

EPA Guidelines

Site contamination—

Notification of site contamination that affects or threatens underground water pursuant to section 83A of the *Environment Protection Act 1993*

Issued December 2008

EPA 837/08: This guideline has been prepared to assist those who are required to notify the Environment Protection Authority of site contamination that affects or threatens underground water. A form is attached to help with notifying the Authority under section 83A of Environment Protection Act 1993.

Purpose and use of this guideline

This guideline has been prepared by the Environment Protection Authority (EPA) to provide the necessary information required by the *Environment Protection Act 1993* (EP Act) on how to notify the EPA of site contamination of underground water.

Section 83A of the Environment Protection Act 1993

83A—Notification of site contamination of underground water

This section applies to—

- (a) an owner or occupier of a site; or
 - (b) a site contamination auditor or a site contamination consultant engaged for the purposes of making determinations or assessments in relation to site contamination on or below the surface of a site.
- (2) A person to whom this section applies must notify the Authority in writing as soon as reasonably practicable after becoming aware of the existence of site contamination at the site or in the vicinity of the site (whether arising before or after the commencement of this section) that affects or threatens water occurring naturally under the ground or introduced to an aquifer or other area under the ground.

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Penalty:

If the offender is a body corporate—\$120 000.

If the offender is a natural person—Division 1 fine.

- (3) The notification must—
 - (a) describe the location of the site contamination sufficient to identify it; and
 - (b) include the information known to the person about the nature and extent of the site contamination.
- (4) For the purposes of this section—
 - (a) a person is not required to notify the Authority of a matter if the person has reason to believe that the matter has already come to the notice of the Authority or an officer engaged in the administration or enforcement of this Act; but
 - (b) a person is required to notify the Authority of a matter despite the fact that to do so might incriminate the person or make the person liable to a penalty.
- (5) A notification given by a person in compliance with this section is not admissible in evidence against the person in proceedings for an offence or for the imposition of a penalty (other than proceedings in respect of the making of a false or misleading statement).

Why is it important to notify the EPA of the existence of site contamination at the site that affects or threatens underground water?

Notification in accordance with section 83A of the EP Act is one way that the EPA can identify site contamination of underground water which may pose a risk to human health and/or the environment.

Underground water is utilised extensively throughout South Australia for a wide variety of purposes ranging from potable use to the restoration of ecosystems. Underground water flows through an aquifer over time. As a result of this natural movement, any chemical substances¹ present within an aquifer may also migrate over time from the source site. This has the potential to impact on the surrounding properties.

If a person to whom section 83A applies becomes aware of the existence of site contamination at the site or in the vicinity of the site, that affects or threatens underground water, the person must as soon as reasonably practicable after becoming aware of the contamination, notify the EPA in writing. The EPA will review all notifications and if necessary, contact notifiers for further information.

A person is not required to notify the EPA of a matter if the person has reason to believe that the matter has already come to the notice of the EPA or an officer engaged in the administration or enforcement of the EP Act. However a person is required to notify the EPA of a matter despite the fact that to do so might incriminate the person or make the person liable to a penalty.

¹ Section 3(1) of the EP Act.

What is site contamination?

The EP Act² defines site contamination as follows:

- (1) For the purposes of this Act, site contamination exists at a site if—
 - (a) chemical substances are present on or below the surface of the site in concentrations above the background concentrations (if any); and
 - (b) the chemical substances have, at least in part, come to be present there as a result of an activity at the site or elsewhere; and
 - (c) the presence of the chemical substances in those concentrations has resulted in—
 - (i) actual or potential harm to the health or safety of human beings that is not trivial, taking into account current or proposed land uses; or
 - (ii) actual or potential harm to water that is not trivial; or
 - (iii) other actual or potential environmental harm that is not trivial, taking into account current or proposed land uses.
- (2) For the purposes of this Act, environmental harm is caused by the presence of chemical substances—
 - (a) whether the harm is a direct or indirect result of the presence of the chemical substances; and
 - (b) whether the harm results from the presence of the chemical substances alone or the combined effects of the presence of the chemical substances and other factors.
- (3) For the purposes of this Act, site contamination does not exist at a site if circumstances of a kind prescribed by regulation apply to the site.

Site contamination that affects underground water

In relation to section 83A(2), the EPA considers site contamination that affects underground water is actual harm to water that is not trivial occurring naturally under the ground or introduced to an aquifer or other area under the ground.

Detailed information on the determination of actual or potential harm to water can be found in the *EPA guideline: Site contamination—How to determine actual or potential harm to water resulting from site contamination*. The EPA has also published guidance on the definition of trivial in the form of an information sheet titled *Site contamination—What is site contamination*.

Site contamination that threatens underground water

In relation to section 83A(2), the EPA considers site contamination that threatens underground water is said to exist if chemical substances introduced to a site are present on or below the surface of the site and these chemical substances are about to enter underground water and cause harm.

Examples of such situations are detailed below. This list is not comprehensive but gives an indication of when the EPA expects to be notified:

² Section 5B of the EP Act.

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- chemical substances are present in soils on or below the surface of a site in concentrations in excess of background that have been demonstrated to be mobile and may leach through the soil profile and impact on underground water
- a leaking underground storage tank (UST) containing liquid organic chemical substances located above, below or within a shallow underground water
- a leaking UST containing liquid organic chemical substances in a fractured or karstic environment where those chemical substances are about to enter underground water.

When to notify the EPA

The duty to notify the EPA under section 83A is irrespective of when the activity that caused the harm to the underground water occurred. It does not exclude site contamination of underground water as a result of an activity that occurred prior to the commencement of the EP Act³.

Section 83A (2) of the EP Act requires that the EPA is notified as soon as reasonably practicable after becoming aware of the site contamination. The EPA provides the following information to provide guidance on when the EPA should be notified:

- There is no requirement to notify the EPA if a person already has reason to believe that the EPA is aware of the existence of site contamination. It is recommended that the person obtain advice from the EPA if they are uncertain as to whether or not the EPA is aware of the existence of the site contamination. It should be noted that the EPA may hold information on the site but this information may not relate to the circumstances identified as part of the notification.
- There is no need for several persons who all have a duty to notify for the same site contamination, to all notify the EPA, if they know that one of those persons has already done so. For example a site owner does not need to notify the EPA if their consultant has already done so.
- There is no requirement to notify the EPA until site contamination that affects or threatens underground water has been identified.
- The EPA considers that if a non aqueous phase liquid (NAPL) is identified, that notification should occur as soon as that stage of the field investigations has been completed.

It should be noted that a person to whom this section applies only has a duty to notify of site contamination which is identified after the commencement of this part of the EP Act in mid-2009.

Information that must be provided

Section 83A (3) requires that the notification must describe the location, nature and extent of the site contamination.

To meet this requirement the EPA recommends that all notifications are made using the EPA form, *Notification of Site Contamination or Potential Site Contamination of Underground water*. This form is included as **Attachment 1** and can be downloaded from the EPA website.

³ Section 83A (2) of the EP Act.

FURTHER INFORMATION

Legislation

Legislation may be viewed on the internet at: <www.legislation.sa.gov.au>

Copies of legislation are available for purchase from:

Service SA Government Legislation Outlet 101 Grenfell Street Adelaide SA 5000	Telephone: Facsimile: Internet:	13 23 24 (08) 8204 1909 < shop.service.sa.gov.au >
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For general information please contact:

Environment Protection Authority GPO Box 2607 Adelaide SA 5001	Telephone: Facsimile: Freecall (country): Internet: Email:	(08) 8204 2004 (08) 8124 4670 1800 623 445 < www.epa.sa.gov.au > < epainfo@epa.sa.gov.au >
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The EPA welcomes written comments on and suggestions for improvements to any of its site contamination publications. These should be addressed to the Manager, Site Contamination at the above address.

Work undertaken			
<input type="checkbox"/> environmental site assessment <input type="checkbox"/> site contamination audit—EPA reference number [] <input type="checkbox"/> intrusive investigations on site (eg trenching) <input type="checkbox"/> other (provide details)			
Nature and extent of site contamination that affects or threatens underground water			
Does the site contamination affect underground water? <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNSURE OR Does the site contamination threaten underground water? <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNSURE Chemical substances identified:			
Is there a non aqueous phase liquid (NAPL) present? <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNSURE If yes, what is the apparent thickness of the NAPL?			
What is the lateral extent of the plume (on- and off-site extent in metres)?			
What is the vertical extent of the plume (depth in metres and aquifers impacted)?			
If there are underground water wells on site, provide a plan showing well identification and location?			
Site well details (if more than three wells, please attach a list)			
Permit Number			
Depth to water (metres below ground level)			
Depth of well			

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Screened interval			
Location (eg GPS co-ordinates)			
Are there any reports pending? <input type="checkbox"/> YES <input type="checkbox"/> NO			
<p>Declaration</p> <p>It is an offence to provide false or misleading information to the Authority. Maximum penalties range from \$60 000 fines for individuals to \$120 000 for corporations⁴</p> <p>I/we hereby declare that the information provided in this and accompanying documents, to the best of my/our knowledge, is true and correct.</p>			
<p>Name:</p> <p>Signature:</p> <p>Position of signatory: _____ Date: _____</p>			
<p>Name:</p> <p>Signature:</p> <p>Position of signatory: _____ Date: _____</p>			
<p>Name:</p> <p>Signature:</p> <p>Position of signatory: _____ Date: _____</p>			
<p>Name:</p> <p>Signature:</p> <p>Position of signatory: _____ Date: _____</p>			
<p>EPA use only</p> <p>Date received:</p> <p>EPA reference number:</p> <p>Received by (print name and sign):</p> <p>Referred to: (print name):</p>			

⁴ Section 83A(2) of the EP Act.