

STATEMENT OF ENVIRONMENTAL AUDIT

I, John Michael Nash, of Douglas Partners Pty Ltd, a person appointed by the Environment Protection Authority of Victoria under the Environment Protection Act 1970 ("the Act") as an environmental auditor for the purpose of the Act, having:-

1. been requested by BP Australia Ltd to issue a statement of environmental audit in relation to the site located at the Corner of Harvey Street and Barneson Street, Darwin ("the site") owned/occupied by BP Australia Ltd;
2. had regard to, amongst other things;
 - (i) guidelines issued by the Victorian EPA and endorsed by the Department of Lands, Planning and Environment, Northern Territory,
 - (ii) the beneficial uses that may be made of the above site; and
 - (iii) relevant environment protection policies and related waste management policies;

in making a total assessment of the nature and extent of any harm or detriment caused to, or the risk of any possible harm or detriment which may be caused to, any beneficial use made of the site by any industrial processes or activity, waste or substance (including any chemical substance);

and

3. completed an environmental audit report in general accordance with Section 57 of the above Act, a copy of which has been sent to the Department of Lands, Planning and Environment, Northern Territory.

HEREBY STATE that I am of the opinion that:

1. The site is suitable for the following beneficial use subject to the recommended conditions noted below :-

Residential land use with gardens and accessible soils (with home grown produce contributing less than 10% fruit and vegetable intake and no poultry).

Recommended conditions of the audit are :

- Prevention of the abstraction or use of groundwater from the site.
2. I have not issued the equivalent of an unconditional certificate of environmental audit for the site. The reasons for which are presented in the environmental audit report and are summarised as follows:
 - Some minor potential exists for the on-site presence and off-site migration of ground-water which contains marginal exceedances of criteria defined in published guidelines for the protection of fresh water aquatic ecosystems, in regard to certain heavy metals, and in regard to the monoaromatic hydrocarbon compound benzene and the heavy metal lead, which in some previous site monitoring exercises marginally exceeded published drinking water standards.
 - In this context it should be noted that these factors are not anticipated to have any impact on the proposed residential development of the site, or on the health and well being of any future site occupants or users.

- It should be further noted that there is no reasonable likelihood of the groundwater in, or immediately down-gradient of the site being developed or used as a viable potable resource. This is due to high natural salinity, low formation transmissivity, the seasonally ephemeral nature of the groundwater flow in the weathered zone, the lack of groundwater flow in the underlying rock strata, and the low potential yield which could be obtained from any abstraction well. On this basis the condition recommending no groundwater abstraction on the site is of a precautionary nature only.
- The reported marginal exceedances of heavy metals in groundwater are mainly considered to be naturally occurring, being related to the tropical weathering of the local soils. The reported concentrations of heavy metals in groundwater are therefore unlikely to have any significant effect on existing ecosystems on, or down-gradient of the subject site.
- The marginally elevated concentration of lead in the groundwater is the exception to the above, and is likely to have derived from products previously stored on site. However, it is considered that the reported concentrations of lead in groundwater will quickly revert to natural background levels, probably by the end of the forthcoming wet season. This is considered likely because of the removal from the site of the previous sources of contamination and from the flushing effects of infiltrating clean water recharge to the site.
- Progressive reductions in lead concentration in groundwater have been monitored during the previous wet season and lead levels in soil on the site are within the published criteria for the site, suggesting that the source of lead contamination in groundwater has been removed.
- It should also be noted that the ecosystem guidelines used as benchmark criteria in this audit are extremely conservative, and are not strictly applicable to groundwater systems, being more appropriate for the protection of freshwater fish, shellfish etc. Notwithstanding these guidelines have nevertheless been employed in the absence of a site specific risk assessment and in the absence of a more suitable Australian standard for groundwater quality.

This statement of environmental audit should be read in conjunction with and forms part of the site audit report entitled 'Site Audit Report BP Port Darwin Terminal Facility, Northern Territory' (*Douglas Partners Pty Ltd, Report Number 28511, Audit Report No DPVNT/100, Dated 6 October 1999*). Further details regarding the condition of the site may be found in the site audit report.

DATED: 29 October 1999