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.

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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.

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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.

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AUSTRALIAN SITE ASSESSMENT

FORMER TELSTRA CORPORATION DEPOT
BRITANNIA STREET, GEELONG WEST

ENVIRONMENTAL AUDIT REPORT

July 1997

Ref. No.100842

CH2MHILL

AUSTRALIAN SITE ASSESSMENT

FORMER TELSTRA CORPORATION DEPOT
BRITANNIA STREET, GEELONG WEST

ENVIRONMENTAL AUDIT REPORT

July 1997

Ref. No.100842

CH2M HILL AUSTRALIA Pty Ltd

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Ref. No.: 100842

CH2M HILL

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SUMMARY INFORMATION

ENVIRONMENTAL (CONTAMINATED SITE) AUDIT

TELSTRA FORMER LINE DEPOT, BRITANNIA STREET, GEELONG WEST

Name of Auditor:	Richard Wolfe
Date of Appointment as Auditor:	21 December 1995
Person requesting audit:	Australian Site Assessment
Date of Audit:	21 December 1995. Note the audit was commenced by Richard Wolfe as an employee of Gutteride Haskins & Davey Pty Ltd and was transferred to CH2M HILL AUSTRALIA Pty Limited in May 1997.
Address of Site:	Corner of Britannia and Andrews Streets, Geelong West
Site Description:	Certificate of Title Volume 8128 Folio 002 as being part of Crown Portion 7, Section 8, Parish of Moorpanyal, County of Grant. A copy of the Certificate of Title is provided as Appendix A.
Zoning:	Public Purposes
Owner/Occupier:	Telstra Corporation Limited

CH2M HILL

ENVIRONMENT PROTECTION ACT 1970

SECTION 57AA

CERTIFICATE OF ENVIRONMENTAL AUDIT

I, Richard Wolfe of CH2M HILL AUSTRALIA Pty Ltd, 615 St Kilda Road, Melbourne, a person appointed by the Environment Protection Authority ("the Authority") under the Environment Protection Act 1970 ("the Act") as an environmental auditor for the purposes of the Act, having:-

1. been requested by the Australian Site Assessment to perform an environmental audit in relation to the former Telstra Corporation Limited Line Depot located at the corner of Britannia and Andrews Streets, Geelong West and described Certificate of Title Volume 8128 Folio 002 as being part of Crown Portion 7 , Section 8, Parish of Moorpanyal, County of Grant.

2. had regard to, amongst other things, -

   (i) guidelines issues by the Authority for the purposes of section 57AA of the Act;
   (ii) the beneficial uses that may be made of the land at the site; and
   (iii) relevant State environment protection policies/industrial waste management policies, namely:
      - EPA Bulletin *Guidelines for Environmental Auditors, Contaminated Land, Issue of Certificates of Environmental Audit* (Reference WM/91/14 dated May 1992).
      - EPA Information Bulletin *Environmental Audit System Contaminated Land Explanatory Notes* (Reference WM/90/04 dated May 1992).
      - ANZECC /NHMRC *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites*, January 1992
      - EPA Publication 228 Draft State Environment Protection Policy (Groundwaters of Victoria), October 1994.
   (iv) various investigations relating to the condition of the land at the site:

   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 relevant segment at the site by any industrial process or activity, waste or substance (including any chemical substance); and

3. completed an environmental audit report in accordance with section 57AA(2) of the Act, a copy of which has been sent to the Authority.

HEREBY CERTIFY that I am of the opinion that the condition of the land at the site is neither detrimental nor potentially detrimental to any beneficial use of the land at the site.

DATED: 11 July 1997

SIGNED: Richard Wolfe .....
(Environmental Auditor)

28143-1-C

1.0 INTRODUCTION

The former Telstra Corporation Limited (Telstra) line depot at the corner of Britannia and Andrews Streets, Geelong West is being sold for redevelopment. The proposed future use is residential.

As part of the clearance of the site, Telstra has undertaken a number of environmental assessments to review the potential impact of past activities on the proposed future use, including a number of more recent assessments undertaken by Australian Site Assessment (ASA). As agreed with Telstra, an independent Auditor was appointed by ASA to review the results of the assessment of ground conditions and cleanup proposals, as required for site remediation.

In accordance with this requirement, Richard Wolfe was subsequently appointed by ASA to undertake the audit. Richard Wolfe is accredited by the Victorian Environment Protection Authority as an Environmental (Contaminated Sites) Auditor until March 1999.

Based on the results of the ASA assessment of site conditions completed in July 1996 and a subsequent assessment of risk for future residents from potential exposure to soil contaminants in October 1996, remediation of the site was proposed. As part of the audit, a review of the ASA site remediation proposal and the subsequent validation of remedial works was undertaken by the Auditor.

28143-1-A

2.0 EPA AUDIT REQUIREMENTS

Consistent with the requirements of Ministerial Directive No.1 (1992), rezoning of land to more sensitive landuses is subject to the issue of a Certificate or Statement of Environmental Audit by an EPA-appointed Auditor, pursuant to Section 57AA of the Environment Protection Act 1970.

A Certificate of Environmental Audit is issued where the Auditor is of the opinion that the condition of the land is not detrimental or potentially detrimental to any beneficial use. If the condition of the land precludes the issue of a Certificate, the Auditor is then required to provide a Statement indicating the types of uses/developments which are not prejudiced by the ground contamination. This may provide for residential development subject to implementation of a management plan. A Statement will therefore impose conditions on the site restricting landuse and the nature of site development.

A number of guidance documents set out requirements for site assessment relevant to auditing, these include:

- ANZECC /NHMRC Guidelines for the Assessment and Management of Contaminated Sites, January 1992;
- Victorian EPA Information Bulletin (WM91/14) Guidelines for Environmental Auditors, Contaminated Land, May 1992;
- Victorian EPA Guidelines for Environmental Auditors, Conducting Environmental Audits of Land, October 1995; and
- Draft Australian Standard, Sampling of Soils, Guide to the Sampling and Investigation of Potentially Contaminated Soils (Part 1), January 1997.

The Audit is also required to consider the requirements of relevant State Environment Protection Policies/Industrial Waste Management Policies.

3.0 DOCUMENTS REVIEWED

The Documents reviewed as part of this Audit included a number of preliminary site assessments, a risk-based review of clean-up requirements, a Remediation Management Plan (RMP) and a validation assessment undertaken following the clean-up works.

As part of this review, the scope of investigations completed by ASA and others to characterize the nature of soil contamination across the site have been considered together with the quality of the data from these assessments. The findings of the site assessments are presented in the following reports:

- Lain Walters and Barrett Fuller & Partners, *Telecom Australia Preliminary Site Contamination Assessment Former Telecom Depot at Britannia Street Geelong West* January 1994

- Australian Site Assessment, *Telstra Corporation Limited, Phase 1 and 2 Site Assessment of Geelong Line Depot Geelong West,* October 1995, (ASA reference ASA35316G/95).

- Australian Site Assessment, *Telstra Corporation Limited, Risk Assessment Former Geelong Line Depot Britannia Geelong West,* July 1996, (ASA reference ASA35316G/96/001).

- Australian Site Assessment *Remediation Management Plan* (RMP) *Former Geelong Line Depot Britannia Geelong West*, September 1996 (ASA reference ASA3516G/96/002).

- Australian Site Assessment Validation of Remediation Works, *Former Geelong Line Depot Britannia Geelong West*, June 1997.

A copy of these documents is not attached to this report.

4.0. SITE DESCRIPTION

4.1 GENERAL

The property is located on the south western corner of the intersection of Britannia and Andrews Streets, Geelong West. The property is described on Certificate of Title, Volume 8128, Folio 002 as being part of Crown Portion 7, Section 8, Parish of Moorpanyal, County of Grant. A copy of the Certificate of Title is included as Appendix A.

The site measures approximately 48m by 97m and covers an area of 0.47 hectares.

4.2 SITE GEOLOGY AND HYDROGEOLOGY

The superficial geology is characterised by Moorabool Viaduct Sand which comprises sand, clayey sand and silt overlying a relatively thick sequence of clay, marl, silt, and limestone – referred to as the Fyansford Formation. The regional geology is described on the 1:63,360 scale geological map for Geelong, Geological Survey of Victoria, 1963. This map identifies the Newer Volcanics as occurring to the south of the site. The Moorabool Viaduct Sand is from 10 to 20m thick locally and is an aquifer. The depth to the water table is likely to be around 10m.

Furthermore, information from the Statewide Groundwater Database indicates there are registered groundwater bores in the general area (within 2 km).

5.0 PREVIOUS ASSESSMENTS

5.1 LAIN WALTERS AND BARRET FULLER & PARTNERS, JANUARY 1994

The preliminary survey of soil conditions by Lain Walters and Barrette Fuller & Partners, in January 1994 relied on the analysis of 3 and 4-part composite samples collected from a depth of nominally 300mm. Samples were referred to a NATA accredited laboratory (WSL Consultants) for analysis, however the data quality was not verified. Nevertheless, the survey identified the following:

- fill consisting of a silty sand and sandy gravel to depths of 0.2 to 0.5m across the site;
- potentially elevated levels of chromium and nickel with reference to the ANZECC environmental investigation levels; and
- Total Petroleum Hydrocarbons (TPHs), Polycyclic Aromatic Hydrocarbons (PAHs), Organochlorine Pesticides (OCPs), Polychlorinated Biphenyls (PCBs) and the monocyclic aromatic hydrocarbons (BTEX) below the laboratory quantification limits (for composite samples).

5.2 AUSTRALIAN SITE ASSESSMENT, PHASE I AND II ASSESSMENT, OCTOBER 1995

Samples were collected at 22 locations across the site as part of the assessment undertaken by ASA in June 1995; this included 18 grid-based locations, and 4 targeted around an underground storage tank (UST). All samples were analysed for a suite of heavy metals (nickel, chromium, copper, lead, zinc, cadmium, mercury and arsenic), whilst selected samples were analysed for a range of organics contaminants (TPHs, BTEX, PAHs, PCBs, phenols, volatile halogenated organics, chlorinated hydrocarbons and organochlorine pesticides).

The areal frequency of sampling was considered to be satisfactory to characterize soil contamination across the site given the nature of past site activities. In this regard the draft Australian Standard CH/28/1/96-6 (January, 1997) proposes a minimum of 13 sampling locations for a 0.5ha site. This number of sampling points is based on the detection of a circular hotspot of contamination of approximately 23m diameter with a 95 percent confidence.

With the actual sampling grid adopted by ASA (equivalent to 16m by 16m) there was a 95 percent probability of detection of a circular hotspot of 9.5m. The sampling and analytical program adopted by ASA was considered to be appropriate to characterise soil contamination across the site although further targeted sampling in the UST area was considered necessary.

Soil samples were collected at a number of sampling depths, generally down to a maximum depth of 500mm and to a depth of 1500mm to 2500mm around the USTs. The heavy metals, nickel and chromium were identified at levels marginally exceeding the ANZECC environmental investigation levels at a number of locations across the site, whilst zinc, copper and mercury each marginally exceeded the respective guidelines at one location. Nickel levels ranged up to 530mg/kg, although most exceedences (with reference to the ANZECC environmental investigation levels) ranged from 70 to 140mg/kg. Chromium levels ranged up to 91mg/kg.

The level of volatile organics (VOCs) measured at two of the sampling locations adjacent to the former USTs were elevated at the full depth of sampling. The C_6 to C_9 petroleum hydrocarbon level was 530 mg/kg at one of the two sampling locations at a depth of 1000mm. The reported BTEX levels in soil samples from these locations were however, below the laboratory quantification limits and further testing was considered appropriate to resolve the anomaly. This was subsequently undertaken as part of the validation sampling.

Details on the specific methods of collection and handling of samples for VOC analysis were not included in the report; these should have been included in the QA/QC procedures.

Background samples were collected at two locations from an adjacent reserve. Chromium levels in the background samples ranged from 65 to 67 mg/kg, whilst nickel levels ranged from 25 to 45 mg/kg.

The chromium levels reported were generally consistent with the natural levels in the clayey sands of the Moorabool Viaduct Sands, however the presence of nickel levels exceeding the ANZECC environmental investigation levels was considered to be associated with past site use.

5.3 AUSTRALIAN SITE ASSESSMENT, RISK ASSESSMENT, JULY 1996

The *ANZECC/NHMRC Guidelines for the Assessment and Management of Contaminated Sites (January 1992)* were used as the initial basis for the assessment of the condition of the land with respect to impacts or potential impacts on any beneficial use. Where investigation levels were not nominated in the ANZECC guidelines, the Dutch B level guidelines (Netherlands Ministry of Social Planning and Environment, November 1988) were used.

The ANZECC guidelines have been set on the basis of current toxicological data and are considered to be conservative. In general the guideline levels are considered to protect the most sensitive receptors and are protective of all beneficial uses. A less stringent set of guidelines is likely to apply for non-sensitive land uses such as commercial/industrial or open-space use. Appropriate guideline levels may be defined on a site-specific basis by assessment of human health and/or ecological risks under the ANZECC guidelines.

A risk assessment was undertaken by ASA in July 1996 to review the requirements for cleanup based on the potential exposure and health impacts of the following population groups:

- on-site workers involved in remediation works;
- off-site residents and workers; and
- future on-site residents.

The risk assessment by ASA concluded that the risk to each of the above groups was within acceptable limits; a comprehensive review of environmental risk was not undertaken as part of this assessment.

The assessment was undertaken using a computer-based model (Risk Assistant). The model assumptions did not fully conform with the procedures set out in the USEPA *Human Health Evaluation Manual (Part A), 1989* or the ANZECC *Guidelines for the Assessment and Management of Contaminated Sites*, January 1992. Soil ingestion rates, for instance did not conform with ANZECC recommendations.

Furthermore, the assessment did not consider the risk to children, which is considered to be the critical population age group for determining human health risk for a residential site use.

Based on these considerations, the Auditor undertook a review of health-based soil remediation goals for a residential (low density) land use. In this regard Langley et al (1995), through the Third National Workshop on the Health Risk Assessment and Management of Contaminated Sites proposed health-based soil investigation or guidance levels. These guidelines provided a range of health based investigation levels considered to be appropriate for a range of generic land uses for Australia including low and medium density residential and commercial industrial use. A health-based guidance values for nickel for a low density residential of 600 mg/kg was proposed by the Auditor.

The approach by ASA for remediation of areas where nickel levels exceed typically 100 mg/kg was considered acceptable by the Auditor, although conservative with regard to the requirement to protect human health for future users. Remediation of cells with mercury and copper levels in excess of the ANZECC environmental investigation levels was also proposed by ASA. A zinc level of 260mg/kg reported in one of the eighteen cells was not considered to impact the beneficial uses of the site, subject to a review of mobility by ASA.

On the basis of the risk assessment, ASA concluded that remediation of the area of the site as shown in Appendix B was necessary. These cells are listed in Table 5. 1.

Table 5.1 Remediation requirements for nominated cells.

Cell number	Remediation depth(m)
1	350
2	500
3	350
4	350
9	500
10	350
12	350
15	350
16	350
18	250

Based on a review by CH2M HILL, the groundwater level was reported to be around 10m below natural surface levels and is relatively shallow. The vulnerability of the aquifer to contamination was considered to be high based on the surface geology and depth of the groundwater table.

5.4 AUSTRALIAN SITE ASSESSMENT, REMEDIATION MANAGEMENT PLAN, JANUARY 1997

The Remediation Management Plan (RMP) sets out the approach to remediation of the areas identified in the July 1996 ASA Risk Assessment report and a program for validation of the cleanup works. Remediation was proposed by excavation and off-site disposal to a landfill licensed to accept low level contaminated soil. As noted, the extent of remediation proposed for areas where levels of nickel, zinc and mercury were elevated, was considered acceptable to the Auditor.

The requirements for management of the area of petroleum hydrocarbon contaminated soils (around the former USTs) were not fully developed by ASA in the RMP. Sampling undertaken during the ASA October 1996 assessment, did not identify the full depth of contamination, nor the potential impact of the aquifer. In accordance with the Auditor's requirements, excavation of hydrocarbon-impacted areas was proposed in the RMP until evidence of petroleum hydrocarbon contamination is reduced to levels where:

- PID field headspace readings are less that 100ppm
- validation samples report BTEX and TPH levels below acceptable levels

In addition, the Auditor recommended that all existing pavements should be removed from all areas where past activities may have impacted the soil or where structures have been placed on fill material. In this regard, removal of the concrete bases from the former workshop and dangerous goods storage areas along the south-west of the site were included as part of the demolition works.

The Auditor also required that procedures for site validation be included for the excavation of soil from cells, or as appropriate for the proposed method of remediation, and to identify the nature of stockpiled material and imported fill. An independent analysis of a representative sample of fill was provided by the remediation contractor for testing by ASA and where requested by the Auditor. Fill material from unknown sources was not to be accepted.

The Auditor recommended that validation samples collected by ASA following the excavation of soil from a cell be in accordance with the following procedures:

- collection of three (3) sub-samples from each wall of the excavation (where the nominated depth of excavation is greater than or equal to 500mm)
- collection of three (3) sub-samples from floor of the excavation
- field sampling to be in accordance with ASA field quality assurance requirements
- laboratory compositing of samples to provide a representative sample for each of the walls and the floor of the cell
- analysis of each composite sample for heavy metals by a NATA accredited laboratory
- referral of 1 in 10 samples to a second independent NATA accredited laboratory for QA/QC analysis

The Auditor required that backfilling of excavations not proceed until approval is given by ASA; in this regard the Auditor was given the opportunity to inspect the excavations once validation requirements were considered to be satisfied.

The RMP prepared by ASA was considered to generally address the requirements to remediate the site to a standard appropriate for residential development, noting that additional data was to be provided in respect of the following:

- ground contamination by petroleum hydrocarbons;
- mobility of soil contaminants and a review of the vulnerability of groundwater to contamination by contaminants identified at the site particularly petroleum hydrocarbons; and
- QA/QC analyses.

6.0 ASSESSMENT OF SITE VALIDATION

6.1 GENERAL

Further to the assessment of cleanup requirements as set out in the ASA, Risk Assessment (July 1996) a remediation program was commenced on 13 February and completed on 3 April 1997. ASA provided a supervisor on the site for the full period of cleanup.

Site visits were undertaken by CH2M HILL on 19 and 26 February 1997 and 24 March 1997 to inspect the progress of remediation works and to witness sampling methods adopted by ASA. The remediation works included the excavation of soil from designated cells across the site to a depth of 500mm, the removal of USTs and the excavation of concrete pavements from former workshop areas along the south-west boundary of the site excavation of petroleum hydrocarbon impacted soil from the UST and workshop area and the subsequent validation of all works areas.

Property records and subsequent advice from the site owner, Telstra, indicated that only one UST remained buried on the site. During the excavation works a second tank was identified. Both tanks were of 5000L capacity; one was empty, however, the second tank was filled with a fuel/water mixture and was considered to be a source of soil and groundwater contamination. It is noted that extensive excavation was subsequently undertaken around the UST area to remove petroleum hydrocarbon impacted soil. Approximately 2,250 cu.m of soil was excavated; the surface 2m of soil was not considered to be contaminated following a visual assessment, PID headspace screening and subsequent validation sampling and analysis. This soil was stockpiled on site; three soil samples were collected from this stockpile and analysed for selected heavy metals, TPHs and BTEX. A copper level of 96 mg/kg was reported for one sample; this reported a level of 43 mg/kg on retesting. The levels of selected analytes (heavy metals, TPHs, BTEX, PAHs and chlorinated organics) were below the laboratory quantification limits for all samples. This soil which represented a volume of around 150 cu.m, was used as initial backfilling for excavation in the UST area..

In addition, an abandoned hoist was identified following removal of concrete pavements from the former workshop areas. The hoist was removed and approximately 500 cu.m of petroleum hydrocarbon impacted soil was excavated from around the hoist.

Validation sampling was undertaken for the cells and UST and hoist areas in accordance with the Auditor requirements prior to the placement of any backfill. The results of the validation sampling are presented in the ASA report. With the exception of a benzene level of 1.1 mg/kg in one of the validation samples collected from the UST excavation, all validation sampling results were less than the ANZECC environmental investigation guidelines. The elevated benzene level was detected in a sample collected from a depth of approximately 2 m adjacent to a major sewer running through the site. Benzene was not reported in other samples collected from around the sewer and the contamination was considered to be localised. In view of the marginal exceedence of the ANZECC guideline level of 1 mg/kg, the depth of sampling and the non detection of BTEX in the other twenty-two validation samples taken from the UST excavation the presence of the benzene was not considered to be detrimental to the residential or other beneficial uses of the site.

With the exception of the surface soil excavated from the UST area, all soil excavated from the cells, the UST and hoist areas was disposed of as Low Level Contaminated Soil to the Corio Landfill following

written approval by EPA. Excavated soil from the UST and hoist areas was stockpiled on paving prior to disposal. Soil excavated from the cells was loaded directly into trucks for disposal.

6.2 QUALITY CONTROL/QUALITY ASSURANCE

The requirements for review of data quality were generally defined as part of the review of the validation procedures and covered the following:

- conformance with field quality procedures
- general agreement between field observations and measurements, and laboratory results
- use of laboratories with appropriate NATA registration
- maintenance of chain of custody requirements for samples transfer
- independent analysis for duplicate samples
- analysis of equipment blanks and trip blanks

The sampling procedures were witnessed by CH2M HILL during site visits and comply with ASA standard field procedures; these procedures were considered acceptable.

WSL Consultants and Water Ecoscience were used as the primary and check laboratories; both have appropriate NATA registrations for the nominated analyses. Completed chain of custody documentation and certified result sheets are provided for all analyses undertaken as part of the validation program.

Independent check analyses were undertaken for around 10 percent of all analyses. The results generally complied with the defined data quality objective, namely the relative percentage difference between the primary and check laboratory result was less than 50 percent. The results of the analysis of blanks was acceptable.

7.0 CONCLUSION

The results of validation program by ASA demonstrate that the levels of contamination of shallow soils across the site and deeper soils around the former location of the USTs and the hoist are within acceptable limits for residential or other use.

The groundwater at the site was not intersected during the deeper excavation (to a depth of 7.6m) undertaken for remediation of petroleum hydrocarbon impacted soils; based on a CH2M HILL review of the regional geology and based on data from existing bores in the area it is likely to be at a depth of around 10m.

TCLP testing of the soils by ASA demonstrated that the heavy metals present in the shallow fill were relatively immobile, that is the elutriable fraction is significantly below EPA guidelines for low level of contaminated soils (EPA Bulletin 448). Given these results and the depth to the water table groundwater was not considered to be potentially impacted by low level heavy metal contamination in fill that was not excavated.

A significant volume of soil was impacted by petroleum hydrocarbons, particularly around former UST area. The lighter petroleum hydrocarbons were relatively mobile in the natural clayey sand stratum as evidenced by the extent of hydrocarbon contamination. The strategy adopted by ASA for remediation of this area was to remove all hydrocarbon impacted soil to remove any source of contamination of groundwater, noting that the Moorabool Viaduct Sands extend to the full depth of the excavation and were likely to extend to the groundwater table. No sampling of groundwater was therefore considered necessary.

Similarly all hydrocarbon impacted soil identified around the former hoist was removed to firstly meet soil remediation objectives, but also to remove a potential source of groundwater contamination. Lighter and more mobile hydrocarbons were present around the hoist area; the contaminants of concern were heavier TPHs and PAHs. Neither TPHs or PAHs were identified in any of the validation samples from the UST and former hoist areas. Notwithstanding this, these contaminants are considered to be relatively immobile in the clayey sand stratum present and given the depth to the water table and volume of hydrocarbons likely to have been released with abandonment of the hoist, the groundwater is not considered to be impacted by past activities in this area.

Based on the information presented in the various investigations undertaken by ASA and others, the inspection of the site and review of information undertaken by the Auditor the soil conditions at the former Telstra depot situated at the corner of Britannia and Andrews Streets, Geelong West are not considered to cause detriment or potential detriment to likely beneficial uses of the site.

A Certificate of Environmental Audit has accordingly been issued for the parcel of land at the corner of Britannia and Andrews Streets, Geelong West.

8.0 LIMITATIONS OF THIS REPORT

This report presents the results of a contaminated site investigation prepared for the purposes of this commission. The advice provided herein relate only to the project described herein and must be reviewed by a competent Engineer, experienced in contaminated site investigations, before being used for any other purpose. CH2M HILL AUSTRALIA (CH2M HILL) accepts no responsibility for other use of the data.

Where drill hole or test pit logs, laboratory tests, geophysical tests and similar work have been performed and recorded by others the data is included and used in the form provided by others. The responsibility for the accuracy of such data remains with the issuing authority, not with CH2M HILL.

The advice tendered in this report is based on information obtained from the investigation locations, test points and sample points and is not warranted in respect to the conditions that may be encountered across the site at other than these locations. It is emphasised that the actual characteristics of the subsurface and surface materials may vary significantly between adjacent test points and sample intervals and at locations other than where observations, explorations and investigations have been made. Sub-surface conditions, including groundwater levels and contaminant concentrations can change in a limited time. This should be borne in mind when assessing the data. However, it is our opinion that the test points chosen are representative of conditions on the site.

It should be noted that because of the inherent uncertainties in sub-surface evaluations, changed or unanticipated sub-surface conditions may occur that could affect total project cost and/or execution. CH2M HILL does not accept responsibility for the consequences of significant variances in the conditions.

An understanding of the site conditions depends on the integration of many pieces of information, some regional, some site specific, some structure-specific and some experienced-based. Hence this report should not be altered, amended or abbreviated, issued in part and issued incomplete in any way without prior checking and approval by CH2M HILL. CH2M HILL accepts no responsibility for any circumstances which arise from the issue of the report which has been modified in any way as outlined above.

This report and Audit have not been carried out for the purposes of assessing the suitability of soil and fill on the site for foundations or establishment of gardens and lawn and purchasers of the site should be advised of this.

CH2M HILL AUSTRALIA

Richard Wolfe

APPENDIX A

CERTIFICATES OF TITLE

Colour Code
Y - Yellow
R - Red
G - Green
BR - Brown
BL - Blue
P - Purple
O - Orange
H - Hatched
CH - Cross Hatched

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Entered in the Register Book

Vol. 8128 *Fol.* 002

INDEX PLAN No. 54
PARCEL No. 754

Certificate of Title

27/2/57.

UNDER THE "TRANSFER OF LAND ACT 1954"

The Commonwealth of Australia is ----------

now the proprietor ----------

of an Estate in Fee-simple subject to the Encumbrances notified hereunder in

All *that piece of Land, delineated and coloured* red on the map in the ----

margin containing One acre Twenty-seven perches and six-tenths of a perch or ------

thereabouts being part of Crown Portion 7 Section 8 Parish of Moorpanyal County-

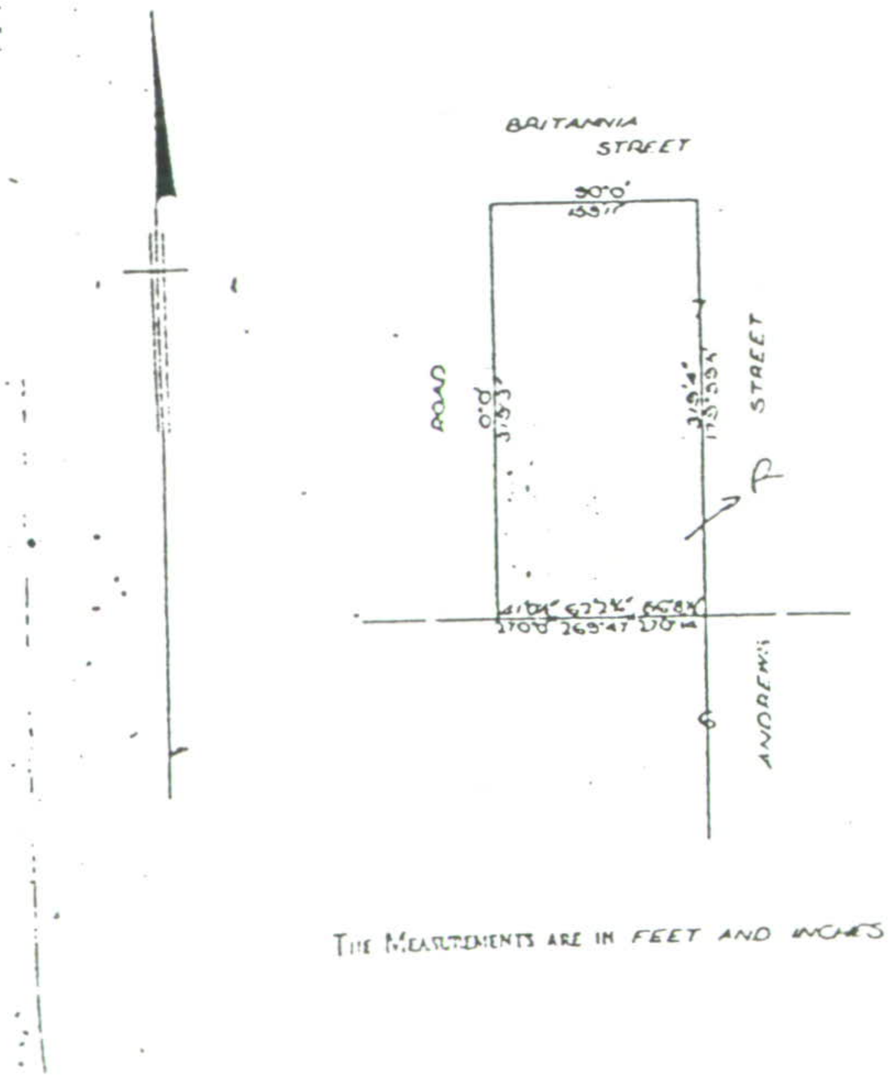
of Grant ----------

Dated the Thirteenth *day of* February *One thousand nine hundred and* fifty-three.

Assistant Registrar of Titles

OFFICE OF TITLES VICTORIA

ENCUMBRANCES REFERRED TO



THE MEASUREMENTS ARE IN FEET AND INCHES

Vol.	Fol.	Transfer	Application
Sec. 54	Act 5843	Red Ink No	Commonwealth Government Gazette No. [illegible] dated [illegible]

PROPRIETOR

AUSTRALIAN TELECOMMUNICATIONS COMMISSION

REGISTERED 16/9/86

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O.H.B.

18 12 [illegible] 4.00

23 SEP 1993

APPENDIX B

SITE REMEDIATION AREAS

BRITANIA STREET