Environmental audit statement

Under Part 8.3 of the *Environment Protection Act 2017*

Publication F1032.3 published October 2023



The purpose of an environmental audit is:

- a) to assess the nature and extent of the risk of harm to human health or the environment from contaminated land, waste, pollution or any activity; and
- b) to recommend measures to manage the risk of harm to human health or the environment from contaminated land, waste, pollution or any activity; and
- c) to make recommendations to manage the contaminated land, waste, pollution or activity.

This statement is a summary of the findings of an environmental audit conducted under Part 8.3 of the *Environment Protection Act 2017* for:

36 Dripstone Road, Casuarina, Northern Territory Lot 4974 (Town of Nightcliff)

Further details are provided in the environmental audit report that accompanies this statement.

Section 1: Environmental audit overview

Environmental audit ID num	ber: Not applicable
Environmental auditor details	
Name:	Todd Mitchell
Company:	AECOM Australia Pty Ltd
Address:	727 Collins Street, Melbourne, Vic, 3008
Phone:	0419 559 114
Email:	todd.mitchell@aecom.com
Site owner or occupant	
Name:	-
Company:	Northern Territory Fire & Rescue Service
Environmental auditor engaged l	ру
Name:	Michael Petrelis
Company:	Department of Infrastructure, Planning and Logistics (NT)
Relationship to site owner:	Agency responsible for site development



Environment Protection Authority Victoria GPO Box 4395, Melbourne VIC 3001 1300 372 842



Reaso	in for the environmental audit:
	Requirement under the Planning and Environment Act 1987 (e.g., planning permit)
	Requirement under the Environment Protection Act 2017 (e.g., remedial notice or licence)
	Requirement under other legislation
\boxtimes	Other
	NTEPA s48(1) Notice dated 2 October 2023
Vatur	e of environmental audit:
\boxtimes	Suitability of land use
\boxtimes	Risk of harm from an activity
	Risk of harm from contaminated land, waste, or pollution



Section 2: Environmental audit scope

Objective of the environmental audit:

In accordance with the requirements of the s48(1) Notice, the objective of this Environmental Audit is to evaluate the type, amount, distribution and mobility of contaminants present in the environment, resulting from, or in any way connected with NTFRS activities at the premises. Furthermore, the Audit is intended to assess the suitability of the site for the proposed future use.

Details of the site in respect of which the environmental audit was conducte	De ⁻	tails	of	the	site	in	respect	of	which	the	envi	ronr	mental	audit	was	cond	lucte	b
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Site/premises name:	Former Casuarina Fire Station					
Address:	36 Dripstone Road, Casuarina, Northern Territory					
Title details:	Lot 4974 (Town of Nightcliff)					
Area (m²):	4,420					
□ a plan of the site is	s attached					

Use or proposed use for which the site was audited: Youth & Community Hub

Land use categories

Note that sensitive land uses in the *Environment Reference Standard* (ERS 2021) are categorised as lower and high density. Lower density is where there is generally substantial access to soil and high density is restricted to developments that make maximum use of available land space, and there is minimal access to soil. For planning purposes, children's playgrounds and secondary schools also trigger *Ministerial Direction No. 1* (MD No.1) and are therefore considered similarly to sensitive land uses.

Sensitive:		
□ High den	sity: 🗆 Other (lov	wer density):
□ Ch □ Pre □ Pri	sidential land use ild care centre e-school mary school condary school	
	's playground (indoor) 's playground (outdoor)	
	on/open space	
\square Parks an	d reserves	
☐ Agricultu		
		the above as described here:
Environment	elements assessed in the er	nvironmental audit:
	nvironmental values were	e considered er than the following were considered:



Ambient sound all environmental values were considered all environmental values other than the following were considered:
Land ☑ all environmental values that apply to the land use category were considered ☐ all environmental values that apply to the land use category, other than the following, were considered:
Water Surface water □ all environmental values that apply to the applicable segment were considered OR □ all environmental values that apply to the applicable segment, other than the following, were considered:
Groundwater ☑ all environmental values that apply to the applicable segment were considered OR ☐ all environmental values that apply to the applicable segment, other than the following, were considered:

Standards and reference documents considered:

- Waste Management & Pollution Control Act 1998 (NT)
- Environment Protection Act 2019 (NT)
- Environment Protection Act 2017 (Vic)
- Environment Protection Regulations 2021 (Vic)
- Environment Reference Standard 2021 (Vic)
- Contaminated Land Guideline 2017 (NT)
- NEPC, National Environment Protection (Assessment of Site Contamination) Measure 1999
 (Amended 2013) (NEPM)
- PFAS National Environmental Management Plan Version 2.0 January 2020 (HEPA)
- NHMRC 2011, Australian Drinking Water Guidelines
- NHMRC 2008 Guideline for Managing Risks in Recreational Water
- ANZG 2018 Australian and New Zealand Guidelines for Fresh and Marine Water Quality
- AS 2159-2009
- AS 4482.1-2005 & 4482.2-1999 (withdrawn pending update)
- EPA Victoria 2022, Guidelines for conducting environmental audits (publication 2041)
- EPA Victoria 2022, Groundwater sampling guidelines (publication 669.1)
- National Uniform Drillers Licensing Committee (2020) Minimum Construction Requirements for Water Bores in Australia – Edition 4

Assumptions made during the environmental audit or any limitations:

The Auditor has relied upon information described in assessment reports supplied by the representative of the site owner, their assessor and other third parties and upon site inspections conducted by the Auditor and/or his representatives. The Auditor undertook desktop checks consistent with the standard of care expected of environmental auditors to assess the likely accuracy of the information described in the Assessment Reports.



Exclusions from the environmental audit and the rationale for these:

Ambient air – the condition of the site is not expected to affect ambient air, except those potential effects due to the condition of soil and groundwater. Relevant assessment of vapour was undertaken via assessment of soil and groundwater conditions.

Ambient sound – Sound / noise is usually not a component of a contaminated land environmental audit.

Surface water – no surface waters exist on site. Potential risks to the water dependent ecosystems and species of receiving surface waters was assessed via the consideration of the condition of groundwater.

The Auditor has not made any comment regarding the geotechnical suitability of the site for the proposed use – not usually a component of contaminated land environmental audit.

Environmental Values of land that are not consistent with the existing and proposed land use

This statement is accompanied by the following environmental audit report:

Title: Environmental Audit Report: 36 Dripstone Road, Casuarina, NT

Report no: 60712377

Date: 19 August 2024



Section 3: Results and recommendations of the environmental audit

 $\hfill\square$ Other land uses not captured by the above as described here:

I	Land use suitability
	Based on my assessment of the site in relation to the risk of harm to human health or the environment from contaminated land, waste or pollution, I am of the opinion that the site is suitable for the following land uses if the recommendations I have made in this statement are complied with:
L	Land use categories
5	Sensitive:
	\square High density: \square Other (lower density):
	 □ Residential land use □ Child care centre □ Pre-school □ Primary school □ Secondary school
	□ Children's playground (indoor)□ Children's playground (outdoor)
(Other:
	□ Recreation/open space
	□ Parks and reserves
	☐ Agricultural



 \square Industrial

Results of the environmental audit

Based on my assessment of the risk of harm to human health or the environment from contaminated land/waste/pollution at 36 Dripstone Road, Casuarina (NT), I conclude that

- the relevant environmental values of land are not threatened for recreation/open space and commercial land uses
- one or more of the environmental values of groundwater are threatened
- groundwater at the site is contaminated from site sourced PFAS compounds.
- The requirement (of the s48(1) Notice) to evaluate the types, amount, distribution and mobility of any potential contaminants of concern, including but not limited to per- and poly-fluoroalkyl substances (PFAS), present in the environment at and from the premises has not been adequately addressed.

The audit is subject to the recommendations below

Recommendations:

- 1. Groundwater beneath the site is contaminated with site sourced PFAS compounds and is not suitable for the use of water dependent ecosystems and species, potable water supply, agriculture and irrigation (irrigation), agriculture and irrigation (stock watering), industrial and commercial use and traditional owner cultural values. Groundwater should not be used without prior testing and review of results by a suitably qualified professional registered under section 68 of the Waste Management and Pollution Control Act 1998 to confirm its suitability for the proposed use. Groundwater may be extracted for the purposes of environmental monitoring or remediation.
- 2. An Environmental Management Plan (EMP) (or plans) must be developed for the site by a suitably qualified professional and verified by a person registered under section 68 of the *Waste Management and Pollution Control Act 1998*. The EMP(s) must be implemented and maintained prior to and during the proposed site redevelopment and for post construction use of the site.

Other related information:

- 1. The Environmental Auditor is satisfied that the groundwater has NOT been cleaned up so far as reasonably practicable
- 2. Groundwater at the site contains naturally elevated concentrations of copper and zinc. The levels are considered typical of the natural groundwater quality surrounding the site and does not constitute contamination in accordance with *clause 4* of the *Environment Reference Standard 2021*.
- 3. Groundwater at the site contains naturally low pH. The levels are considered typical of the natural groundwater quality surrounding the site and does not constitute contamination in accordance with clause 4 of the Environment Reference Standard 2021.
- 4. Groundwater monitoring wells should be retained for the purpose of future environmental monitoring. Where these may be affected be site development works, groundwater monitoring wells should be decommissioned in accordance with the requirements of *Minimum Construction Requirements for Water Bores in Australia*, 4th Edition (2020), published by the National Uniform Drillers Licensing Committee (or replacement publication).



- 5. Any soil or inert waste proposed to be excavated and disposed off-site after the completion of the Environmental Audit must be tested and classified in accordance with relevant guidelines accepted in the Northern Territory.
- 6. Any fill material proposed to be imported to the audit site after the completion of the Environmental Audit, must contain concentrations of chemicals that do not exceed environmental quality objectives for open-space use.
- 7. Not all land uses for which the audit site is considered suitable by this Environmental Audit may be allowed under the relevant planning scheme.



Section 4: Environmental auditor's declaration

I state that:

- I am appointed as an environmental auditor by the Environment Protection Authority Victoria under the *Environment Protection Act 2017*.
- The information contained in this statement represents a true and accurate summary of the findings of the environmental audit that I have completed.

Date:

19 August 2024

Signed:

Name: Todd Mitchell

Environmental Auditor