



INFORMATION REGARDING ENVIRONMENTAL AUDIT REPORTS

August 2007

VICTORIA'S AUDIT SYSTEM

An environmental audit system has operated in Victoria since 1989. The *Environment Protection Act 1970* (the Act) provides for the appointment by the Environment Protection Authority (EPA Victoria) of environmental auditors and the conduct of independent, high quality and rigorous environmental audits.

An environmental audit is an assessment of the condition of the environment, or the nature and extent of harm (or risk of harm) posed by an industrial process or activity, waste, substance or noise. Environmental audit reports are prepared by EPA-appointed environmental auditors who are highly qualified and skilled individuals.

Under the Act, the function of an environmental auditor is to conduct environmental audits and prepare environmental audit reports. Where an environmental audit is conducted to determine the condition of a site or its suitability for certain uses, an environmental auditor may issue either a certificate or statement of environmental audit.

A certificate indicates that the auditor is of the opinion that the site is suitable for any beneficial use defined in the Act, whilst a statement indicates that there is some restriction on the use of the site.

Any individual or organisation may engage appointed environmental auditors, who generally operate within the environmental consulting sector, to undertake environmental audits. The EPA administers the environmental audit system and ensures its ongoing integrity by assessing auditor applications and ensuring audits are independent and conducted with regard to guidelines issued by EPA.

AUDIT FILES STRUCTURE

Environmental audit reports are stored digitally by EPA in three parts: the audit report (part A), report appendices (part B) and, where applicable, the certificate or statement of environmental audit and an executive summary (part C). A report may be in colour and black-and-white formats. Generally, only black-and-white documents are text searchable.

Report executive summaries, findings and recommendations should be read and relied upon only in the context of the document as a whole, including any appendices and, where applicable, any certificate or statement of environmental audit.

AUDIT REPORT CURRENCY

Audit reports are based on the conditions encountered and information reviewed at the time of preparation and do not represent any changes that may have occurred since the date of completion. As it is not possible for an audit to present all data that could be of interest to all readers, consideration should be made to any appendices or referenced documentation for further information.

When information regarding the condition of a site changes from that at the time an audit report is issued, or where an administrative or computation error is identified, environmental audit reports, certificates and statements may be withdrawn or amended by an environmental auditor. Users are advised to check [EPA's website](http://www.epa.vic.gov.au) to ensure the currency of the audit document.

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FURTHER INFORMATION

For more information on Victoria's environmental audit system, visit EPA's website or contact EPA's Environmental Audit Unit.

Web: www.epa.vic.gov.au/envaudit

Email: environmental.audit@epa.vic.gov.au

ENVIRONMENTAL AUDIT REPORT

FORMER MOBIL SERVICE STATION,
151-153 CHURCH STREET,
GEELONG WEST, VIC

AEC REF 5176

Vic EPA CARMS Ref 68842-2

Prepared for Mobil Oil Australia Pty Ltd

13 May 2011



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EXECUTIVE SUMMARY

This is an environmental audit report for the former Mobil Service Station site at 151-153 Church Street, Geelong West, Victoria (corner of Shannon Avenue and Church Street), which has been completed by Mr. Steven Kirsanovs of AEC Environmental Pty Ltd, in his capacity as an environmental auditor (contaminated land) appointed by the EPA pursuant to the *Environment Protection Act 1970*. The audit details and outcomes are summarised in Tables 1 and 2 on the following pages.

Table 1. Summary of audit information

EPA file reference no.	68842-2
Auditor	Steven Jon Kirsanovs
Auditor term of appointment	03/11/2009 to 02/11/2011
Name of person requesting certificate	Mr Stewart Frater (Mobil Oil Australia Pty Ltd)
Relationship to premises/location	Nominated representative for Mobil (site owner)
Date of request	15/02/2011
Date EPA notified of audit	22/02/2011
Completion date of the audit	13 May 2011
Reason for Audit	Clean up Notice N09017 dated 14 January 2011
Description of activity	Service Station Activities (storage, handling & distribution of petroleum hydrocarbons)
EPA Region	South West
Dominant – Lot on plan	Lot 1 on Title Plan 382065X, Volume 8666 Folio 665
Additional – Lot on plan(s)	
Site/Premises Name	Former Mobil Service Station (Geelong West)
o Building / complex sub-unit No	
o Street / Lot – Lower No	151
o Street / Lot – Upper No	153
o Street Name	Church
o Street type (road, court etc.)	Street
o Street suffix (North, south etc.)	
o Suburb	Geelong West
o Postcode	3218
GIS Coordinate of Site centroid	(from Vic Land Channel interactive mapping tool)
o Longitude / Northing (GDA 94)	5776299 N
o Latitude / Easting (GDA 94)	266730 E
Members and categories of support team utilised	Jackie Wright (Health Risk Assessment)
Outcome of the audit	Past leakage of petroleum products has resulted in contamination of land and groundwater in the vicinity of the site. There has been extensive investigation undertaken to characterise the nature and extent of impacts. The lateral extent of impacts has been delineated adequately, but the impacts have not been delineated vertically. The auditor is satisfied the scope of investigations to date has been commensurate with the scale and significance of the impacts. The hydrocarbon impacts are not likely to pose a significant current risk to the land and groundwater environment. However, there are

	limitations with some of the supporting data, particularly in relation to vapour intrusion risk. Further investigation is warranted to improve the confidence in the supporting data for exposures via vapour intrusion risk and indoor air quality impacts. The clean up measures carried out to date are reasonable and appropriate, and have been carried out with regard to the general requirements of EPA publication 840.
Further work or requirements	The auditor recommends the following additional investigation and management measures:- SHORT TERM MEASURES (WITHIN 3 MONTHS OF AUDIT COMPLETION) - o A site environmental management plan (SEMP) should be prepared for the management of contaminated soil and groundwater at the site. The plan should include provisions for ongoing groundwater monitoring, trigger levels, contingency plan, utility pit vapour monitoring, disposal or re-use of any waste soil or groundwater generated by site activities and retention and maintenance of the existing groundwater monitoring bore network. The SEMP must be prepared by an appropriately qualified professional practitioner and be subsequently approved by an Environmental Auditor (Contaminated Land) appointed pursuant to the Environment Protection Act 1970. - o EPA should consider declaring a Groundwater Quality Restricted Use Zone (GQRUZ) encompassing the site and affected off-site areas, or a similar regulatory mechanism that has the effect of prohibiting groundwater extraction and use unless it is for ongoing monitoring or remediation purposes. - o All owners and occupants of properties in the affected off-site areas should be informed of the risks posed by the groundwater impacts, including the risks if affected groundwater was extracted and utilised. As part of this consultation process, enquiries should be made to establish whether these properties have basements and/or cellars. MEDIUM TERM MEASURES (WITHIN 6 MONTHS OF AUDIT COMPLETION) - o An additional soil vapour monitoring event should be completed from the existing on site soil vapour monitoring bores, and the data used to upgrade the on site and off site health risk assessment. In addition to the scenarios of sub surface trenching and existing slab on ground structures, the risk assessment should consider the potential risk associated with subsurface structures such as basements and/or cellars both on site and off site.

	- o Further investigation should be conducted to vertically delineate dissolved phase impacts under the north eastern portion of the site. Delineation should be achieved to the lowest of the adopted groundwater clean-up criteria for each analyte of interest (eg. 1µg/L for benzene). - o A clean up and remediation plan should be prepared to address residual hydrocarbon impacted soil remaining on site. LONGER TERM MEASURES (WITHIN 2 YEARS OF AUDIT COMPLETION) - o If the environmental audit of the site currently being undertaken under Section 53X of the Environment Protection Act has not been completed and submitted within 2 years of the provision of this 53V audit (including a determination by EPA that clean up to extent practicable has been achieved), there should be a review conducted to assess the need for further investigation, remediation and/or other management measures. The form of this review should be an audit conducted in accordance with Section 53V of the Environment Protection Act 1970.
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Table 2. Physical Site Information

Groundwater segment	C
Surrounding land use	North:- Commercial (hair dresser directly opposite and fitness centre north west) East:- Residential South:- Residential West:- Caltex Service Station and residential property adjacent.