



MINISTER FOR THE ENVIRONMENT WESTER

Ass # 993

Bull # 807

State # 409

STATEMENT TO AMEND CONDITIONS APPLYING TO A PROPOSAL
(PURSUANT TO THE PROVISIONS OF SECTION 46 OF THE
ENVIRONMENTAL PROTECTION ACT 1986)

PROPOSAL: CLEAN-UP OF CONTAMINATED SITE
McCABE STREET, MOSMAN PARK (817/993)

CURRENT PROPONENT: LANDCORP AND OCTENNIAL HOLDINGS PTY LTD

CONDITIONS SET ON: 1 FEBRUARY 1994

Condition 1 is amended to read as follows:

1 Proponent Commitments

The proponent has made a number of environmental management commitments in order to protect the environment.

- 1-1 In implementing the proposal (including the documented modifications of January 1996), the proponent shall fulfil the relevant environmental management commitments made in documentation on the increase in size of the containment cell in January 1996, and reported on in Environmental Protection Authority Bulletin 807; in the Consultative Environmental Review (July 1993), and published in Environmental Protection Authority Bulletin 699, and in response to issues raised following public submissions; provided that the commitments are not inconsistent with the conditions or procedures contained in this statement.

A schedule of those environmental management commitments, including additional commitments made in connection with the increase in the size of the containment cell (February 1996), which will be audited by the Department of Environmental Protection is attached.

Condition 5 is amended to read as follows:

5 Expanded Underground Containment Cell

- 5-1 Prior to any filling of the expanded containment cell, the proponent shall ensure that an agreement, acceptable to the Minister for the Environment on advice of the Environmental Protection Authority, regarding the long-term management of the expanded containment cell has been finalised with the Department of Land Administration. (See commitments 22 to 25).

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- 5-2 The proponent shall design, construct and monitor the performance of the expanded containment cell to ensure that there is no unacceptable release of contaminants, in the opinion of the Minister for the Environment.
- 5-3 The proponent shall prepare the final design details of the expanded containment cell in consultation with the Environmental Protection Authority, the Town of Mosman Park and the Water and Rivers Commission to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

This design shall incorporate the principal findings of the Environmental Protection Authority Review Committee, as included in the design requirements in Attachment A.

- 5-4 The proponent shall construct the expanded containment cell to achieve the objectives of condition 5-2.
- 5-5 The proponent shall prepare the final monitoring programme for the expanded containment cell in consultation with the Environmental Protection Authority, the Town of Mosman Park and the Water and Rivers Commission to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

This programme shall address but not be limited to the following:

- 1 The measurement of settlement and moisture content within the cap and the contaminated material, including a management plan to deal with any irregularities that may occur;
- 2 Additional monitoring bores constructed to ensure that the groundwater downstream of the extension area is adequately monitored for release of contaminants from the cell;
- 3 Review of dust control measures, and submission of an improved programme to the requirements of the Department of Environmental Protection to ensure that site works are programmed wherever possible to minimize the generation of dust. This reviewed programme to address any special health issues; and
- 4 Installation of additional dust sampler(s) to monitor any dust carried by southerly winds.

- 5-6 The proponent shall implement the monitoring programme required by condition 5-5 to achieve the objective of condition 5-2.
- 5-7 At the time of filling the expanded containment cell, the proponent shall deposit all material in a manner that will reduce the incidence of specific material of high concentration of heavy metals or similar being localised within the cell.
- 5-8 Within three months of the commencement of filling of the expanded containment cell, the proponent shall prepare a contingency plan to the requirements of the Minister for the Environment, on advice of the Environmental Protection Authority, to address but not be limited to the following:
- 1 contamination of the groundwater; and
 - 2 management of any additional material found at the site which may involve off-site disposal of uncontaminated materials, such as concrete and rubble.

- 5-9 In the event that the monitoring programme required by condition 5-5 indicates that contamination of groundwater is occurring, the proponent shall immediately undertake appropriate measures, including those in the contingency plan referred to in condition 5-8, to address the environmental impacts, to the requirements of the Minister for the Environment on advice of the Environmental Protection Authority.

The following procedure is inserted following procedure 2:

Procedure

- 3 Within three months of the completion of filling of the containment cell, the Department of Land Administration will prepare a management plan for the use of the land over the clay cap in association with the Town of Mosman Park to ensure that land uses are compatible with the need to maintain the integrity of the clay cap.

Hon. Peter Foss QC MLC
MINISTER FOR THE ENVIRONMENT

15 MAR 1996

**Proponent's Amended Environmental Management
Commitments**

February 1996

**CLEAN-UP OF CONTAMINATED SITE
McCABE STREET, MOSMAN PARK (817/993)**

Landcorp and Octennial Holdings Pty Ltd

The proponent has made the following environmental management commitments:

*N.B. * indicates commitments to be audited by the Department of Environmental Protection.*

Clean-up Phase

- 1 Any activity pertaining to the clean-up undertaken on the McCabe Street site will comply with all legislative requirements.
- 2* The site clean-up will excavate and remove all pyrite cinders from the three dump areas (the western cinders dump, the pyrite slurry dump and the embankment cinders dump), the foundry waste dump, contaminated surface soils from the two areas around the former acid plants that have been identified as having high lead levels, and any discrete pockets of contaminated topsoils that occur elsewhere on the site.
- 3* During the placement of material into the containment cell, contaminated fill will be layered to maximise the retention of residual contaminants in accordance with best practice as indicated in column and leach testing.
- 4* The effectiveness of the site clean-up will be confirmed by chemical analyses, to the satisfaction of the Environmental Protection Authority.
- 5* All contaminated soils and pyritic cinders material, building rubble etc. on the site will be excavated and consolidated within an engineered storage cell located on the site.
- 6* The storage cell will be constructed to ensure waste is separated by a minimum of 5 m vertical distance from the groundwater table.
- 7 The storage cell will be constructed to the details described in the CER, or to a similar approved standard.
- 8 The site clean-up will be supervised by professionals in the environmental and engineering fields, to ensure the work is carried out to the standards required by the Environmental Protection Authority, the Health Department and the Department of Occupational Health, Safety and Welfare.
- 9 A separate Lot will be created to contain the waste storage cell. This Lot will remain as Crown land.
- 10* Drainage outfalls from the site to the Swan River will be sealed and/or otherwise treated in a manner that will avoid disturbance to the surrounding vegetation and soil. No other direct stormwater discharges to the Swan River will be constructed on the site.
- 11* Subdivision and sale of the land will not occur until the site clean-up is completed to the satisfaction of the Environmental Protection Authority, the Town of Mosman Park and all other relevant Government agencies.
- 12* Areas of the site to be sold as freehold residential lots will be covered with a minimum of 1 m of clean fill.
- 13 Special precautions will be taken to control dust generation and protect workers from dust inhalation during site clean-up.
- 14 No water used during the clean-up works will be sourced from groundwater beneath the site.
- 15 All clean-up work will be supervised by professionals in the engineering and environmental fields using recognised quality control and quality assurance procedures to ensure the work is carried out to the highest standard.

- 16 In the event that the remedial works need to disturb the existing cycleway/pedestrian path along the southern boundary to the site, an alternative thoroughfare will be provided and the path restored as soon as possible, to the satisfaction of the Town of Mosman Park.
- 17* Noise, dust and vibration from the site will be controlled to prevent unacceptable environmental impacts. In the event that the Environmental Protection Authority receives ongoing complaints relating to noise or dust emissions from the site, the Proponent will conduct surveys and assessments in consultation with the Environmental Protection Authority.
- 18 The Proponent will install two groundwater monitoring bores in accordance with the proposed monitoring programme in this report. An assessment of the results will be provided to the Environmental Protection Authority, the Water and Rivers Commission, and the Town of Mosman Park.
- 19* Upon completion of the remedial work programme, excavated areas will be sprayed with mulch and planted with grass to minimise any ongoing potential for dust emissions.
- 20* All areas of remedial works will be surrounded with appropriate fencing to exclude public access. Vehicle entry and exit points will have a gate that will be locked during non-working hours. Appropriate signs will be displayed along the perimeter fencing to inform the public of the nature and purpose of the remedial works, and to prohibit public access to the site.
- 21* The excavated disposal pit will be separately surrounded with 2 m high wire mesh fencing capped with barbed wire, with appropriate signs to warn of the deep excavation. The security of this fence will be regularly inspected and maintained during the remedial works programme.

Long Term Containment

The following commitments in respect of the long-term containment of wastes at the McCabe Street site will be incorporated in the legal agreement on long-term management required by condition 5-1:

- 22* Conduct ongoing monitoring of groundwater quality and the storage cell capping system (refer Commitment 18) and if necessary, based on the results, implement actions necessary to prevent unacceptable environmental impacts.
- 23* Ensure all maintenance works necessary to ensure the ongoing integrity of the storage cell capping system are identified promptly by regular monitoring and carried out in a thorough and professional manner as quickly as is practicable.
- 24* Maintain a Crown Reserve over the waste storage cell and ensure adequate notification is given to all interested parties concerning the function and status of the Reserve.
- 25 Ensure that the surface of the Crown Reserve is properly maintained to a standard in keeping with the function of the land as part of the public recreational resource of the area to the satisfaction of the Town of Mosman Park, Ministry for Planning and any other relevant Government agency.

ATTACHMENT A

CLEAN-UP OF CONTAMINATED SITE, McCABE STREET MOSMAN PARK (817/993)

LANDCORP AND OCTENNIAL HOLDINGS PTY LTD

Design Requirements for the Expanded Containment Cell

- 1 Selection of the materials for the construction of the cap and cover of soil shall ensure that the moisture content within the clay is maintained at a level to avoid cracking and to minimise the quantities of water entering the contaminated materials.
- 2 In the event of excess space being available within the containment cell, the upper surface of the clay layer must lie at a depth of at least 0.65 metres below the finished surface and at most 2.00 metres below the finished surface. Notwithstanding this, every effort should be made to increase the depth of the soil cover so as to minimize ongoing management needs.
- 3 The design of the cell and its cap should incorporate mechanisms to manage the drainage and prevent erosion in the long term.
- 4 The capping over the proposed extension and the approved cell should be continuous.
- 5 The proponent should provide to the Department of Environmental Protection (and to the Town of Mosman Park and the Department of Land Administration) an "as constructed" drawing of the containment cell, showing the location and details of all material placed in the cell.