



Ass # 989
Bull # 827
State # 430

MINISTER FOR THE ENVIRONMENT WESTERN

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

PROPOSAL: YAKABINDIE NICKEL PROJECT, LEONORA
(352 / 352-1 / 765 / 957 / 989)

CURRENT PROPONENT: DOMINION RESOURCES PTY LTD

CONDITIONS SET ON: 29 NOVEMBER 1990

CONDITIONS AMENDED ON: 24 MAY 1991
2 FEBRUARY 1993
19 JULY 1995

The implementation of this proposal is now subject to the following conditions which replace all previous conditions:

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 as reported on in Environmental Protection Authority Bulletin 444 and subsequently modified and reported on in Environmental Protection Authority Bulletins 509, 668 and 827, the proponent shall fulfil the relevant commitments; provided that the commitments are not inconsistent with the conditions or procedures contained in this statement.

The list of consolidated environmental management commitments was included in Environmental Protection Authority Bulletin 827 (Appendix 5) and a copy is attached.

2 Implementation

Changes to the proposal which are not substantial may be carried out with the approval of the Minister for the Environment.

- 2-1 Subject to these conditions, the manner of detailed implementation of the proposal shall conform in substance with that set out in any designs, specifications, plans or other technical material submitted by the proponent to the Environmental Protection Authority with the proposal.

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- 2-2 Where, in the course of the detailed implementation referred to in condition 2-1, the proponent seeks to change the designs, specifications, plans or other technical material submitted to the Environmental Protection Authority in any way that the Minister for the Environment determines, on the advice of the Environmental Protection Authority, is not substantial, those changes may be effected.

3 Drainage Management Programme

Detailed plans for the management of drainage are required.

- 3-1 The proponent shall ensure that drainage does not unacceptably affect vegetation on the site and its environs, nor the quality of water in Jones Creek.
- 3-2 Prior to the commencement of productive mining, to achieve the objective of condition 3-1, the proponent shall prepare a Drainage Management Programme. This programme shall include, but not be limited to drainage of:
- 1 the waste dumps,
 - 2 ore stockpiles,
 - 3 processing plant, and
 - 4 tailings dam,

to the requirements of the Minister for the Environment on advice of the Department of Environmental Protection in consultation with the pastoral lessee.

- 3-3 The proponent shall implement the Drainage Management Programme required by condition 3-2

4 Jones Creek Diversion

- 4-1 The proponent shall ensure that the diversion of Jones Creek maintains downstream water flows in the long term.
- 4-2 Prior to undertaking work for the diversion of Jones Creek, to achieve the objective of condition 4-1, the proponent shall design the diversion to the requirements of the Minister for the Environment on advice of the Department of Environmental Protection.

The design shall be prepared in consultation with the pastoral lessee giving regard to historical information on local flood heights of Jones Creek.

- 4-3 The proponent shall implement the design required by condition 4-2.

5 Six Mile Well Block

- 5-1 Prior to the disturbance of any land within the Six Mile Well block, as shown in figure 1 attached, the proponent shall prepare an Environmental Management Programme for this area in consultation with the Department of Conservation and Land Management and the National Parks and Nature Conservation Authority.

This programme shall include, but not be limited to the following topics:

- 1 dust;
- 2 surface water management (erosional runoff);
- 3 groundwater (leaching);
- 4 rehabilitation, and
- 5 decommissioning;

and be prepared to the requirements of the Environmental Protection Authority on advice of the Department of Conservation and Land Management and the National Parks and Nature Conservation Authority.

- 5-2 The proponent shall implement the Environmental Management Programme required by condition 5-1.

6 Greenhouse Gas Emissions

- 6-1 At appropriate times, the proponent shall address the following matters relating to greenhouse gas emissions:

- 1 calculation of the greenhouse gas emissions associated with the proposal (using the generally accepted methods);
- 2 indication of the measures adopted to limit greenhouse gas emissions for the project; and
- 3 estimation of the comparative greenhouse gas efficiency of the project (per unit of product and/or other agreed performance indicators) with the efficiency of other comparable projects producing a similar product;

to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection.

- 6-2 Consider entry (whether on a project specific basis, company wide arrangement or within an industrial grouping as appropriate) into the Commonwealth Government's "Greenhouse Challenge" voluntary co-operative agreement programme. The agreement would include, an inventory of emissions; opportunities for abating greenhouse gas emissions in the organisation; a greenhouse gas mitigation action plan; regular monitoring and reporting of performance; and independent performance verification.

7 Rehabilitation

In addition to waste dumps, ore stockpiles and tailings dams, other project areas will need to be properly rehabilitated.

- 7-1 Within six months following commissioning, the proponent shall prepare on-going rehabilitation plans to the requirements of the Department of Environmental Protection on advice of the Department of Minerals and Energy and the Department of Conservation and Land Management.

- 7-2 The proponent shall submit the plans required by condition 7-1 to the Department of Environmental Protection for review every three years.
- 7-3 The proponent shall implement the rehabilitation plans required by condition 7-1.

8 Reporting

- 8-1 Within five years following the commencement of the operation of the tailings storage facility, the proponent shall submit a report which includes, but is not necessarily limited to the following:

- 1 description of the development of the tailings storage facility;
- 2 details of the operation of the facility and issues arising from and variations required to its operation; and
- 3 monitoring results,

to the requirements of the Environmental Protection Authority.

The reporting required by this condition shall be repeated thereafter at five-yearly intervals to the requirements of the Minister for the Environment.

Note: The Environmental Protection Authority will advise the Minister for the Environment on the need for subsequent five-yearly reports.

9 Decommissioning

- 9-1 The proponent shall achieve the satisfactory decommissioning of the project, removal of the plant and installations and rehabilitation of the site and its environs, leaving the site in a sustainable condition in the long term.

- 9-2 Within five years following commissioning, or at such later time considered appropriate by the Minister for the Environment on advice of the Department of Environmental Protection, the proponent shall prepare a plan which:

- 1 describes the process for decommissioning and final rehabilitation of the project area;
- 2 provides for the long term stability of the surface water systems, in particular the Jones Creek diversions;
- 3 provides for the long term management of ground and surface water systems affected by the tailings disposal area; and
- 4 provides for the development of a 'walk away' solution for the decommissioned mine pits, process plant, tailings dam, and associated infrastructure,

to the requirements of the Environmental Protection Authority on advice of the Department of Environmental Protection, the Department of Minerals and Energy, the Water and Rivers Commission and the Department of Conservation and Land Management.

Note: A "walk away" solution means that the site shall either no longer require management at the time the proponent ceases operations, or if further management is deemed necessary, the proponent shall make adequate provision so that the required management is undertaken with no liability to the State.

9-3 The proponent shall implement the plan required by condition 9-2.

10 Proponent

These conditions legally apply to the nominated proponent.

10-1 No transfer of ownership, control or management of the project which would give rise to a need for the replacement of the proponent shall take place until the Minister for the Environment has advised the proponent that approval has been given for the nomination of a replacement proponent. Any request for the exercise of that power of the Minister shall be accompanied by a copy of this statement endorsed with an undertaking by the proposed replacement proponent to carry out the project in accordance with the conditions and procedures set out in the statement.

11 Time Limit on Approval

The environmental approval for the proposal is limited.

11-1 If the proponent has not substantially commenced the project within two years of the date of this statement, then the approval to implement the proposal as granted in the statement of 29 November 1990 shall lapse and be void. The Minister for the Environment shall determine any question as to whether the project has been substantially commenced.

Any application to extend the period of two years referred to in this condition shall be made before the expiration of that period to the Minister for the Environment.

Where the proponent demonstrates to the requirements of the Minister for the Environment on advice of the Department of Environmental Protection that the environmental parameters of the proposal have not changed significantly, then the Minister may grant an extension not exceeding three years.

12 Compliance Auditing

To help determine environmental performance and compliance with the conditions, periodic reports on the implementation of the proposal are required.

12-1 The proponent shall submit periodic Performance and Compliance Reports, in accordance with an audit programme prepared by the Department of Environmental Protection in consultation with the proponent.

Procedure

- 1 Unless otherwise specified, the Department of Environmental Protection is responsible for assessing compliance with the conditions contained in this statement and for issuing formal clearance of conditions.
- 2 Where compliance with any condition is in dispute, the matter will be determined by the Minister for the Environment.

Note

- 1 The Drainage Management Programme and the design of the Jones Creek diversion, required by conditions 3 and 4 respectively, will need to be updated to incorporate the present changes.
- 2 The proponent is required to apply for a Works Approval and Licence for this project under the provisions of Part V of the Environmental Protection Act.

Hon Peter Foss QC MLC
MINISTER FOR THE ENVIRONMENT

21 OCT 1996

Proponent's Environmental Management Commitments

July 1996

**YAKABINDIE NICKEL PROJECT, LEONORA
(352 / 352-1 / 765 / 957 / 989)**

DOMINION RESOURCES PTY LTD

Yakabindie Nickel Project (989)

Summary of proponent's commitments

Dominion Resources Pty Ltd (the proponent) undertakes to fulfil the following commitments to protect the environment and public during the life of the Yakabindie Project from commitment to proceed with the project to decommissioning following the completion of mining, and while ever Dominion holds the leases on which project activities have been undertaken.

Government Acts and Regulations

- 1 Comply with the requirements of all applicable Acts and Regulations.

Environmental Officer

- 2 Appoint a Project Environmental Officer prior to the commencement of construction whose duties include:
 - 1 environmental impact assessment and monitoring of project activities;
 - 2 design and implementation of the progressive rehabilitation programmes including research activities associated;
 - 3 establish fauna monitoring programmes in consultation with CALM;
 - 4 establish feral animal eradication programmes in consultation with CALM and the APB;
 - 5 liaise and report to Government Departments as required in relation to environmental matters;
 - 6 act as an honorary warden for the Wanjarri Nature Reserve;
 - 7 set up an educational programme as part of the site induction of employees for the protection of the Wanjarri Nature Reserve and areas surrounding the project; and
 - 8 obtain the appropriate licence from CALM for seed collection activities associated with rehabilitation;
- 3 The proponent will enter into a Section 16A Joint Management Agreement with CALM (in conjunction with, and in the spirit of, the already signed Memorandum of Understanding) for the protection of a *Grevillea inconspicua* population and an area of the Montague landform unit near the project area.

Environmental Management Programmes

Baseline Studies

- 4 Carry out a baseline survey of Jones Creek aquatic biology and water quality as soon as possible prior to commencement of construction.
- 5 Carry out a baseline groundwater quality survey as soon as possible prior to the commencement of construction downstream of the tailings dam and in the borefield areas.

Monitoring and Inspection Programmes

- 6 Monitor groundwater levels and groundwater quality immediately downstream of the tailings dam on a regular weekly basis.
- 7 Carry out daily inspections of the tailings dam;
- 8 Monitor water quality of Jones Creek during the life of the project;
- 9 Monitor groundwater resources (water quality and water levels) in the borefields and pastoral wells at Miranda, Paddy's Knob, Townsend and Henry Wells and pit dewatering, and evaluate extent and depth of drawdowns.
- 10 Carry out regular inspections of the water pipeline from the borefields.
- 11 Monitor noise levels to ensure compliance with Government Acts and Regulations.

Operational Management Procedures

Dust Control

- 12 Establish dust suppression programmes to comply with Mines Department Regulations.
- 13 Minimize dust pollution of the project area and adjacent nature reserve through the following procedures:
 - 14 minimize clearing of land by staging clearing works and keeping clearing to the minimum for essential use consistent with safe and efficient operations;
 - 15 fencing off areas not to be disturbed by the project;
 - 16 limiting development of tracks and roads to essential requirements;
 - 17 damping haul roads and plant roads with low salinity water when available;
 - 18 carry out trials with dust suppressant materials (enzymes) mixed with water to assist with dust suppression;
 - 19 progressive rehabilitation of tailings dam and waste dumps;
 - 20 cover the side slopes and upper surfaces of the tailings dam and waste dumps with rock to prevent wind erosion and dust formation;
 - 21 The proponent will control dust on roads to the waste tip face using water carts (similar to elsewhere on lease).
 - 22 The northern and easterly face of each dump lift will be rehabilitated early in the life of the Eastern Waste dump, and paddock dumping will occur in a southerly direction to reduce the chance of dust impact further.

Noise

- 23 Where possible, minimize blast noise impact by scheduling blasting during optimal meteorological conditions.

Rehabilitation and Decommissioning

- 24 Carry out progressive rehabilitation of the waste dumps and tailings dam embankments and rehabilitate the project area to the level of the existing land use in accordance with the rehabilitation programme.
- 25 This programme will be planned and carefully implemented from the commencement of mining to ensure it becomes part of the operational procedures of the project ensuring its cost effectiveness.
- 26 Developments in rehabilitation techniques will be incorporated into the rehabilitation programme as appropriate.

Vegetation and Topsoil Salvage

- 27 In areas to be disturbed, all vegetation litter and topsoil (where present) will be salvaged by progressive removal in front of advancing waste dumps and immediately redeployed where possible to conform to natural thickness.
- 28 Where redeployment is not possible, material will be stockpiled in areas specifically reserved for this purpose adjacent to redeployment areas for short term storage.
- 29 These stockpiles will be surface ripped, seeded and fertilized.

Waste Dumps

- 30 Are designed and will be constructed to blend into the existing topography such that visual impact from the main roads is minimized.
- 31 Will be constructed with overall 20° overall slopes, in 10 metre high lifts, with a 5 m wide berm for rehabilitation access separating each lift with dumping to commence from the outside of the dumps and each lift built to full height before dumping in the centre is commenced.
- 32 Tops of the dumps will be sloped towards the centre of the dump, will be ripped on completion of construction and windrows constructed at the edge of each terrace.
- 33 Outer faces will be moonscaped and covered with fresh rock.

Open Pit

- 34 On completion of mining, the pit will be left in accordance with the details as laid out in the Department of Minerals and Energy interim guidelines on safety bund walls around abandoned open pits.

Tailings Dam

- 35 Will be constructed and operated to maximize water return and tailings density, by collection of water through the central decant and upstream toe drain, with return water being re-used in processing.
- 36 Will be constructed with 20° overall slopes in 10 metre high lifts with a 5 metre wide berm for rehabilitation access separating each lift.
- 37 The tailings dam will be covered with a layer of waste rock on completion of mining.
- 38 Outer slopes will be moonscaped and covered with fresh rock.

- 39 The tailings lines will be located on the rebated upstream side of the embankment, and a downstream bund will be constructed to contain spills from water return lines which will be fitted with pressure transducers for automatic shut-off and one-way valves to limit drainage of these lines.
- 40 Bunds will be constructed between the plant and downstream toe drain to contain any pipeline breakages between the plant and tailings dam.
- 41 Decant systems will be left open on completion of mining to assist drainage, with any toxic leachates neutralised by passive methods or directed by pipeline into the abandoned open pit.
- 42 In the event of adverse groundwater quality changes detected by groundwater monitoring, a recovery bore or seepage trench system will be installed, alternative tailings disposal techniques investigated or an alternative tailings disposal site will be considered.

Support Facilities

- 43 Establishment and re-introduction of local native flora will be carried out and co-ordinated by the environmental officer in the village area.
- 44 Sewage disposal will be carried out in a purpose-built treatment plant for the main village and by septic tank and leach drain, as appropriate for the houses and main offices.
- 45 All domestic waste will be buried within the waste dump.
- 46 To minimize clearing requirements, powerlines, water lines and associated access roads will be constructed in one corridor.
- 47 On completion of mining, all buildings and equipment, including water pipelines and power transmission lines, will be removed.
- 48 On completion of mining, all pipes and boreholes will be capped, costeans backfilled and the ground ripped and seeded.
- 49 On completion of mining, all sites will be left clean and tidy.

Gas Pipeline

- 50 The proponent will bury the gas pipeline and rehabilitate the ground surface over the pipeline, following construction.

Surface Water

- 51 Install silt traps to collect runoff from roads, waste dumps and tailings dam and prevent sediment from entering the drainage channels in accordance with the management plan for drainage to be provided to the Department of Minerals and Energy prior to commencement of construction.
- 52 Disruption of overland water flow will be minimized by placing the maintenance road adjacent to the pipeline on the same level as the existing ground and raising the pipeline as appropriate to the topography and at least every 50 m to permit free passage of runoff.
- 53 In the unlikely event that the existing design of the Eastern Waste dump has not fully obviated the chance of ponding of water during an extraordinary rainfall event leading to flooding of part of the southern areas of the reserve, further suitable earthworks would be performed at that time to overcome such a problem.

- 54 The proponent will update the Drainage Management Programme and the Jones Creek Diversion plan, required by Environmental Conditions 3-1 and 4-1 (of the statement published on 20 July 1995), to incorporate changes made to the proposal.

Groundwater

- 55 A groundwater management programme will be adopted to balance project requirements from the borefields with the quantities of water recovered from the tailings dam and mine dewatering.
- 56 Pipelines from the borefields will be fitted with a series of one-way valves at strategic locations to limit draining of pipes in the event of pipeline failure or for maintenance requirements.
- 57 Additional studies of the hydrological and geotechnical aspects of the tailings dam site will proceed and be submitted to the Department of Minerals and Energy, the Department of Conservation and Land Management, the Water and Rivers Commission and the Department of Environmental Protection.

Hazardous Substances

- 58 Transportation, storage and handling of hazardous substances will be in accordance with the appropriate regulations.
- 59 Waste oils and grease will be collected and transported off-site for recycling.
- 60 A hazardous substances and dangerous goods register will be prepared that will detail the following procedures:
- 1 Transportation, handling and storage practices;
 - 2 Safety and hazard management;
 - 3 Maintenance, testing and audit procedures;
 - 4 Contingency, cleanup and disposal procedures; and
 - 5 Personnel training procedures.

Emissions

- 61 The proponent will specify emission criteria in tender documents for the supply of equipment for the Plant. This commitment will be implemented to meet the requirements of the DEP.
- 62 Compliance testing will be carried out by the proponent during the commissioning of the Plant to confirm that the emissions from the plant equipment are within the specified limits. This commitment will be implemented to meet the requirements of the DEP.

Safety

- 63 The proponent will construct and operate the gas pipeline in accordance with applicable Government Acts and Regulations.

- 64 The proponent will erect signs along the pipeline route at intervals such that at least one sign is visible from any position on the pipeline route to warn of the presence of a high pressure gas pipeline.
- 65 The proponent will construct the process plant in accordance with applicable Australian Standards and International Standards, as appropriate.
- 66 The proponent will operate the process plant in accordance with operational and safety procedures as prepared for the NOI (in respect to the operational safety issues as they relate to the new Mine Safety Inspection Act) and other Government Acts and Regulations.

Nature Reserve

- 67 Provide new access to the Wanjarri Nature Reserve complete with gate and appropriate fencing.
- 68 Institute education programmes as part of the site induction of employees for the Wanjarri Nature Reserve.
- 69 The proponent will protect the buffer zone (a zone of approximately 200m established between the limit of waste dump and the Wanjarri Nature Reserve) from disturbance as agreed with by the NPNCA.
- 70 The proponent will fence the area designated for inclusion into the Wanjarri Nature Reserve and protect the area of the excised nature reserve while active in this area by methods agreed with CALM.

Pastoral Activities

- 71 Erect fencing as agreed with relevant parties around some or all parts of the development.
- 72 Provide additional stock watering points where wells are affected by project dewatering.

Fire Control

- 73 Maintain strict fire control procedures.

Access to the Project

- 74 Restrict human and non-avian faunal access to potentially hazardous areas by fencing if required.
- 75 Signs, fences and gates will be installed where necessary to prohibit public access to the mine site and village.

Aboriginal Interests

- 76 Submit an application to the W.A. Museum for Aboriginal artefact sites which are to be disturbed.

Conditions of Employment

- 77 Recreational activities such as off-road driving, hunting etc. will not be permitted by employees.
- 78 Keeping of domestic animals (dogs, cats, etc.) will be prohibited on the project.

Environmental Management Reports

- 79 Submit an annual report of environmental management and monitoring programmes to an agreed format and content with State Authorities.