T(1) of the Act.

### 4.11 Unsuccessful applicants

Each unsuccessful applicant will be advised of the reason(s) his or her application was not successful.

### 4.12 Induction

An induction session will be conducted for successful applicants.

### 4.13 Appeals process

Where an applicant is dissatisfied with a decision made by the Authority in relation to his or her application for initial appointment as an environmental auditor, he or she may request reconsideration. This request should set out the grounds for reconsideration in terms of the assessment criteria contained in section 3 (including the relevant schedules) of these guidelines.

The request must be lodged with the Authority within 28 days from the date of notification of the Authority's decision.



Within 28 days of receipt of the request for appeal the Authority will either:

- (i) appoint an independent person, as described in sections 12.9 and 12.10 of these guidelines, to chair the appeal and make a recommendation to the Authority
- or
- (ii) refuse the request.

The Authority may refuse a request for appeal if the appellant fails to provide any evidence or grounds to support the request or the Authority upholds its initial decision. In the event of the Authority's decision to refuse a request for appeal, the Authority will notify the appellant of the reasons in writing.

After conducting the appeal, the independent person will make a recommendation to the Authority. The Authority will re-examine its decision in light of the information presented and recommendations by the independent person. The Authority will communicate its final decision to appellant.

## 5. Application for subsequent appointment

An auditor appointment is for a finite period – usually two or five years. Auditors who want to continue their appointment as an auditor must apply for subsequent appointment using the prescribed form and in the manner detailed below. In the subsequent appointment assessment process, EPA will consider information presented within the application, review outcomes of the auditor's work and any issues or complaints.

Subsequent appointment means any appointment of an environmental auditor other than an initial appointment referred to in sections 3 and 4 of these guidelines.

### 5.1 Application for subsequent appointment

A person appointed as an environmental auditor may apply for subsequent appointment. Such an application should be made in writing and submitted in electronic and hardcopy form to the address listed at the end of section 3 of these guidelines. An application for subsequent appointment must be received at least eight weeks prior to the expiry of the environmental auditor's appointment.

The environmental auditor must complete the subsequent appointment application form provided by EPA and supply the following information in support of the application for subsequent appointment:

- (i) an undertaking to maintain environmental auditor's expert support team in accordance with these guidelines
- (ii) full disclosure of any circumstances that may affect the applicant's independence or objectivity in acting as an environmental auditor appointed pursuant to the Act (the application form requires a signed declaration to this effect)
- (iii) maintaining professional indemnity insurance (as set out in section 3.2 (xiv) of these guidelines)

- (iv) a recent, digital passport-sized photograph
- (v) applicants must complete a National Police Records Check.

### 5.2 Environmental auditors who have completed less than two reports

An environmental auditor who has completed only one environmental audit report during their last period of appointment must identify an additional report which demonstrates;

- (i) technical and environmental auditing competence through work of equivalent professional standing, including but not limited to environmental audits performed in another jurisdiction(s)
- (ii) sufficient understanding of relevant Victorian environmental legislation, policy, regulations and guidelines.

EPA may request a copy of this report.

A statement of understanding of Victorian legislation is also required. Where applicable and upon request by the Manager Environmental Audit, the auditor must provide two examples of the documents prepared as a result of the other statutory works conducted pursuant to the Act or other acts (refer to section 5.1 (v) of these guidelines) by the applicant during his or her last period of appointment.

An application will only be regarded as submitted if the subsequent appointment application form is completed and the supporting information supplied. If this does not occur, an appointment may lapse or expire as described in Section 5.5

### 5.3 Environmental auditors who have not completed any environmental audits in Victoria

An environmental auditor who has not completed any environmental audit in Victoria in the preceding period of appointment will not be eligible for subsequent appointment unless the environmental auditor is able to demonstrate requirements of section 5.2 above.

To demonstrate the above, the applicant must list (in addition to the requirements of section 5.1 of these guidelines) at least two reports of equivalent professional standing and a written statement demonstrating understanding of requirements in (ii) above. In addition the Manager Environmental Audit may request copies of listed reports and applicants to attend an interview.

Where an environmental auditor has not conducted any environmental audit in Victoria in the two preceding periods of appointment, and upon consideration of individual circumstances, the Authority may determine to not grant subsequent appointment.

Notwithstanding the above, any environmental auditor may apply for appointment under the procedures for initial appointment as outlined in sections 3 to 4 of these guidelines.

## 5.4 Assessment

In assessing an environmental auditor's application for subsequent appointment, the Authority will consider the information provided in accordance with sections 5.1 and 5.2 above. In addition, the Authority will review all information compiled as a result of any quality assurance review carried out in accordance with section 10 of these guidelines. Where applicable, the Manager Environmental Audit will seek comments on the environmental auditor's performance in other statutory works conducted pursuant to other Acts from the relevant government agencies and other jurisdictions. All assessments will be subject to an internal peer review prior to recommendation to the Authority.

In order to subsequently appoint an environmental auditor, the Authority must be satisfied that all works, including environmental audits and any other statutory works conducted pursuant to the Act or other acts, completed by the environmental auditor are of a satisfactory standard.

If the assessment identifies outstanding issues regarding the environmental auditor's performance during his or her previous period of appointment, such as:

- (i) environmental audits not completed in accordance with published guidelines
- (ii) the environmental auditor not providing information to the Authority when requested to do so
- (iii) consistent submission of poor-quality environmental audit reports
- (iv) consistently poor performance in other statutory works conducted pursuant to the Act or other acts, the Manager Environmental Audit will:
  - (a) write to the environmental auditor to advise of the outstanding issues in relation to the application and invite written submission on those matters
  - and
  - (b) consider any response by the environmental auditor and, if satisfied in respect of the outstanding issues, report the satisfactory resolution of the issues in the assessment/review report.

If one or more of the outstanding issues are not satisfied, the Manager Environmental Audit may recommend to the Authority that the appointment of the environmental auditor be reviewed in accordance with section 12 of these guidelines.

Where all matters related to the auditor's conduct and quality of audit reports are deemed to be satisfactory – including resolution of any issues identified – the Manager will recommend the subsequent appointment of the auditor to the Authority.

## 5.5 Timing

Applications for subsequent appointment must be received by the Manager Environmental Audit at least eight weeks prior to the expiry of the environmental auditor's appointment, to allow time for the assessment process described in section 5.4. Applications submitted later than this may result in the environmental auditor's appointment lapsing until the assessment is completed (see section 7 of these guidelines).

Applications received after an environmental auditor's appointment has expired will not be accepted unless prior agreement with the Manager Environmental Audit is confirmed in writing. Where an environmental auditor's appointment has expired and there is no prior agreement in place, such a person may reapply through the initial appointment process.

## 5.6 Decision

The decision on subsequent appointment will be made by the Authority.

## 5.7 Conditions of appointment and fees

Subsequent appointment will be subject to the same conditions as outlined in section 4.9 of these guidelines, and payment of fees as outlined in section 4.10 of these guidelines.

## 5.8 Appointment term

For subsequent appointment, there is no limit on the number of subsequent appointments an environmental auditor may be granted. The appointment period will usually be an exact period in years but may be adjusted to allow for adequate resourcing for assessment. EPA will usually appoint auditors for a period of five years where an environmental auditor:

- a) is not in their first appointment period
- b) is actively participating in a significant number of environmental audits each year
- c) consistently presents work of a high standard
- d) does not have conditions placed upon their appointment
- e) is not the subject of current concerns or complaints.

The Authority will appoint auditors for a shorter period of appointment where the above criteria have not been met as long as the auditor has achieved the criteria outlined in sections 5.2 and 5.3.

## 6. Mutual recognition

Under section 17(1)(a) of the Commonwealth *Mutual Recognition Act 1992* (the MRA 1992), a person who is registered in one state<sup>3</sup> for an occupation is entitled to apply for registration in an equivalent occupation in another state. Under the MRA 1992, the Authority is required to consider applications from environmental auditors appointed under equivalent systems in other jurisdictions.

An application to the Authority for appointment as an environmental auditor under the MRA 1992 must be made in writing, in accordance with section 19 of that Act. The information required under section 19 of the MRA 1992 is outlined in Appendix One.

In addition, the application must

- (i) Provide a current detailed curriculum vitae.
- (ii) Provide a National police record certificate. Include an undertaking in relation to professional indemnity insurance (as set out in section 3.2 (xiv) of these guidelines).
- (iii) Provide information relating to his or her expertise and the expertise of nominated support team members in the areas specified in the schedule of these guidelines relevant to the category of appointment sought. This information should be submitted in the form required for initial appointment as specified in section 3.2 (xi, xiii, xiv) of these **guidelines**.

The application should be submitted, with a completed application form (available from the forms section of EPA's website, [www.epa.vic.gov.au/forms](http://www.epa.vic.gov.au/forms)) and a recent digital passport-sized photograph, to the address listed at the end of section 3 of these guidelines.

EPA may permit the application to be amended after it is lodged.

The applicant will receive notification of the Authority's decision in accordance with these guidelines and section 24 of the MRA 1992.

An appointed environmental auditor will receive a Notice of Appointment as outlined in section 4.7 of these guidelines and the term of appointment will be as outlined in section 4.8 of these guidelines. Conditions of appointment will be as outlined in section 4.9 of these guidelines, and payment of fees as outlined in section 4.10 of these Guidelines.

Once appointed, EPA reserves the right to obtain further information regarding an environmental auditor's experience and capabilities as per Section 10.6 of these guidelines.

## 7. Lapse of Appointment

If an environmental auditor's appointment lapses then he or she is no longer an environmental auditor appointed pursuant to the Act and he or she must not:

- (i) act in the capacity of an environmental auditor appointed pursuant to the Act
- (ii) undertake, or propose to undertake, any environmental audit work
- (iii) in any other way hold him or herself out to be an environmental auditor appointed pursuant to the Act.

**Each of the above activities is an offence against the Act.**

Enforcement action may be taken in accordance with EPA's *Compliance and Enforcement Policy* (EPA Publication 1388) against any person found to be holding him or herself out to be an appointed environmental auditor when not so appointed.

An environmental auditor may request in writing to EPA to hold his or her appointment in abeyance for a specified period of time. EPA will assess the request on its individual merits (potentially acceptable reasons for the request may include illness, a period of overseas employment or a secondment from normal duties). If EPA approves the request, EPA will inform the environmental auditor in writing of the approved period of abeyance, and the environmental auditor's appointment will lapse for that period of time.

The total period of abeyance that can be granted by EPA for either a single request or consecutive requests by the same environmental auditor must not be more than 24 months.

Where the approved abeyance period is beyond the environmental auditor's appointment period, the environmental auditor may apply for subsequent appointment after the abeyance period in accordance with the requirements as detailed in section 5 of these guidelines. In this case, the application must be made at least eight weeks prior to the agreed end date of the abeyance. If, however, the application is made after the agreed end date of abeyance, and there is no prior agreement on this delayed arrangement, the application will not be accepted and the environmental auditor may reapply through the initial appointment process.

<sup>3</sup> All references to 'state' in this and related sections should be read as meaning 'state or territory'.

## 8. Maintenance of appointment – environmental auditor’s responsibilities – change in circumstances

An environmental auditor must notify the Manager Environmental Audit at least 14 days in advance of any change in circumstances relevant to his or her appointment. Changes include the environmental auditor’s employment status such as a temporary change. The minimum advance notice of 14 days can be exempted if the change is due to unforeseeable circumstances.

Environmental auditors must provide appropriate supporting material when notifying the Manager Environmental Audit of a change in circumstances, who will then assess the information supplied.

Where the change in circumstances is considered to be significant and/or is non-compliant with an environmental auditor’s appointment conditions, the Manager Environmental Audit may recommend to the Authority a review of appointment be undertaken. Alternatively, the Manager Environmental Audit may recommend that the Authority note that the change does not affect the environmental auditor’s appointment. The Manager Environmental Audit will then advise the environmental auditor of the assessment result.

Where the Manager Environmental Audit advises the environmental auditor that the notified changes are not acceptable and will result in non-compliance with the environmental auditor’s appointment conditions, the environmental auditor should either withdraw the changes or make further changes for re-assessment by EPA. Otherwise, the environmental auditor’s appointment will lapse (see section 7 of these guidelines).

## 9. Conduct of an environmental auditor

Environmental auditors are appointed pursuant to and for the purposes of the Act. In exercising their functions and duties pursuant to the Act or other acts, environmental auditors owe a primary duty of care to the environment and to the people of Victoria above all others (including their clients).

The responsibilities of an environmental auditor, as defined under Part IXD of the Act, reflect this primary duty of care.

In particular, an environmental auditor must:

- (i) not give false or misleading information to the Authority or to any other person in carrying out a function under the Act or any other Act<sup>4</sup>
- (ii) not issue a certificate or a statement of environmental audit that is false or misleading
- (iii) not issue a certificate or any other document which is false or misleading in carrying out a function under any other Act<sup>4</sup>

- (iv) not conceal any relevant information or documentation from the Authority or from any other person in carrying out a function under the Act or any other Act<sup>4</sup>
- (v) not issue a certificate or statement of environmental audit without first preparing an environmental audit report<sup>5</sup>
- (vi) notify the Authority within seven days of receiving a request to issue a certificate of environmental audit<sup>6</sup>
- (vii) provide the Authority (via Manager Environmental Audit) and the relevant planning authority and responsible authority within the meaning of the *Planning and Environment Act 1987* with a copy of the environmental audit report and certificate or statement of environmental audit within seven days of completion<sup>7</sup>
- (viii) notify the Authority of any imminent environmental hazard as soon as is practicable after becoming aware of the hazard in the course of conducting an environmental audit.<sup>8</sup>

If for any reason an environmental auditor’s appointment is suspended, revoked or lapses he or she must not purport to be an environmental auditor appointed pursuant to the Act.<sup>9</sup>

Failure to comply with the above statutory requirements may lead to enforcement action being taken in accordance with EPA’s *Compliance and Enforcement Policy* (EPA Publication 1388). The penalties under the Act for environmental auditors who contravene those requirements range up to 2400 penalty units<sup>10</sup> or imprisonment for two years, or both. In addition, an environmental auditor is required to:

- (ix) employ assessment methods and approaches consistent with good practice for environmental auditing
- (x) exercise due care, diligence and professional judgment, to the standard which may be reasonably expected of qualified and experienced environmental professionals who are performing duties conferred upon them by the Act or other acts, such as occupational health and safety
- (xi) conduct environmental audits and other statutory works pursuant to the Act or other acts in accordance with guidelines approved by the Authority or by other government agencies
- (xii) act at all times in a professional manner, upholding the independence and integrity of the environmental audit system
- (xiii) offer services only in areas of his or her competence and only perform environmental audits and exercise powers that are relevant to the category or categories of environmental audit to which his or her appointment relates

<sup>4</sup>Section 53ZC(1) of the Act

<sup>5</sup>Section 53ZB(1) of the Act

<sup>6</sup>Section 53ZB(2) of the Act

<sup>7</sup>Section 53ZB(3) of the Act

<sup>8</sup>Section 59B(b) of the Act

<sup>9</sup>Section 110 of the *Sentencing Act 1991* contains the meaning of ‘penalty units’. The value of a penalty unit is index annually in line with CPI increases.

<sup>4</sup>Section 53ZC(1) of the Act.



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- (xiv) utilise expert support team in their respective fields of expertise in accordance with these guidelines
- (xv) ensure that any reports, certificates, statements or documents which he or she provides pursuant to the Act or other acts are an accurate record of soundly based observations and of logical deductions
- (xvi) continue to develop relevant knowledge, skills and expertise and actively assist and encourage those under his or her direction to do likewise.

An environmental auditor may use the title of 'Environmental Auditor (appointed pursuant to the *Environment Protection Act 1970*)' to sign environmental audit reports, statements of environmental audit, certificates of environmental audit and documents prepared pursuant to the Act or other acts and in marketing material or project proposals. An environmental auditor must not use that title to sign other documents.

Note: An environmental auditor appointed pursuant to section 53S of the Act who undertakes an environmental audit in a jurisdiction other than Victoria should make him or herself familiar with the relevant legislation, regulations and guidelines in that jurisdiction(s). The Authority may consider environmental audit work performed in another jurisdiction in determining whether to subsequently appoint an environmental auditor.

## 9.1 Imminent environmental hazard

Section 53ZB(3) of the Act requires environmental auditors to 'notify the Authority of any imminent environmental hazard as soon as is practicable after becoming aware of the hazard in the course of conducting an environmental audit'.

An imminent environmental hazard is any situation that requires immediate action to prevent a state of danger to human beings or the environment. Depending on the nature and significance of the risk associated with the hazard, such action may be required within hours or weeks.

Determining whether an imminent environmental hazard exists is likely to require the environmental auditor to exercise his or her professional judgment.

The Manager Environmental Audit may, however, provide specific guidance to environmental auditors when requested.

**Examples** of circumstances that would constitute an imminent environmental hazard include (but are not limited to):

- an accumulation of asphyxiating, toxic or flammable gas (e.g. landfill gas), or significant risk of accumulation of such a gas, in an enclosed space where there is risk of an explosion or other similar risk.
- contaminated soil, at the surface or near the surface, containing a contaminant which, due to its concentration and properties, may pose an imminent risk to human health or **safety** and where access to the site is not adequately

controlled. In assessing such a risk, particular consideration should be given to sensitive groups, e.g. children. (see footnote)<sup>11</sup>.

- free flammable petroleum product appearing at the surface or within subsurface conduits where access to these is not adequately controlled (e.g. stormwater, sewer or service conduits offsite), and where the presence of product may cause an explosion or other risk
- absence of adequate spill containment (for example, bunding) beneath bulk liquid storage vessels in the immediate proximity of waters (including a stormwater drain), where there is a potential to cause a discharge that may have toxic impacts on aquatic life (for example, fish kills or similar impacts), or an impact on human health.
- discharge (or a high risk of discharge) of any substance, including polluted groundwater, to surface waters at concentrations that may have toxic impacts on aquatic life (e.g., fish kills), or potential impacts on human health
- presence of dangerous goods onsite, whether below or above ground, where access to the site is not effectively controlled.
- historical or ongoing contamination of groundwater where people, either on-site or off-site, may be exposed to contaminants that may pose a risk to human health or safety
- friable asbestos in an uncontrolled environment, such that there is a significant risk that asbestos fibres may be released to the air environment and present a risk to people either on-site or off-site.
- offsite transport of contaminated soil or groundwater causing material damage to the property of another person.

Examples of circumstances that would not constitute an imminent environmental hazard include (but are not limited to):

- Free product present in the unsaturated zone or floating on the water table onsite need not be an imminent environmental hazard if the occupier is aware and workers and other people at the site are not likely to be exposed to this hazard.
- Presence of an asphyxiating, toxic or flammable gas (e.g. landfill gas), where accumulation is adequately controlled by ventilation or other means or where the concentration, location and rate of evolution indicates there is negligible risk of explosion or other similar hazard.
- Presence of dangerous goods or contaminated soil as set out above do not constitute an

<sup>11</sup> Footnote: In determining whether the contaminant concentration may pose an imminent hazard, the auditor should consider the quantity of soil plausibly consumed by a child or adult (as appropriate) in a short period of time. Similarly, consideration may be given to risks posed to animals, including stock, by contaminated soil.

imminent hazard if access to the site is effectively controlled.

**If an environmental auditor considers an event to constitute an imminent environmental hazard, he/she should immediately inform EPA's 24-hour Pollution Watch Line (1300 EPA VIC or 1300 372 842) and/or Emergency services (000). After that the Manager Environmental Audit Unit should be informed in writing.**

Written communications can be provided via email ([environmental.audit@epa.vic.gov.au](mailto:environmental.audit@epa.vic.gov.au)) and should be clearly identified as an 'imminent environmental hazard report'.

## 10. Quality assurance program

The Manager Environmental Audit conducts a quality assurance program to ensure that environmental audits and other duties undertaken by appointed environmental auditors are completed in accordance with the relevant sections of the Act or other acts and with guidelines published by the Authority or by other government agencies.

The Manager Environmental Audit will conduct a quality assurance program in accordance with the following sections.

### 10.1 Compliance with the Act

- (i) All environmental audit reports provided under sections 53V or 53X of the Act, and certificates or statements of environmental audit issued under sections 53Y or 53Z of the Act, and statements in writing provided under section 53ZB of the Act will be examined to ensure administrative compliance with those sections of the Act.
- (ii) The Manager Environmental Audit will seek an explanation from the environmental auditor when:
  - a statement in writing does not comply with section 53ZB of the Act
  - an environmental audit report does not comply with section 53V or 53X of the Act as appropriate
  - a certificate or statement of environmental audit does not comply with sections 53W, 53Y or 53Z of the Act as appropriateor
  - there is an error or inconsistency in the information contained in any of the following:
    - a statement in writing provided under section 53ZB of the Act
    - an environmental audit report provided under sections 53V or 53X of the Act
    - a certificate or statement of environmental audit provided under sections 53Y or 53Z of the Act
    - a document prepared and signed by the environmental auditor pursuant to other sections of the Act.

### 10.2 Compliance with guidelines

- (i) The quality assurance program will include an assessment of a sample of all environmental audit reports received by EPA's Environmental Audit Unit<sup>12</sup> for compliance with the most recent version of:
  - *Provision of Environmental Audit Reports, Certificates and Statements* (EPA Publication 1147)
  - *Environmental Auditor Guidelines for Conducting Environmental Audits* (EPA Publication 953)
  - for section 53V environmental audits - *Environmental Auditor Guidelines for the Preparation of Environmental Audit Reports on Risk to the Environment* (EPA Publication 952)
  - for section 53X environmental audits - *Environmental Auditor (Contaminated Land) Guidelines for Issue of Certificates and Statements of Environmental Audit* (EPA Publication 759)
  - other relevant guidelines that may be published by the Authority from time to time.
- (ii) Any environmental audit may be assessed for compliance with relevant guidelines. Environmental audit reports may be selected for targeted assessment:
  - following identification of a potential issue during the initial processing of the environmental audit report
  - where complaints have been received about the environmental auditor's work, in accordance with section 11 of these guidelines or by other means including random selection.
- (iii) This assessment may include a desktop review of an environmental audit report, a review of the procedures used in preparing the environmental audit report or verification of the conclusions of the assessment on which the environmental audit report is based
- (iv) The quality assurance program may include conducting a verification of the environmental status of a site subject to environmental audit.

If the Manager Environmental Audit considers that an environmental audit does not comply with relevant guidelines, he or she will contact the environmental auditor to seek an explanation.

If the environmental auditor does not provide a satisfactory explanation or other relevant information, the Authority may commence a review of appointment in accordance with section 12 of these guidelines.

### 10.3 Information about an environmental audit

The Manager Environmental Audit may require an environmental auditor to provide further information

<sup>12</sup> The quality assurance program will include an assessment of the first two environmental audit reports completed by an environmental auditor.

about an environmental audit. Such information must be provided within 14 days unless otherwise advised in writing by the Authority.

## 10.4 Performance in statutory works under other acts

The Manager Environmental Audit maintains channels of communication with the relevant government agencies to enable the Authority to be notified of any issues regarding an environmental auditor's conduct and performance in carrying out his or her statutory functions under other acts.

The Environmental Audit Unit will investigate any notified issues. The Manager Environmental Audit may require the environmental auditor to clarify or explain the issue or to provide copies of relevant documents for assessment. If the environmental auditor's response fails to address the issue to the satisfaction of the Manager Environmental Audit, the Authority may commence a review of appointment in accordance with section 12 of these guidelines.

## 10.5 Annual Auditor Statements

By 30 September each year, auditors must submit to EPA an Annual Auditor Statement detailing the statutory and non-statutory work carried out in the previous financial year, professional development activities and any required self-assessment of compliance. The Annual Auditor Statement must be completed on the form provided to auditors. The Manager Environmental Audit uses the information contained in Annual Auditor Statements to assist the ongoing development of the audit system and to supplement the review of auditors' subsequent appointment applications.

## 10.6 Further assessment

Where the Authority has concerns about an auditor's performance, knowledge or currency, the Manager Environmental Audit may require an auditor to undertake an examination or interview, or provide a Statement of Understanding on detail relevant to their appointment.

## 11. Complaints

Where the Authority receives a complaint about the conduct of an appointed environmental auditor, the Manager Environmental Audit will:

- (i) provide details of the complaint to the environmental auditor
- (ii) review the complaint and discuss it with the environmental auditor
- (iii) where the Manager Environmental Audit believes that there are insufficient grounds to warrant an investigation, will inform the complainant and the environmental auditor that no further action will be taken and the reasons for that decision
- (iv) where the Manager Environmental Audit believes that there are sufficient grounds to warrant an investigation, will invite a submission from the environmental auditor as well as from other relevant parties

- (v) prepare an assessment of the complaint taking into consideration any submissions received in relation to the complaint
- (vi) make a recommendation to the Authority regarding the complaint, including any recommended further action
- (vii) a decision in relation to the complaint will be made by the Authority.

The Authority will seek to resolve complaints within three months of initially receiving them. The Authority's decision in relation to the complaint will be communicated to both the environmental auditor and the complainant.

In the event of a significant complaint, the Authority may institute a formal review of the appointment of the environmental auditor in accordance with section 12 of these guidelines.

Where the Authority receives or otherwise becomes aware of a serious complaint, such as an allegation of criminal action, the Authority may instigate a criminal investigation without undertaking the complaint or review process in accordance with sections 11 and 12 of these guidelines respectively.

## 12. Review of appointment as environmental auditor - investigation, review, Authority decision and appeals processes

### 12.1 Overview of the investigation, review and appeals processes

The investigation, review and appeal processes are three discrete and separate processes.

- (i) EPA may conduct an investigation to determine if there is a substantive case against an auditor who is the subject of allegations of inappropriate conduct or other complaints or concerns. The objective of the investigation is to determine whether based upon the evidence the allegation has merit. An investigation will seek the views of relevant parties, including the auditor. The EPA will notify the auditor and other relevant parties (including any complainants) in writing of its intention to undertake an investigation and the reasons for it
- (ii) If the investigation indicates there is a substantive case, a review may be initiated. The review process centres upon the Authority's decision-making process. The Authority will review all the available information about the allegation, including any extenuating circumstances, and assess it against the requirements and expectations of the Act and guidelines. The Authority will notify an auditor in writing of its intention to, and reasons for, initiating a review. See Sections 12.3 and 12.5 for more details. A review may also be initiated from the assessment of an application for a subsequent appointment

- (iii) The Authority will notify the auditor in writing of the outcome of the review. See Section 12.7 for more details. If an auditor is aggrieved by the Authority's decision, the appeals process provides a mechanism to seek an independent review of that decision. The appeal process would normally only be triggered by application from the auditor. Refer to section 12.8 for further information.

These processes will follow the principles of EPA's *Compliance and Enforcement Policy* (EPA Publication 1388).

## 12.2 Power of the Authority

Section 53S of the Act gives the Authority the power to suspend or revoke the appointment of an appointed environmental auditor.

## 12.3 Review of appointment

The Authority may conduct a review of an environmental auditor's appointment with a view to determining whether:

- (i) the appointment should be suspended or revoked
- (ii) an environmental auditor who has applied for subsequent appointment should be appointed.

## 12.4 Suspension

In circumstances where, in the opinion of the Authority, continued appointment presents an unacceptable risk to the environment or the community, the Authority may immediately suspend an environmental auditor's appointment pending the outcome of the review. The Authority will advise the environmental auditor if he or she is suspended.

## 12.5 Grounds for review

A review may be conducted if any matter or circumstance comes to the attention of the Authority that casts doubt on the fitness of an environmental auditor to be appointed as such or on the capacity of the environmental auditor to carry out the functions of the appointment.

Without limiting the grounds for review, the Authority will ordinarily institute a review of the environmental auditor's appointment where:

- (i) the environmental auditor has issued an incorrect certificate or statement of environmental audit
- (ii) a review of an environmental audit report raises concerns about the environmental auditor's expertise or methods
- (iii) the Manager Environmental Audit, in consultation with the Executive Director is of the opinion that an environmental audit report provided is unsatisfactory
- (iv) the Manager Environmental Audit, in consultation with the Executive Director, is of the opinion that the environmental auditor's performance in carrying out his or her statutory works under the Act or other acts is unsatisfactory
- (v) a complaint is received, and is appropriately verified, about unprofessional conduct of an environmental auditor

- (vi) an environmental auditor behaves fraudulently or deceptively
- (vii) an environmental auditor is declared bankrupt
- (viii) an environmental auditor is found guilty of an indictable offence
- (ix) an environmental auditor is removed from appointment as an environmental auditor, or has been the subject of disciplinary action, under any environmental audit scheme other than the one to which these guidelines refer (for example, the environmental audit systems in other states)
- (x) there is a significant change in circumstances relevant to the appointment, as outlined in section 8 of these guidelines
- (xi) outstanding issues regarding the performance of the environmental auditor remain unresolved following the process set out in section 5.3 of these guidelines
- (xii) an environmental auditor is found to have been conducting work beyond his or her areas of expertise or that of his or her expert support team.

## 12.6 Notification of review

Before initiating a review of an environmental auditor's appointment, the Authority (via the Manager Environmental Audit) may invite the environmental auditor to show cause why a review of his or her appointment should not be conducted. Any response from the environmental auditor will be considered by the Authority for deciding whether or not to proceed with the review.

If the Authority decides to review an appointment, this decision will be communicated to the auditor in the form of a letter setting out the grounds of review.

## 12.7 The Authority's decision

After considering all the information available, including all submissions made by the environmental auditor, the Authority will decide either:

- (i) to continue the environmental auditor's current term of appointment or subsequently appoint the environmental auditor
- or
- (ii) determine to suspend, revoke or place conditions upon the auditor's appointment.

The Authority will notify the environmental auditor in writing of its decision within seven days of the completion of the review of appointment.

Where the review identifies that an offence may have been committed by an environmental auditor, enforcement action may be taken in accordance with EPA's *Compliance and Enforcement Policy* (EPA Publication 1388).



## 12.8 Appeals process

Where the environmental auditor is dissatisfied with a decision made by the Authority in relation to his or her appointment as an environmental auditor, he or she may request an appeal of that decision. The request for appeal must be in writing and set out the grounds for reconsideration in terms of:

- (i) the facts surrounding the issue and/or
- (ii) the grounds upon which the EPA decision was based.

The request must be lodged with the Authority within 28 days, from the date of notification of the Authority decision.

Within 28 days of receipt of the request for appeal the Authority will either:

- (i) appoint an independent person, as described in section 12.9 of these guidelines, to undertake a review of the appeal and make a recommendation to the Authority  
or
- (ii) refuse the request.

The Authority will determine the outcome of any appeal application, taking into account the independent person's recommendation.

The Authority may refuse a request for appeal if the appellant fails to provide any evidence or grounds to support the request or the Authority upholds its initial decision. In the event of the Authority's decision to refuse a request for appeal, the Authority will notify the appellant of the reasons in writing.

This appeal process is in addition to any other avenues that may be available to the appellant by law.

## 12.9 Independent person

Where the Authority decides to/agrees to uphold the request for appeal, the Authority will appoint an 'independent person' (which may be an individual person or a panel of persons) to conduct the appeal, and will specify the terms of reference for the appeal.

The independent person must:

- (i) appreciate the role of an appointed environmental auditor and the importance of the environmental audit system
- (ii) address the specific issues which are the subject of the review
- (iii) not be a person involved in the day-to-day administration of the environmental audit system or the process of appointing environmental auditors pursuant to the Act, but may be an EPA officer
- (iv) not have a conflict of interest in conducting a review of an environmental auditor
- (v) be able to balance opposing views and reach a soundly reasoned conclusion.

The Authority may appoint a suitably qualified person to assist the independent person in conduct of the appeal. The independent person may seek further information as required.

## 12.10 Conduct of the appeal

The environmental auditor under review and the Manager Environmental Audit will each be invited to make a submission to the independent person, orally and/or in writing.

Any written submission should be supplied at least seven days prior to the date set for the appeal hearing.

The independent person will conduct a hearing at which the Manager Environmental Audit and the environmental auditor present their submissions.

After conducting the hearing, the independent person will make a recommendation to the Authority.

The Authority will re-examine its decision in light of the information presented and recommendations of the independent person. The Authority will communicate its final decision to the appellant post hearing.

## 13 Other functions of environmental auditors

Environmental auditors may be called upon to undertake duties detailed in other legislation or legal instruments.

Prior to, offering to undertake any of these duties the environmental auditor must ensure:

- (i) the duty falls within the environmental auditor's area of expertise or competency.
- (ii) their involvement will not result in a conflict of interest.
- (iii) they have all required approvals from the responsible Authority(s).
- (iv) they meet all requirements including any special requirements specified within EPA guidance, or other including possible conditions upon employment or written communications on the subject.

## 13.1 Duties under the Mineral Resource (Sustainable Development) Act 1990.

Environmental auditors intending to undertake duties detailed in the *Mineral Resources (Sustainable Development) Act 1990 (MR (SD) Act)* must:

- (i) Have expertise in, or access to expertise in, the areas detailed in Table 2C of this publication.
- (ii) Hold current approval in writing from both EPA and the responsible department (Department of Economic Development, Jobs, Transport and Resources, DEDJTR) to undertake duties under the *MR (SD) Act*.

**For further information** please contact EPA Environmental Audit Unit on 1300 372 842 (1300 EPA VIC) or email [environmental.audit@epa.vic.gov.au](mailto:environmental.audit@epa.vic.gov.au).

## Schedule A - Contaminated Land Category

### A.1 Specific assessment criteria

This section details the specific criteria that will be used to assess applicants for appointment to the Contaminated Land Category of environmental auditor. These criteria are additional to the general criteria detailed in section 3 of these guidelines.

- A.1.1 The applicant must be able to demonstrate extensive experience and a high level of expertise in all the following core competencies:
- (i) assessment of contaminant exposure pathways
  - (ii) contaminated site assessment and remediation including management
  - (iii) evaluation and interpretation of chemical and analytical data
  - (iv) soil sampling design and methodology
  - (v) soil gas sampling design and methodology
  - (vi) groundwater sampling design and methodology
  - (vii) identification of potential human health and environmental risks
  - (viii) quality control/assurance procedures
  - (ix) risk communication.
- A.1.2 The applicant must be able to demonstrate his or her expertise in, or access to relevant expertise in:
- (i) air quality
  - (ii) assessment of impacts on groundwater from contaminated sites
  - (iii) contaminant fate and transport
  - (iv) environmental chemistry
  - (v) environmental risk assessment
  - (vi) environmental toxicology
  - (vii) geology
  - (viii) human health and ecological risk assessment relating to contamination
  - (ix) human toxicology
  - (x) hydrogeology
  - (xi) identification of contaminants of concern from past industrial land uses
  - (xii) remedial technologies and geotechnology
  - (xiii) soil science
  - (xiv) sampling and interpretation of analytical data for a variety of media
  - (xv) statutory and environmental planning.

Note: Nominated experts will make up the environmental auditor's expert support team. Further guidance on

capabilities of experts is provided in Appendix Two.

- A.1.3 The applicant must be able to demonstrate an understanding of:
- (i) *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites* (ANZECC/ NHMRC: 1992)
  - and
  - (ii) *National Environment Protection (Assessment of Site Contamination) Measure 1999*.
- A.1.4 An applicant's experience in contaminated sites work must be broadly based in terms of:
- (i) the scale of work undertaken
  - (ii) the range of contaminants encountered and
  - (iii) the scope of work performed.
- A.1.5 The following will be regarded highly:
- (i) experience in assessment and management of major environmental issues involving complex sampling design and
  - (ii) experience in chemical or hydrogeological data collection and interpretation.

## Schedule B - Industrial Facilities Category

### B.1 Specific assessment criteria

This section details the specific criteria that will be used to assess applicants for appointment to the Industrial Facilities Category of environmental auditor. These criteria are additional to the general criteria detailed in section 3 of these guidelines.

- B.1.1 The applicant must be able to demonstrate extensive experience and a high level of expertise in all the following core competencies:
- (i) industrial processes
  - (ii) industrial waste management and waste minimisation strategies
  - (iii) environmental management systems.
- B.1.2 In addition, the applicant must demonstrate experience and expertise in at least two of the following areas and demonstrate access to expertise in all other areas:
- (i) air quality
  - (ii) corporate/governance environmental performance and reporting
  - (iii) energy auditing.
  - (iv) environmental chemistry
  - (v) environmental risk assessment

- (vi) freshwater science
- (vii) human health and ecological risk assessment
- (viii) hydrogeology
- (ix) marine water science
- (x) noise
- (xi) pollution control equipment and strategies
- (xii) sampling and interpretation of analytical data for a variety of media
- (xiii) soil science
- (xiv) statutory and environmental planning

Note: Nominated experts will make up the environmental auditor's expert support team. Further guidance on capabilities of experts is provided in Appendix Two.

B.1.3 The applicant must be able to demonstrate an understanding of:

- (i) *Environmental Management Systems – Requirements with Guidance for Use* (AS/NZS ISO 14001: 2004)
- (ii) *Guidelines for Quality and/or Environmental Management Systems Auditing* (AS/NZS ISO 19011: 2003).

- (iii) environmental modelling
- (iv) fluvial geomorphology
- (v) freshwater science
- (vi) hydrogeology
- (vii) marine water science
- (viii) soil science
- (ix) terrestrial ecology.

Note: Nominated experts will make up the environmental auditor's expert support team. Further guidance on capabilities of experts is provided in Appendix Two.

## Schedule C – Natural Resources Category

### C.1 Specific assessment criteria

This section details the specific criteria that will be used to assess applicants for appointment to the Natural Resources Category of environmental auditor. These criteria are additional to the general criteria detailed in section 3 of these guidelines.

C.1.1 The applicant must be able to demonstrate extensive experience and a broad level of knowledge in all the following core areas:

- (i) legal and institutional frameworks, including codes of practice, used in the management of Victoria's natural resources (for example water, land and ecosystems)
- (ii) environmental management; practices, processes, planning and systems
- (iii) composition, maintenance and protection of Victoria's biodiversity
- (iv) sampling and interpretation of analytical data for relevant environmental applications
- (v) natural events and land and water uses and their potential impacts on natural resource and ecosystem condition and processes.

C.1.2 The applicant must demonstrate his or her expertise in, or access to expertise in:

- (i) aquatic ecology
- (ii) environmental chemistry

## Appendix One – Applications for mutual recognition

An application to the Authority for appointment as an environmental auditor under the MRA 1992 must be made in writing, in accordance with section 19 of that Act. That is, the application must:

- (i) specify the state(s) in which the applicant is appointed as an environmental auditor
- (ii) state that appointment as an environmental auditor in the state of Victoria is being sought in accordance with the mutual recognition principle
- (iii) specify all the states in which the applicant's appointment as an environmental auditor is recognised
- (iv) state that the applicant is not and has not been subject to any disciplinary action (including any preliminary investigations or action that might lead to disciplinary proceedings) in relation to his or her appointment as an environmental auditor (or equivalent occupation) in any other jurisdiction, and provide evidence thereof in the form of written confirmation from all relevant agencies
- (v) specify that the applicant's appointment in any state is not cancelled or currently suspended as a result of disciplinary action
- (vi) state that the applicant is not otherwise personally prohibited from acting as an environmental auditor in any state, and is not subject to any special conditions in acting as an environmental auditor, as a result of criminal, civil or disciplinary proceedings in any state
- (vii) specify any special conditions to which the applicant is subject in acting as an environmental auditor in any state
- (viii) give consent to the making of enquiries of, and the exchange of information with, the authorities of any state regarding the applicant's activities as an environmental auditor or otherwise regarding matters relevant to the application
- (ix) be accompanied by a document that is either the original or a copy of the instrument evidencing the applicant's existing appointment as an environmental auditor
- (x) include certification by the applicant that the accompanying instrument of appointment is the original or a complete and accurate copy of the original
- (xi) be accompanied by a properly signed and witnessed statutory declaration by the applicant verifying the statements and other information in the application.

The application must also address all additional requirements outlined in section 6 of these guidelines.



## Appendix Two – Area of expertise categories and descriptions

### Area of expertise categories

Environmental audits require the use of experts in particularly areas of expertise. An expert is a person with extensive knowledge or ability based on experience or qualification on a particular area of study or area of expertise.

Table 2A below outlines the required area of expertise for different audit types. Table 2B provides a guide to the nature and extent of experience required to be demonstrated under each required area of expertise.

**Table 2A - Audit type and required area of expertise**

Audit	Required area of expertise
Contaminated Land	<ul style="list-style-type: none"> <li>• air quality</li> <li>• assessment of impacts on groundwater from contaminated sites or industrial facilities</li> <li>• contaminant fate and transport</li> <li>• environmental chemistry</li> <li>• environmental toxicology</li> <li>• geology</li> <li>• human health and ecological risk assessment</li> <li>• human toxicology</li> <li>• hydrogeology</li> <li>• identification of contaminants of concern from past industrial land uses</li> <li>• remedial technologies and geotechnology</li> <li>• sampling and interpretation of analytical data for a variety of media</li> <li>• soil science</li> <li>• statutory and environmental planning</li> </ul>
Industrial Facilities	<ul style="list-style-type: none"> <li>• air quality</li> <li>• assessment of impacts on groundwater from contaminated sites or industrial facilities</li> <li>• corporate/governance environmental performance and reporting</li> <li>• energy auditing</li> <li>• environmental chemistry</li> <li>• freshwater science</li> <li>• human health and ecological risk assessment</li> <li>• hydrogeology</li> <li>• marine water science</li> <li>• noise</li> <li>• pollution control equipment and strategies</li> <li>• sampling and interpretation of analytical data for a variety of media</li> <li>• soil science</li> <li>• statutory and environmental planning</li> </ul>
Natural Resources	<ul style="list-style-type: none"> <li>• aquatic ecology</li> <li>• environmental chemistry</li> <li>• environmental modelling</li> <li>• fluvial geomorphology</li> <li>• freshwater science</li> <li>• hydrogeology</li> <li>• marine water science</li> <li>• soil science</li> <li>• terrestrial ecology</li> </ul>

# Environmental auditor guidelines for appointment and conduct

Table 2B - Descriptions of expertise and experience

Area of expertise	Description of experience	Qualifications not limited to bachelor or higher degree	Examples of professional associations and certifications
<p><b>Air quality</b></p> <p><i>Ability to assess pollution sources and their impacts to air quality.</i></p>	<p><b>Mandatory experience</b></p> <ul style="list-style-type: none"> <li>• Detailed understanding of the SEPP (Air Quality Management), SEPP (Ambient Air Quality), NEPM (Air Toxics), and relevant EPA guidelines.</li> <li>• Assessment of pollution sources and the impacts to air quality, air sampling design and methodology, and air modelling.</li> <li>• Assessment of gas, volatile emissions and dust relating to contamination.</li> </ul> <p><b>Desirable experience</b></p> <p>Applicant should be able to demonstrate experience in one or more of the following:</p> <ul style="list-style-type: none"> <li>• Air emissions (sources, monitoring, modelling).</li> <li>• Human health risk assessment due to air toxics, carcinogens, PM10, 2.5, 7.5, etc.</li> <li>• Air sheds (meteorological effects, pollution formation, fate and transport etc.), etc).</li> <li>• Air pollution management, controls and mitigation</li> <li>• Greenhouse (Energy).</li> <li>• Chemicals (vapour pressures, volatility).</li> <li>• Amenity (odours, dust).</li> </ul>	<p>Engineering (Chemical, Environmental)</p> <p>Science/Applied Science (Chemistry, Biochemistry, Environment, Physics)</p>	<p>Air &amp; Waste Management Association (USA)</p> <p>Clean Air Society Australia and New Zealand (CASANZ)</p> <p>Royal Meteorological Society</p>

# Environmental auditor guidelines for appointment and conduct

Area of expertise	Description of experience	Qualifications not limited to bachelor or higher degree	Examples of professional associations and certifications
<p><b>Aquatic ecology</b></p> <p><i>Ability to understand the physical, chemical and biological assessments of aquatic ecosystems.</i></p>	<p><b>Mandatory experience</b></p> <ul style="list-style-type: none"> <li>• Detailed understanding of SEPP (Waters of Victoria), its schedules and relevant guidelines including the national water quality guidelines.</li> <li>• Physical, chemical and biological assessments of aquatic ecosystems.</li> <li>• Population and community dynamics and understanding the effects of changes in water quality and habitat on aquatic food webs and in-stream fauna.</li> <li>• Understanding biogeochemical function (such as transport and cycling of nutrients) and food webs.</li> <li>• Implications of land use on the aquatic ecosystem.</li> <li>• Improving the methods for managing aquatic systems through land and river management.</li> <li>• Assessment of pollution sources and the impact assessment to water quality and ecosystems, sampling design and standard methods.</li> </ul> <p><b>Desirable experience</b></p> <ul style="list-style-type: none"> <li>• Freshwater /marine water impact assessment, sampling design and methodology and modelling.</li> <li>• Water chemistry.</li> <li>• Freshwater/ marine ecological processes.</li> <li>• Biological assessments.</li> <li>• Environmental flows and hydrology.</li> <li>• Understanding of chemical behaviours in the subsurface.</li> <li>• Experience in assessing fate and transport of contaminants.</li> </ul>	<p>Engineering (Environmental)</p> <p>Science/Applied Science (Chemistry, Biochemistry, Biology, Ecology, Environment)</p> <p>Environmental Science</p>	<p>Association for Environmental Hydrology</p> <p>Australian Society for Limnology</p> <p>Australian Marine Sciences Association</p> <p>Ecological society of Australia</p>
<p><b>Assessment of impacts on groundwater from contaminated sites or industrial facilities</b></p> <p><i>Ability to assess contaminated sites and extend investigation/interpretation to potential groundwater contamination.</i></p>	<p><b>Mandatory experience</b></p> <ul style="list-style-type: none"> <li>• Broad experience with contaminated sites including those with a wide range of previous uses i.e. industrial, petroleum industry, greenfield, etc.</li> <li>• Understanding of soil/groundwater interaction.</li> <li>• Understanding of well installation, well construction, groundwater gauging and sampling.</li> </ul> <p><b>Desirable experience</b></p> <ul style="list-style-type: none"> <li>• Understanding of chemical behaviours in the subsurface.</li> <li>• Experience in assessing fate and transport of contaminants (including modelling).</li> </ul>	<p>Engineering (Geological, Chemical, Environmental)</p> <p>Science/Applied Science (Chemistry, Geology, Geography, Environmental Science)</p>	<p>Australian Contaminated Land Consultants Association (ACLCA)</p> <p>Australian Land and Groundwater Association (ALGA)</p> <p>Certified Environmental Practitioner</p> <p>Certified Practising Engineer</p> <p>International Association of Hydrogeologists (IAH)</p>

# Environmental auditor guidelines for appointment and conduct

Area of expertise	Description of experience	Qualifications not limited to bachelor or higher degree	Examples of professional associations and certifications
<p><b>Contaminant fate and transport</b></p> <p><i>Ability to assess the impact posed by activities or contaminants identified onto human health and the environment through contaminant transport and exposure pathways assessment to all segments of the environment.</i></p>	<p><b>Mandatory experience</b></p> <ul style="list-style-type: none"> <li>• Extensive experience in the assessment and management of contaminated land and groundwater in the context of a contaminated land assessment/audit.</li> <li>• Experience in multiple contaminant types, assessment methodologies (refer to next point), geology and hydrogeology.</li> <li>• Experience in soil, groundwater, surface water and soil vapour sampling design and methodology.</li> <li>• Broad understanding in the areas of environmental chemistry, soil science, hydrogeology, human health and ecological risk assessment (as noted above).</li> </ul>	<p>Science/ Applied Science (Environmental Toxicology, Toxicology, Biochemistry or related discipline)</p>	<p>Association for Environmental Hydrology</p> <p>Australian Society Soil Science Incorporated (ASSSI)</p> <p>International Association of Hydrogeologists (IAH)</p> <p>National Groundwater Association</p> <p>Society of Environmental Toxicology and Chemistry (SETAC)</p>
<p><b>Corporation/ governance environmental performance and reporting</b></p> <p><i>Ability to prepare, audit or verify environmental performance reports.</i></p>	<p><b>Mandatory experience</b></p> <ul style="list-style-type: none"> <li>• Preparation and/or auditing/verification of environmental performance reports for a range of companies, organisations, statutory bodies and government departments and agencies.</li> <li>• Detailed understanding of environmental reporting or environmental performance evaluation standards such as ISO 14001, ISO 14031, etc.</li> </ul> <p><b>Desirable experience</b></p> <ul style="list-style-type: none"> <li>• Sustainability reporting.</li> <li>• Triple Bottom Line (i.e. environment, economic and social performance) reporting.</li> </ul>	<p>Engineering (Chemical, Civil, Mechanical, Environmental)</p> <p>Science/Applied Science (Chemistry, Environment)</p>	<p>Engineers Australia</p> <p>Institute of Chemical Engineers</p>
<p><b>Energy auditing</b></p> <p><i>Ability to undertake energy use assessment and development of energy management systems.</i></p>	<p><b>Mandatory experience</b></p> <ul style="list-style-type: none"> <li>• AGO Greenhouse challenge verification, AS/NZS 3598 Energy audits.</li> <li>• Energy use assessments and development of energy management systems.</li> <li>• Detailed understanding of the Energy Efficiency Opportunities (EEO) program and EREP.</li> <li>• Energy and carbon emissions management programs.</li> <li>• Renewable and sustainable energy technologies.</li> </ul>	<p>Engineering (Chemical, Civil, Mechanical, Environmental, and Electrical)</p> <p>Science/Applied Science (Chemistry, Environment)</p>	<p>AIRAH Registered Energy Auditor</p> <p>Engineers Australia</p> <p>Institution of Chemical Engineers</p>



# Environmental auditor guidelines for appointment and conduct

Area of expertise	Description of experience	Qualifications not limited to bachelor or higher degree	Examples of professional associations and certifications
<p><b>Environmental chemistry</b></p> <p><i>Ability to develop and implement analytical sampling programs for the purposes of environmental site assessments.</i></p> <p><i>Review and interpretation of held analytical laboratory data.</i></p> <p><i>Fate and transport of chemicals in the environment and chemical speciation.</i></p> <p><i>Demonstrated experience in at least two pollution emissions such as air, water, noise, soil, groundwater.</i></p>	<p><b>Mandatory experience</b></p> <ul style="list-style-type: none"> <li>• Detailed understanding of relevant sampling and testing guidelines (chemical and biological).</li> <li>• Design and conduct of sampling and testing.</li> <li>• Fate and transport of chemicals in the environment.</li> <li>• Chemical speciation in the environment.</li> <li>• Data interpretation including quality assurance and quality control, statistical analysis of data, etc.</li> <li>• Multiple contaminant types and assessment methodologies.</li> </ul> <p><b>Desirable experience</b></p> <ul style="list-style-type: none"> <li>• Identification and management of pollution inputs (for example, industrial wastewater, stormwater, soil wastes and sludge).</li> </ul>	<p>Engineering (Chemical, Environmental)</p> <p>Science/Applied Science (Environment, chemistry or related discipline)</p>	<p>American Society for Testing and Materials</p> <p>Association of Professional Engineers, Scientists and Managers</p> <p>Clean Air Society of Australia and New Zealand</p> <p>Royal Australian Chemical Institute (RACI)</p> <p>Society of Environmental Toxicology and Chemistry (SETAC)</p>
<p><b>Environmental modelling</b></p> <p><i>Ability to use environmental modelling to assess impacts.</i></p>	<p><b>Mandatory experience</b></p> <p>Detailed understanding of one or more of the following:</p> <ul style="list-style-type: none"> <li>• Ecological and hydrological modelling.</li> <li>• Statistical and mathematical modelling of ecological data.</li> <li>• Experimental and survey design.</li> <li>• Water quality, quantity, climate change, marine waters (for example, effects of waves, tides on effluent discharge).</li> <li>• Ecological risk, population viability and habitat modelling.</li> </ul>	<p>Engineering (Environmental)</p> <p>Science/Applied Science (Mathematics, Chemistry, Biochemistry, Biology, Ecology, Environment)</p>	<p>Environment Institute of Australia and New Zealand (EIANZ)</p>

# Environmental auditor guidelines for appointment and conduct

Area of expertise	Description of experience	Qualifications not limited to bachelor or higher degree	Examples of professional associations and certifications
<p><b>Environmental toxicology</b></p> <p><i>Ability to assess ecological hazards posed by various chemicals in the environment to enable an assessment of risk to the environment.</i></p>	<p><b>Mandatory experience</b></p> <p><b>Toxicology</b></p> <ul style="list-style-type: none"> <li>• Experience in the evaluation of toxicology data and dose-response information.</li> <li>• Extensive experience in assessing the ecological hazards posed by various chemicals, and identification of gaps in the science regarding a particular chemical.</li> </ul> <p><b>Ecological Risk Assessment</b></p> <p>Extensive experience in the application of risk-based approach for assessment and management of contaminated sites, including the following:</p> <ul style="list-style-type: none"> <li>• Conduct of ecological risk assessment in the context of a contaminated land assessment/audit.</li> <li>• Understanding of relevant guidance documents ecological risk assessment (for example, NEPM and enHealth, as well as international publications).</li> <li>• Interpretation of findings from complex environmental investigations and ability to provide recommendations for further investigations.</li> <li>• Conduct of exposure assessment including the use of computational approaches and modeling for multi-pathway exposure.</li> <li>• Conduct of characterisation or interpretation of site-specific risk profiles.</li> <li>• Derivation of site-specific risk-based criteria for contaminants in various media (i.e. soil, groundwater, soil gas).</li> <li>• Experience in multiple contaminant types and geological/hydrogeological settings are highly preferable.</li> <li>• Ability to construct or evaluate detailed or complex risk assessment models (for example, fate and transport, vapour intrusion, etc).</li> <li>• Detailed understanding of exposure routes and pathways with respect to the derivation of site-specific guidelines values.</li> <li>• Impacts of soil contamination on plants.</li> <li>• Impacts of soil and groundwater contamination on surface water.</li> </ul>	<p>Science/ Applied Science (Environmental Toxicology, Toxicology, Biochemistry or related discipline)</p>	<p>Australian College of Toxicology and Risk Assessment (ACTRA) (Registration of)</p> <p>Australasian Society of Clinical and Experimental Pharmacologists and Toxicologists</p> <p>Society of Environmental Toxicology and Chemistry (SETAC)</p>

# Environmental auditor guidelines for appointment and conduct

Area of expertise	Description of experience	Qualifications not limited to bachelor or higher degree	Examples of professional associations and certifications
<p><b>Fluvial geomorphology</b></p> <p><i>Ability to undertake investigations of fluvial environments and an understanding of hydrology.</i></p>	<p><b>Mandatory experience</b></p> <ul style="list-style-type: none"> <li>• Fluvial investigations.</li> <li>• Fluvial geomorphology and hydrology of streams.</li> </ul> <p><b>Desirable experience</b></p> <ul style="list-style-type: none"> <li>• Reveirie investigation and catchment management.</li> <li>• Catchment and stream hydrology - sediment/nutrient (catchment sediment budgets).</li> <li>• River rehabilitation strategies and stream health/condition.</li> <li>• Water resource modelling and assessment.</li> <li>• Lake and wetland hydrology and management.</li> <li>• River management including environmental flows.</li> </ul>	<p>Science/ Applied Science (Soil science, Agriculture, Environment or related discipline)</p>	<p>Australian Institute of Agricultural Science and Technology</p> <p>Australian Society of Soil Science Incorporated (ASSSI)</p> <p>River Basin Management Society</p>
<p><b>Freshwater science</b></p> <p><i>Ability to assess pollution sources and their impacts to surface water (biological and chemical).</i></p>	<p><b>Mandatory experience</b></p> <ul style="list-style-type: none"> <li>• Detailed understanding of the SEPP (Waters of Victoria), ANZECC guidelines, NEPM and relevant EPA guidelines.</li> <li>• Assessment of pollution sources and the impact (biological/chemical) to surface water quality, surface water sampling design and methodology.</li> <li>• Freshwater ecology and ecological processes.</li> </ul> <p><b>Desirable experience</b></p> <p>Applicant should be able to demonstrate experience in one or more of the following:</p> <ul style="list-style-type: none"> <li>• Water chemistry including fate and behaviour of contaminants.</li> <li>• Aquatic ecology, using both fish water quality and macro-invertebrates as indicators of river health or condition</li> <li>• Biological risk assessments.</li> <li>• Ecological risk assessments.</li> <li>• Environmental flows and hydrology modelling.</li> </ul>	<p>Engineering (Chemical, Environmental).</p> <p>Science/Applied Science (Chemistry, Biochemistry, Biology, Ecology, Environment).</p>	<p>AUSRIVAS Bioassessment Vic Accreditation</p> <p>Australian Chapter of the Society for Risk Analysis</p> <p>Australian Society for Limnology</p> <p>Available Courses</p> <p>USFWS NCTC</p>

# Environmental auditor guidelines for appointment and conduct

Area of expertise	Description of experience	Qualifications not limited to bachelor or higher degree	Examples of professional associations and certifications
<p><b>Geology</b></p> <p><i>Ability to assess the geology of a site with respect to potential for contamination and the migration of contamination through both the regolith and underlying rock.</i></p>	<p><b>Mandatory experience</b></p> <ul style="list-style-type: none"> <li>• Extensive experience of geology investigations for the purposes of environmental assessment (geotechnical experience would also be considered beneficial).</li> <li>• Extensive experience of the geology in the Victorian region.</li> <li>• Understanding of geochemistry.</li> <li>• Understanding of rock degradation / regolith development.</li> <li>• Understanding of structural geology.</li> </ul> <p><b>Desirable experience</b></p> <ul style="list-style-type: none"> <li>• Experience in contaminated land investigations.</li> <li>• Experience in hydrological investigations.</li> <li>• Understanding / experience of geophysical techniques and outcomes.</li> </ul>	<p>Science/Applied Science (Geology, Engineering Geology, Earth Science)</p> <p>Engineering (Geological, Environmental)</p>	<p>Australian Contaminated Land Consultants Association (ACLCA)</p> <p>Australian Institute of Geologists</p> <p>Australian Land and Groundwater Association (ALGA)</p>
<p><b>Human health and ecological risk assessment</b></p> <p><i>Ability to assess the impact posed by activities or contaminants identified on human health and the environment through contaminant transport and exposure pathways assessment to all segments of the environment.</i></p> <p><i>The ability to identify mitigation and management measures to address risks identified.</i></p>	<p><b>Mandatory experience</b></p> <ul style="list-style-type: none"> <li>• Detailed understanding of relevant guideline documents such as AS/NZS ISO 31000:2009 (Risk Management). ISO 1400 Series, EMS, etc.</li> <li>• Application of risk assessment methodologies (HAZOP, BOWTIE, HACCP) to assess environmental risks.</li> <li>• Human health risk assessment.</li> <li>• Extensive experience in the assessment and management of contaminated land and groundwater in the context of a contaminated land assessment/audit.</li> <li>• Experience in multiple contaminant types, assessment methodologies (refer to next point), geology and hydrogeology.</li> <li>• Experience in soil, groundwater, surface water and soil vapour sampling design and methodology.</li> <li>• Broad understanding in the areas of environmental chemistry, soil science, hydrogeology, human health and ecological risk assessment (as noted above).</li> </ul>	<p>Engineering (Chemical, Environmental)</p> <p>Science/Applied Science (Agriculture, Chemistry, Biochemistry, Environment, Risk Assessment, Hydrogeology and Geology, Environmental Toxicology, Toxicology, Biochemistry or related discipline)</p>	<p>American Public Health Association</p> <p>Australian College of Toxicology and Risk Assessment (ACTRA) (Registration of)</p> <p>Society for Risk Analysis</p> <p>Society of Environmental Toxicology and Chemistry (SETAC)</p>



# Environmental auditor guidelines for appointment and conduct

Area of expertise	Description of experience	Qualifications not limited to bachelor or higher degree	Examples of professional associations and certifications
<p><b>Human toxicology</b></p> <p><i>Ability to assess health hazards posed by various chemicals in the environment to enable an assessment of risk to human health.</i></p>	<p><b>Mandatory experience</b></p> <p><b>Toxicology</b></p> <ul style="list-style-type: none"> <li>• Experience in the evaluation of toxicology data and dose-response information.</li> <li>• Extensive experience in assessing the health hazards posed by various chemicals, and identification of gaps in the science regarding a particular chemical.</li> </ul> <p><b>Health Risk Assessment</b></p> <p>Extensive experience in the application of risk-based approach for assessment and management of contaminated sites, including the following:</p> <ul style="list-style-type: none"> <li>• Conduct of human health risk assessment in the context of a contaminated land assessment/audit.</li> <li>• Understanding of relevant guidance documents for human health risk assessment (for example, NEPM and enHealth, as well as international publications).</li> <li>• Interpretation of findings from complex environmental investigations and ability to provide recommendations for further investigations.</li> <li>• Conduct of exposure assessment including the use of computational approaches and modeling for multi-pathway exposure.</li> <li>• Conduct of characterisation or interpretation of site-specific risk profiles.</li> <li>• Derivation of site-specific risk-based criteria for contaminants in various media (i.e. soil, groundwater, soil gas).</li> </ul> <ul style="list-style-type: none"> <li>• Experience in multiple contaminant types and geological/hydrogeological settings are highly preferable.</li> <li>• Ability to construct or evaluate detailed or complex risk assessment models (for example fate and transport, vapour intrusion, etc.).</li> <li>• Detailed understanding of exposure routes and pathways with respect to the derivation of site-specific guidelines values.</li> </ul>	<p>Science/ Applied Science (Toxicology, Biochemistry or related discipline)</p>	<p>Australian College of Toxicology and Risk Assessment (ACTRA) (Registration of)</p> <p>Society of Environmental Toxicology and Chemistry (SETAC)</p>

# Environmental auditor guidelines for appointment and conduct

Area of expertise	Description of experience	Qualifications not limited to bachelor or higher degree	Examples of professional associations and certifications
<p><b>Hydrogeology</b></p> <p><i>Ability to investigate and assess groundwater properties, including well design and installation and sampling.</i></p> <p><i>Ability to develop detailed and complex conceptual hydrogeological models.</i></p>	<p><b>Mandatory experience</b></p> <ul style="list-style-type: none"> <li>• Detailed understanding of the SEPP (Groundwater of Victoria), ANZECC guidelines, NEPM and relevant EPA guidelines.</li> <li>• Development of detailed and complex conceptual hydrogeological models.</li> <li>• Assessment and understanding of various aquifer parameters, properties and chemistry.</li> <li>• Quantification of aquifer hydraulic parameters, including hydraulic and pump testing and analysis.</li> <li>• Groundwater well design and installation (using multiple techniques).</li> <li>• Groundwater sampling (using multiple techniques).</li> </ul> <p><b>Desirable experience</b></p> <ul style="list-style-type: none"> <li>• Assessment and remediation of contaminated groundwater.</li> <li>• Multiple contaminant types and hydrogeological settings preferable. Less weight is given to salinity and resource-based experience (but some experience preferred).</li> <li>• Assessment of natural attenuation of petroleum hydrocarbons and chlorinated solvents.</li> <li>• Groundwater contaminant plume modelling (including fate and transport).</li> </ul>	<p>Science/ Applied Science (Hydrogeology, Geology or related discipline)</p>	<p>Association for Environmental Hydrology</p> <p>Australian Institute of Geoscientists</p> <p>Australian Land and Groundwater Association</p> <p>International Association of Hydrogeologists (IAH)</p> <p>National Groundwater Association</p>

# Environmental auditor guidelines for appointment and conduct

Area of expertise	Description of experience	Qualifications not limited to bachelor or higher degree	Examples of professional associations and certifications
<p><b>Ability to identify contaminants of concern from past industrial land uses</b></p>	<p><b>Mandatory experience</b></p> <ul style="list-style-type: none"> <li>• Extensive experience in contaminated land investigations involving soil and groundwater across a wide range of industrial activities.</li> <li>• Extensive experience in undertaking site historical assessments.</li> </ul> <p><b>Desirable experience</b></p> <ul style="list-style-type: none"> <li>• Knowledge in industrial plant processes and mechanisms.</li> </ul>	<p>Engineering (Chemical, Environmental)</p> <p>Science/Applied Science (Chemistry, Geology, Geography, Environmental Science)</p>	<p>Australian Contaminated Land Consultants Association (ACLCA)</p> <p>Australian Land and Groundwater Association (ALGA)</p> <p>Certified Environmental Practitioner</p> <p>Certified Practising Engineer</p> <p>Geological Society of Australia</p> <p>Institute of Chemical Engineers</p> <p>International Association of Hydrogeologists (IAH)</p>
<p><b>Marine water science</b></p> <p><i>Ability to assess pollution sources and their impacts to marine water (biological and chemical).</i></p>	<p><b>Mandatory experience</b></p> <ul style="list-style-type: none"> <li>• Detailed understanding of the SEPP (Waters of Victoria), ANZECC guidelines, and relevant EPA guidelines.</li> <li>• Assessment of pollution sources and the impact (biological / chemical) to marine water quality, marine sampling design and methodology and modelling.</li> <li>• Marine ecology and ecological processes.</li> <li>• Marine impact assessment, sampling design and methodology and modelling.</li> </ul> <p><b>Desirable experience</b></p> <ul style="list-style-type: none"> <li>• Water chemistry including fate and behaviour of contaminants.</li> <li>• Marine ecology and ecological processes.</li> <li>• Biological assessments.</li> <li>• Ecological risk assessment.</li> </ul>	<p>Engineering (Chemical, Environmental)</p> <p>Science/Applied Science (Chemistry, Biochemistry, Biology, Ecology, Ecotoxicology, Environment)</p>	<p>Australian Marine Sciences Association</p>

# Environmental auditor guidelines for appointment and conduct

Area of expertise	Description of experience	Qualifications not limited to bachelor or higher degree	Examples of professional associations and certifications
<p><b>Noise</b></p> <p><i>Ability to assess industrial noise impacts on residents, management and mitigation.</i></p>	<p><b>Mandatory experience</b></p> <ul style="list-style-type: none"> <li>• Detailed understanding of the SEPP N1, N2 and N3, and relevant EPA guidelines</li> <li>• Assessment of environmental noise impact, not occupational noise assessments.</li> <li>• Noise measurement and modelling.</li> <li>• Noise management and mitigation.</li> </ul>	<p>Science/Applied Science (Acoustics, Physics)</p>	<p>Australian Acoustical Society (AAS)</p> <p>Delegate - Ass Aust Acoustical Consultants (AAAC)</p>
<p><b>Pollution control equipment and strategies</b></p> <p><i>Ability to understand the design, installation and/or operation of equipment and strategies used to control pollution to mitigate environmental risk</i></p>	<p><b>Mandatory experience</b></p> <ul style="list-style-type: none"> <li>• Design, installation and/or operation of pollution prevention and pollution control equipment/strategies for at least two of the followings: air emissions, wastewater, groundwater, noise and solid waste. Examples include: <ul style="list-style-type: none"> <li>• air pollution control systems (for example, scrubbers, bio-filters, bag filters, etc.)</li> <li>• wastewater treatment systems</li> <li>• pollution source reduction measures/technologies</li> <li>• landfill liners and leachate collection/treatment systems</li> <li>• acoustic insulation</li> <li>• engineered lagoon systems</li> <li>• waste minimisation, reduction and recovery technologies</li> <li>• soil and groundwater remediation equipment.</li> </ul> </li> </ul> <p>*Note: All these elements should be covered by combining the experts in this area.</p> <p><b>Desirable experience</b></p> <ul style="list-style-type: none"> <li>• Multiple contaminant types, equipment and strategies.</li> </ul>	<p>Engineering (Chemical, Civil, Mechanical)</p> <p>Science/Applied Science (Chemistry, Environment)</p>	<p>American Institute of Chemical Engineering</p> <p>Engineers Australia</p> <p>Institution of Chemical Engineers</p>

# Environmental auditor guidelines for appointment and conduct

Area of expertise	Description of experience	Qualifications not limited to bachelor or higher degree	Examples of professional associations and certifications
<p><b>Remedial technologies and geotechnology</b></p> <p><i>Experience in remediation of contaminated land and groundwater including design, construction and performance monitoring.</i></p>	<p><b>Mandatory experience</b></p> <p><b>Remedial Technology</b></p> <ul style="list-style-type: none"> <li>• Extensive experience in the remediation contaminated land and groundwater in the context of a contaminated land assessment/audit.</li> <li>• Experience in the design, construction and performance monitoring of remediation systems is preferred.</li> <li>• Experience in the remediation of multiple contaminant types, remediation methodologies, geology and hydrogeology.</li> </ul> <p><b>Geotechnology</b></p> <ul style="list-style-type: none"> <li>• Geotechnology is the application of scientific methods and engineering techniques to the exploitation and use of natural resources and is the science and engineering of rock soil and the fluids they contain.</li> <li>• An expert in this area should be able to demonstrate how the application of geotechnology principles has been considered in the design and operation of remediation systems.</li> </ul>	<p>Engineering (Chemical, Civil, Mechanical, Geological)</p> <p>Science/Applied Science (Chemistry, Environment, Hydrogeology, Geology)</p>	<p>Engineers Australia</p> <p>Institution of Chemical Engineers</p> <p>International Association of Hydrogeologists (IAH)</p>
<p><b>Sampling and interpretation of analytical data for a variety of media</b></p> <p><i>Detailed understanding of relevant sampling and testing guidelines.</i></p> <p><i>Design and conduct of sampling and testing and data interpretation.</i></p>	<p><b>Mandatory experience</b></p> <ul style="list-style-type: none"> <li>• Detailed understanding of relevant sampling and testing guidelines for at least three of the followings: soil, sediment, groundwater, surface water, marine water, soil vapour, air (including odour), noise.*</li> <li>• Design and conduct of sampling and testing for at least three of the followings: soil, sediment, groundwater, surface water, marine water, soil vapour, air (including odour), noise.*</li> <li>• Data interpretation including quality assurance and quality control, statistical analysis of data, etc.</li> <li>• Multiple contaminant types and assessment methodologies.</li> </ul> <p>*Note: All these elements should be covered by combining the experts in this area.</p>	<p>Engineering (Chemical, Environmental)</p> <p>Science/Applied Science (Agriculture, Chemistry, Ecology, Biochemistry, Environment, Hydrogeology and Geology)</p>	<p>Clean Air Society of Australia and New Zealand</p> <p>Society of Environmental Toxicology and Chemistry (SETAC)</p> <p>The Royal Australian Chemical Institute</p>



# Environmental auditor guidelines for appointment and conduct

Area of expertise	Description of experience	Qualifications not limited to bachelor or higher degree	Examples of professional associations and certifications
<p><b>Soil science</b></p> <p><i>Understanding soil chemistry, soil properties, assessment of soil contamination and its impact upon flora and fauna associated with that element.</i></p> <p><i>Understanding of natural and background concentrations of metals/analytes in the environment.</i></p>	<p><b>Mandatory experience</b></p> <ul style="list-style-type: none"> <li>• Detailed understanding of the SEPP (Prevention &amp; Management of Contaminated Land), NEPM, AS 4482.1 and relevant EPA guidelines.</li> <li>• Contaminated site assessment, sampling design and methodology.</li> <li>• Detailed understanding of soil chemistry and soil properties including the following:               <ul style="list-style-type: none"> <li>• soil formation (i.e. mineralogy, physical and chemical composition)</li> <li>• classification/properties</li> <li>• biological properties of soils</li> <li>• fertility properties of soils</li> </ul> </li> <li>• Natural vs. anthropogenic chemical concentrations.</li> </ul>	<p>Science/ Applied Science (Soil Science, Agriculture or related discipline)</p>	<p>Australian Contaminated Land Consultants Association (ACLCA)</p> <p>Australian Institute of Agricultural Science and Technology</p> <p>Australian Land and Groundwater Association (ALGA)</p> <p>Certified Professional Soil Scientist - Soil Science Australia (SSA)</p>
<p><b>Statutory and environmental planning</b></p> <p><i>Knowledge of law and associated processes in relation to environment and planning</i></p>	<p><b>Mandatory experience</b></p> <ul style="list-style-type: none"> <li>• Extensive experience in environmental planning matters, with specific experience in environmental planning.</li> <li>• Strong understanding of local, state and Commonwealth guidelines and laws.</li> </ul> <p><b>Desirable experience</b></p> <ul style="list-style-type: none"> <li>• Planning with respect to contaminated sites.</li> </ul>	<p>Urban Planning / Environmental Planning, /Environmental Science, Geography, Public Policy, Transportation</p>	<p>Certified Environmental Practitioner</p> <p>Environment Institute of Australia and New Zealand (EIANZ)</p> <p>Planning Institute of Australia, Victorian Planning and Environmental Law Association (VPELA)</p>

# Environmental auditor guidelines for appointment and conduct

Area of expertise	Description of experience	Qualifications not limited to bachelor or higher degree	Examples of professional associations and certifications
<p><b>Terrestrial ecology</b></p> <p><i>Detailed understanding of the physical, chemical and biological assessments of terrestrial ecosystems.</i></p>	<p><b>Mandatory experience</b> Detailed understanding of the following (and as applicable to flora and fauna):</p> <ul style="list-style-type: none"> <li>• Relevant regulations/guidelines i.e. EPBC Act, Flora and Fauna Guarantee Act, Recovery Plans, Action Statements, Planning controls etc.</li> <li>• Assessments of flora and fauna and terrestrial ecosystems, including:               <ul style="list-style-type: none"> <li>• targeted fauna surveys and inventory</li> <li>• baseline studies</li> <li>• regional environmental planning and biodiversity surveys</li> <li>• rare and threatened species assessment and management</li> <li>• habitat assessment/mapping and sites of significance studies.</li> </ul> </li> <li>• Management of ecosystems (such as rainforest, mallee) or individual species, or study of impacts to ecosystem due to environmental threats (for example, habitat fragmentation or planned developments).</li> </ul> <p><b>Desirable experience</b></p> <ul style="list-style-type: none"> <li>• Development or implementation of assessment methodologies to determine status or health of individual species.</li> <li>• Study of ecosystem distinctiveness in relation to:               <ul style="list-style-type: none"> <li>• composition and structure</li> <li>• occurrence in relation to physical limiting resources and disturbance</li> <li>• geology, evolution and climatic change</li> <li>• ecological adaptation, population (for example, viability), community and ecosystem processes and human impacts.</li> </ul> </li> </ul>	<p>Engineering (Environmental)</p> <p>Science/Applied Science (NR Management, Ecotoxicology, Chemistry, Biochemistry, Biology, Ecology, Environment)</p>	<p>Ecological Consultants Association (NSW)</p> <p>Ecological Society of Australia</p> <p>Environment Institute of Australia and New Zealand (EIANZ)</p>

# Environmental auditor guidelines for appointment and conduct

Table 2C

Descriptions of expertise and experience, that must be held by or available to an EPA appointed auditor approved to undertake duties under Mineral Resources (Sustainability Development) Act.

	Area of expertise	Description of experience	Qualifications not limited to bachelor or higher degree	Examples of professional associations and certifications
1	Human Health and Ecological Risk Assessment	<p><i>Mandatory experience</i></p> <ul style="list-style-type: none"> <li>(i) Mandatory experience identified in table 2B, for this expertise.</li> <li>(ii) Detailed understanding of hierarchy of controls and its application.</li> <li>(iii) Application of risk assessment and management, in the extractive industry or mining industry.</li> </ul> <p><i>Desirable experience</i></p> <ul style="list-style-type: none"> <li>(iv) Desirable experience identified in table 2B, for this expertise.</li> <li>(v) Application of risk assessment and management, in the extractive industry or mining industry, with a focus on rehabilitation including pit and overburden stockpiles.</li> <li>(vi) An understanding of acid mine drainage and its environmental impacts.</li> </ul>	<ul style="list-style-type: none"> <li>(i) Qualifications identified in table 2B, for this expertise</li> </ul>	<ul style="list-style-type: none"> <li>(i) Professional Associations identified in table 2B, for this expertise</li> </ul>
2	Hydrogeology	<p><i>Mandatory experience</i></p> <ul style="list-style-type: none"> <li>(i) Mandatory experience identified in table 2B, for this expertise.</li> <li>(ii) Applied hydrogeology within the extractive industry or mining industry.</li> </ul> <p><i>Desirable experience</i></p> <ul style="list-style-type: none"> <li>(iii) Desirable experience identified in table 2B, for this expertise.</li> <li>(iv) A comprehensive understanding of the characteristics of groundwater systems of the Latrobe Valley, with particular regard to the Latrobe Valley coal mines.</li> <li>(v) Hydrogeology, in the extractive industry or mining industry, with a focus on rehabilitation including pit and overburden stockpiles.</li> </ul>	<ul style="list-style-type: none"> <li>(i) Qualifications identified in table 2B, for this expertise</li> <li>(ii) Tertiary qualifications in applied science (hydrogeology and geology. Engineering hydrogeology)</li> </ul>	<ul style="list-style-type: none"> <li>(i) Professional Associations identified in table 2B, for this expertise</li> <li>(i) International Association of Hydro geologists (IAH)</li> <li>(ii) Australasian Institute of Mining and Metallurgy</li> <li>(iii) Engineers Australia</li> </ul>
3	Hydrology	<p><i>Mandatory experience</i></p> <ul style="list-style-type: none"> <li>(i) Applied hydrology within the extractive industry or mining industry.</li> <li>(ii) An understanding of wave mechanics and the impact of wave generation in large waterbodies on bank erosion.</li> </ul> <p><i>Desirable experience</i></p>	<ul style="list-style-type: none"> <li>(i) Tertiary qualifications in applied science (hydrology)</li> </ul>	<ul style="list-style-type: none"> <li>(i) Engineers Australia</li> </ul>

	Area of expertise	Description of experience	Qualifications not limited to bachelor or higher degree	Examples of professional associations and certifications
		(iii) Hydrology of large waterbodies created by filling of open cut mines.		
4	Mine or extractive industry auditing	<p><i>Mandatory experience</i></p> <ul style="list-style-type: none"> <li>(i) Auditing within the extractive industry or mining industry.</li> <li>(ii) Familiarity with mine closure and post closure issues including monitoring and maintenance.</li> <li>(iii) Mine rehabilitation including (bulk earthworks, dewatering and drainage, and revegetation).</li> <li>(iv) Familiarity with the preparation and implementation of mine rehabilitation plans.</li> <li>(v) Detailed understanding of plant species suitable for revegetation works</li> <li>(vi) An understanding of the <i>Mineral Resources (Sustainable Development) Act 1990</i>.</li> <li>(vii) An understanding of the <i>Mineral Resources (Sustainable Development) (Mineral Industries) Regulations 2013 (MRSDMI Regulations)</i>.</li> </ul> <p><i>Desirable experience</i></p> <ul style="list-style-type: none"> <li>(viii) An understanding of the <i>Hazelwood Mine Fire Inquiry Report 2015/2016 Volume IV - Mine Rehabilitation (HMFIR Report)</i>.</li> <li>(ix) An understanding of the assessment techniques as applied to revegetation works.</li> <li>(x) An understanding of earth resource management.</li> <li>(xi) Experience in monitoring and maintenance of rehabilitation plans.</li> </ul>	<ul style="list-style-type: none"> <li>(i) Degree (or higher) in ecology or botany</li> <li>(ii) Tertiary qualifications in earth resource management</li> </ul>	<ul style="list-style-type: none"> <li>(i) Australasian Institute of Mining and Metallurgy</li> <li>(ii) Engineers Australia</li> <li>(iii) Australian Geomechanics Society</li> </ul>
5	Geotechnical engineering	<p><i>Mandatory experience</i></p> <ul style="list-style-type: none"> <li>(i) Familiarity with mine closure and post closure issues including monitoring and maintenance.</li> <li>(ii) Mine rehabilitation including (bulk earthworks, water balance, dewatering and drainage, and revegetation).</li> <li>(iii) Familiarity with the preparation and implementation of mine rehabilitation plans.</li> </ul> <p><i>Desirable experience</i></p> <ul style="list-style-type: none"> <li>(iv) Experience (more than 5 years) of working with the brown coal mining industry.</li> <li>(v) Experience (more than 5 years) of working with soil or soft rock mining industry.</li> </ul>	<ul style="list-style-type: none"> <li>(i) Degree (or higher) in geotechnical engineering or engineering geology</li> </ul>	<ul style="list-style-type: none"> <li>(i) Australasian Institute of Mining and Metallurgy</li> <li>(ii) Engineers Australia</li> <li>(iii) Australian Geomechanics Society</li> </ul>

# Environmental auditor guidelines for appointment and conduct

	Area of expertise	Description of experience	Qualifications not limited to bachelor or higher degree	Examples of professional associations and certifications
		(vi) Familiarity with the use of numerical modelling of slope failure mechanisms.		
6	Environmental chemistry	<p><i>Mandatory experience</i></p> <p>(i) Mandatory experience identified in table 2B, for this expertise. (ii) Environmental chemistry within the extractive industry or mining industry.</p> <p><i>Desirable experience</i></p> <p>(iii) Desirable experience identified in table 2B, for this expertise. (iv) Pit water chemistry.</p>	(i) Qualifications identified in table 2B, for this expertise	(i) Professional Associations identified in table 2B, for this expertise
7	Financial modelling	<p><i>Mandatory experience</i></p> <p>(i) Modelling costs for earthworks, dewatering and drainage, and revegetation and other rehabilitation activities.</p> <p><i>Desirable experience</i></p> <p>(ii) Focus on probabilistic costing of mine rehabilitation plans.</p>	(i) Broad financial planning qualifications	
8	Quantity surveying	<p><i>Mandatory experience</i></p> <p>(i) Quantity surveying within the extractive industry or mining industry.</p> <p><i>Desirable experience</i></p> <p>(ii) Quantity surveying, with a focus on rehabilitation including pit and overburden stockpiles.</p>	(i) Diploma (or higher) in quantity surveying	<p>(i) Australasian Institute of Quantity Surveyors</p> <p>(ii) The Institution of Surveyors Victoria</p> <p>(iii) Royal Institution of Chartered Surveyors</p> <p>(iv) The Association of Consulting Surveyors Victoria</p>
9	Emergency response	<p><i>Mandatory experience</i></p> <p>(i) Familiarity with impacts on stability and off-site discharges resulting from an emergency event (e.g. batter failure, fire). (ii) Familiarity with impacts on stability and off-site discharges resulting from the emergency response activities.</p> <p><i>Desirable experience</i></p> <p>(iii) Understanding of propensity for coal ignition due to exposed coal.</p>		<p>(i) Engineers Australia</p> <p>(ii) Institute of Fire Engineers</p>