

# Project Approval

## Section 75J of the *Environmental Planning and Assessment Act 1979*

I, the Minister for Planning, approve the Project referred to in Schedule 1, subject to the conditions in Schedules 2 to 5.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the Project.

**SIGNED BY MINISTER SARTOR ON 11 APRIL 2007**

Frank Sartor MP  
Minister for Planning

Sydney

2007

File No: 9039486

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### SCHEDULE 1

<b>Application No:</b>	05_0103
<b>Proponent:</b>	Ivanhoe Coal Pty Limited
<b>Approval Authority:</b>	Minister for Planning
<b>Land:</b>	Part of Ben Bullen State Forest (No Title, see Appendix 2)
<b>Project:</b>	Ivanhoe North Rehabilitation Project

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Blue type represents 19 January 2012 modification

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## DEFINITIONS

AEMR	Annual Environmental Management Report
<a href="#">BCA</a>	<a href="#">Building Code of Australia</a>
Coal haulage	The movement of coal trucks to or from the Ivanhoe North site on public roads
Council	Lithgow City Council
Day	Day is defined as the period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and public holidays
Department	Department of Planning <a href="#">and Infrastructure</a>
Director-General	Director-General of Department of Planning <a href="#">and Infrastructure</a> , or delegate
<a href="#">DRE</a>	<a href="#">Division of Resources and Energy within the Department of Trade and Investment, Regional Infrastructure and Services</a>
EA	Environmental Assessment
<a href="#">EPA</a>	<a href="#">Environment Protection Authority</a>
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
Evening	Evening is defined as the period from 6pm to 10pm
Land	Land means the whole of a lot, or contiguous lots owned by the same landowner, in a current plan registered at the Land Titles Office at the date of this approval
Minister	Minister for Planning <a href="#">and Infrastructure</a> , or delegate
<a href="#">NOW</a>	<a href="#">NSW Office of Water</a>
Privately owned land	Land that is not owned by a public agency, or a mining company or its subsidiary; and where relevant, land that is not covered by a private agreement between the Proponent and the land owner that specifically allows for variances to criteria for environmental performance in this approval
Proponent	Ivanhoe Coal Pty Limited, or its successors in title
ROM	Run of mine
<a href="#">RMS</a>	<a href="#">Roads and Maritime Services</a>
Site	Land to which the Project Application applies

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## SCHEDULE 2 ADMINISTRATIVE CONDITIONS

### Obligation to Minimise Harm to the Environment

1. The Proponent shall implement all practicable measures to prevent and/or minimise any harm to the environment that may result from the construction, operation, or rehabilitation of the Project.

### Terms of Approval

2. The Proponent shall carry out the Project generally in accordance with the:
  - (a) Project Application 05\_0103;
  - (b) *Proposed Ivanhoe North Rehabilitation Project - Environmental Assessment*, dated May 2006, and prepared by RW Corkery & Co;
  - (c) *Ivanhoe North Rehabilitation Project - Updated Statement of Commitments*, dated September 2006, compiled by RW Corkery & Co;
  - (d) the modification application MOD 1 and document entitled *Environmental Assessment: Proposed Extension to Mining and Trucking, Ivanhoe North Rehabilitation Project*, dated November 2011; and
  - (e) conditions of this approval.
3. If there is any inconsistency between the above documents, the latter document shall prevail over the former to the extent of the inconsistency. However, the conditions of this approval shall prevail over all other documents to the extent of any inconsistency.
4. The Proponent shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of:
  - (a) any reports, plans, programs or correspondence that are submitted in accordance with this approval; and
  - (b) the implementation of any actions or measures contained in these reports, plans, programs or correspondence.

### Limits on Approval

5. The Proponent may carry out mining operations on site until 2 May 2012.

*Note: Under this approval, the Proponent is required to rehabilitate the site and carry out additional undertakings to the satisfaction of both the Director-General. Consequently, this approval will continue to apply in all other respects other than the right to conduct mining operations until the rehabilitation of the site and those additional undertakings have been carried out satisfactorily.*

6. The Proponent shall not extract more than 300,000 tonnes of ROM coal a year from the site.
7. The Proponent shall comply with the operating hours in Table 1:

*Table 1: Operating hours*

Activity	Days of the Week	Time
Coal recovery Coal processing Rehabilitation activities	Monday to Saturday (inclusive)	7 am to 6 pm
	Sunday and public holidays	No work at any time
Coal transportation	Monday to Saturday (inclusive)	7 am to 6 pm
	Sunday and public holidays	No work at any time
Minor maintenance works on plant and machinery	7 days a week and public holidays	Any time

### Demolition

8. The Proponent shall ensure that all demolition work is carried out in accordance with *Australian Standard AS 2601-2001: The Demolition of Structures*, or its latest version.

### Structural Adequacy

9. The Proponent shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures, are constructed in accordance with the relevant requirements of the BCA.

*Notes:*

- *Under Part 4A of the EP&A Act, the Proponent is required to obtain construction and occupation certificates for the proposed building works.*
- *Part 8 of the EP&A Regulation sets out the requirements for the certification of the Project.*

**Operation of Plant and Equipment**

10. The Proponent shall ensure that all plant and equipment used at the site is:
- (a) maintained in a proper and efficient condition; and
  - (b) operated in a proper and efficient manner.

**Community Enhancement Contribution**

11. Within 6 months of this approval, the Proponent shall contribute \$15,000 to Lithgow City Council for the provision of community facilities in the Cullen Bullen area. Any monies not expended on such facilities within 2 years of their receipt shall be returned to the Proponent by the Council.

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### SCHEDULE 3 SPECIFIC ENVIRONMENTAL CONDITIONS

#### NOISE

##### Noise Impact Assessment Criteria

1. The Proponent shall ensure that the noise generated by the Project does not exceed the noise impact assessment criteria in Table 2 for any privately owned residence.

Table 2: Noise impact assessment criteria dB(A)

<i>L<sub>Aeq</sub>(15 minute)</i>	<i>Land Reference and Owner</i>
36	K (Muenzer)
35	All other residences

*Notes:*

- a) Noise from the Project is to be measured at the most affected point or within the residential boundary, or at the most affected point within 30 metres of a dwelling (rural situations) where the dwelling is more than 30 metres from the boundary, to determine compliance with the *L<sub>Aeq</sub>(15 minute)* noise limits in the above table. The modification factors in Section 4 of the NSW Industrial Noise Policy shall also be applied to the measured noise levels where applicable.
- b) Where it can be demonstrated that direct measurement of noise from the Project is impractical, the EPA may accept alternative means of determining compliance (see Chapter 11 of the NSW Industrial Noise Policy).
- c) The noise emission limits identified in the above table apply under meteorological conditions of:
  - wind speeds of up to 3 m/s at 10 metres above ground level; or
  - temperature inversion conditions of up to 3°C/100m, and wind speeds of up to 2 m/s at 10 metres above ground level.
- d) The locations of residences in Table 2 are shown in Appendix 2 of this approval.

#### Continuous Improvement

2. The Proponent shall:
  - (a) implement all reasonable and feasible noise mitigation measures;
  - (b) investigate ways to reduce the noise generated by the Project; and
  - (c) report on these investigations and the implementation and effectiveness of these measures in the AEMR,
 to the satisfaction of the Director-General.

#### Monitoring

3. Prior to the commencement of mining and/or rehabilitation activities, the Proponent shall prepare (and following approval implement) a Noise Monitoring Program for the Project, to the satisfaction of the Director-General. This Program must include attended monitoring at residences C, G, and K, and include a noise monitoring protocol for evaluating compliance with the noise impact assessment criteria in this approval.

#### Additional Noise Mitigation Measures

4. Upon receiving a written request from the owner of any privately owned residence where subsequent noise monitoring shows the noise generated by the Project is greater than, or equal to, *L<sub>Aeq</sub>(15 minute)* 38 dB(A), the Proponent shall implement additional noise mitigation measures such as double glazing, insulation and/or air conditioning at any residence on the land in consultation with the landowner. These additional mitigation measures must be reasonable and feasible. If within 3 months of receiving this request from the landowner, the Proponent and the landowner cannot agree on the measures to be implemented, or there is a dispute about the implementation of these measures, then either party may refer the matter to the Director-General for resolution.

#### AIR QUALITY

##### Impact Assessment Criteria

5. The Proponent shall ensure that the dust emissions generated from the Project do not cause exceedances of the air quality impact assessment criteria listed in Tables 4, 5 and 6 at any residence on any privately owned land.

Table 4: Long term impact assessment criteria for particulate matter

Pollutant	Averaging period	Criterion
Total suspended particulate (TSP) matter	Annual	90 µg/m <sup>3</sup>
Particulate matter < 10 µm (PM <sub>10</sub> )	Annual	30 µg/m <sup>3</sup>

Table 5: Short term impact assessment criterion for particulate matter

Pollutant	Averaging period	Criterion
Particulate matter < 10 µm (PM <sub>10</sub> )	24 hour	50 µg/m <sup>3</sup>

Table 6: Long term impact assessment criteria for deposited dust

Pollutant	Averaging period	Maximum increase in deposited dust level	Maximum total deposited dust level
Deposited dust	Annual	2 g/m <sup>2</sup> /month	4 g/m <sup>2</sup> /month

Note: Deposited dust is assessed as insoluble solids as defined by Standards Australia, 2003, AS 3580.10.1-2003: Methods for Sampling and Analysis of Ambient Air - Determination of Particulates - Deposited Matter - Gravimetric Method.

### Continuous Improvement

6. The Proponent shall:
  - (a) implement all reasonable and feasible air quality impact mitigation measures;
  - (b) investigate ways to reduce the air quality impacts generated by the Project;
  - (c) ensure any visible air pollution generated by the Project is assessed regularly; and
  - (d) report on these assessments and investigations and the implementation and effectiveness of these measures in the AEMR,
 to the satisfaction of the Director-General.

### SURFACE WATER

#### Discharge Limits

7. Except as may be expressly provided by an [EPA](#) Environment Protection Licence, the Proponent shall not discharge any water from the site or to underground mine workings.

#### Site Water Management Plan

8. Prior to the commencement of works, the Proponent shall prepare (and following approval implement) a Site Water Management Plan for the Project, in consultation with the [EPA](#), and to the satisfaction of the Director-General. This plan must include:
  - (a) a Site Water Balance;
  - (b) an Erosion and Sediment Control Plan; and
  - (c) a Surface Water Monitoring Program.

#### Site Water Balance

9. The Site Water Balance must:
  - (a) include details of all water extracted, dewatered, transferred, used and/or discharged by the Project; and
  - (b) provide for the annual re-calculation of the water balance and its reporting in the AEMR.

## Erosion and Sediment Control Plan

10. The Erosion and Sediment Control Plan must:

- (a) be consistent with the requirements of the Department of Housing's Managing Urban Stormwater: Soils and Construction manual;
- (b) identify activities that could cause soil erosion and generate sediment;
- (c) describe measures to minimise soil erosion and the potential for the transport of sediment to downstream waters;
- (d) describe the location, function, and capacity of erosion and sediment control structures; and
- (e) describe what measures would be implemented to maintain the structures over time.

## Surface Water Monitoring Plan

11. The Surface Water Monitoring Plan must include:

- (a) surface water impact assessment criteria;
- (b) a program to monitor the volume and quality of any off-site water discharges;
- (c) a program to monitor surface water flows and quality in local watercourses;
- (d) a protocol for the investigation, notification, and mitigation of identified exceedances of the surface water assessment criteria.

## REHABILITATION MANAGEMENT

12. Prior to commencement of mining and/or rehabilitation activities, the Proponent shall prepare (and following approval implement) a Rehabilitation Management Plan for the mine, in consultation with [NOW](#), [EPA](#) and [DRE](#), and to the satisfaction of the Director-General.

13. The Proponent shall progressively rehabilitate the site in a manner that is generally consistent with the final landform in the Rehabilitation Management Plan, to the satisfaction of the Director-General.

14. The Rehabilitation Management Plan must include:

- (a) the rehabilitation objectives for the site;
- (b) a description of the short, medium, and long term measures that would be implemented to:
  - rehabilitate the site; and
  - manage the remnant vegetation and habitat on the site;
- (c) a detailed completion criteria for the rehabilitation of the site;
- (d) a detailed description of how the performance of the rehabilitation of the mine would be monitored over time to achieve the stated objectives;
- (e) a detailed description of what measures would be implemented to rehabilitate and manage the landscape of the site including the procedures to be implemented for:
  - collecting and propagating seed for rehabilitation works;
  - the provision of adequate propagation stock for each rehabilitation area;
  - progressively rehabilitating areas disturbed by mining;
  - how operational works and rehabilitation works will be phased so as to ensure that sufficient viable seed and propagations stock is available
  - implementing revegetation and regeneration;
  - rehabilitating watercourses on the site;
  - managing impacts on fauna;
  - conserving and reusing topsoil;
  - salvaging and reusing material from the site for habitat enhancement;
  - controlling weeds and feral pests;
  - controlling access;
  - bushfire management; and
  - mine closure;
- (f) a description of the measures that would be implemented if any Aboriginal objects are discovered during the rehabilitation of the site; and
- (g) details of who is responsible for monitoring, reviewing, and implementing the plan.

*Note: References to "rehabilitation" in this approval include all works associated with the rehabilitation and restoration of the site as described in the Environmental Assessment and Part 3 of the Specialist Consultant Studies Compendium.*

15. Following the completion of mining activities, the Proponent must remove and rehabilitate the Retained Water Storage (as shown on Figure 2.7 of the EA), to the satisfaction of the Director-General, except with the agreement of the Director-General.

16. Prior to the commencement of stream rehabilitation works for "Stream 3" (as shown in Figure 3.4 of the EA), the Proponent must prepare (and following approval implement) a design for the stream rehabilitation works, to the satisfaction of the [NOW](#).



## **BEN BULLEN STATE FOREST**

17. Prior to the removal of any commercially viable timber within Ben Bullen State Forest, the Proponent shall consult with the Macquarie Region office of Forests NSW.
18. Prior to the commencement of mining and/or rehabilitation operations within Ben Bullen State Forest, the Proponent shall prepare a Bush Fire Management Plan, to the satisfaction of the Macquarie Region office of Forests NSW.

## **TRAFFIC AND TRANSPORT**

### **Monitoring of Coal Transport**

19. The Proponent must not despatch more than 50 truck loads of coal from the site on any day.
20. The Proponent shall:
  - (a) keep records of the:
    - amount of coal transported from the site each year;
    - number of truck loads generated by the Project (on a daily basis)
    - departure times of trucks; and
  - (b) include these records in the AEMR.

### **Traffic Management**

21. Prior to the transport of any coal from the site by road, the Proponent shall obtain a written agreement from the Invincible Colliery to allow the use of its site entrance and internal roads by trucks hauling coal from the Project.
22. Prior to commencement of mining and/or rehabilitation operations, the Proponent shall prepare a Traffic Management Plan, as detailed in the EA, in consultation with the [RMS](#) and to the satisfaction of the Director-General. This plan must include:
  - (a) details of how coal transport from both the Project site and the Invincible Colliery would be co-ordinated;
  - (b) identify how coal transport from the Project site will be managed to minimise inconvenience to other road users and operate safely on public roads; and
  - (c) identify how the implementation and effectiveness of the plan will be monitored and reported.
23. Prior to the transport of any coal from the site by road, the Proponent shall re-design and re-construct:
  - (a) the site access road-Castlereagh Highway intersection; and
  - (b) the Western Main Colliery-Castlereagh Highway intersection, to the satisfaction of the [RMS](#).
24. The Proponent shall ensure that all coal trucks exiting from the site access road do not enter the southbound lane of the Castlereagh Highway.

## **VISUAL IMPACT**

25. Prior to commencement of mining in operational blocks Nth04 and Nth05, the Proponent must construct a 4 metre high bund wall along the eastern perimeter of those blocks in accordance with the specifications included in the EA for construction and revegetation.

### **Lighting Emissions**

26. The Proponent shall:
  - (a) take all practicable measures to mitigate off-site lighting impacts from the Project; and
  - (b) ensure that all external lighting associated with the Project complies with *Australian Standard AS4282 (INT) 1995 – Control of Obtrusive Effects of Outdoor Lighting*, to the satisfaction of the Director-General.

## **GREENHOUSE GASES**

27. The Proponent shall:
  - (a) estimate the greenhouse gas emissions generated by the Project;
  - (b) investigate ways to reduce greenhouse gas emissions generated by the Project; and
  - (c) report on greenhouse gas estimation and abatement measures in the AEMR, to the satisfaction of the Director-General.

## WASTE MINIMISATION

28. The Proponent shall:

- (a) monitor the amount of waste generated by the Project;
  - (b) investigate ways to minimise waste generated by the Project;
  - (c) implement reasonable and feasible measures to minimise waste generated by the Project;
  - (d) ensure any irrigation of treated wastewater is undertaken in accordance with EPA's *Environmental Guideline for the Utilisation of Treated Effluent*; and
  - (e) report on waste management and minimisation in the AEMR, to the satisfaction of the Director-General.
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**SCHEDULE 4**  
**ENVIRONMENTAL MANAGEMENT, MONITORING, AUDITING AND REPORTING**

**ENVIRONMENTAL MANAGEMENT STRATEGY**

1. Prior to carrying out any mining and/or rehabilitation activities, the Proponent shall prepare and implement an Environmental Management Strategy for the Project to the satisfaction of the Director-General. This strategy must:
  - (a) provide the strategic context for environmental management of the Project;
  - (b) identify the statutory requirements that apply to the Project;
  - (c) describe in general how the environmental performance of the Project would be monitored and managed during the Project;
  - (d) describe the procedures that would be implemented to:
    - keep the local community and relevant agencies informed about the operation and environmental performance of the Project;
    - receive, handle, respond to, and record complaints;
    - resolve any disputes that may arise during the course of the Project;
    - respond to any non-compliance;
    - manage cumulative impacts; and
    - respond to emergencies; and
  - (e) describe the role, responsibility, authority, and accountability of all the key personnel involved in environmental management of the Project.

**ENVIRONMENTAL MONITORING PROGRAM**

2. Prior to commencement of mining and/or rehabilitation activities, the Proponent shall prepare an Environmental Monitoring Program for the Project in consultation with relevant agencies, and to the satisfaction of the Director-General. This program must consolidate the various monitoring requirements in Schedule 3 of this approval into a single document.

**INCIDENT REPORTING**

3. Within 7 days of detecting an exceedance of the limits/performance criteria in this approval, the Proponent shall report the exceedance to the Department, and any relevant agency. The report must:
  - (a) describe the date, time, and nature of the exceedance;
  - (b) identify the cause or likely cause of the exceedance;
  - (c) describe what action has been taken to date; and
  - (d) describe the proposed measures to address the exceedance.

**ANNUAL REPORTING**

4. The Proponent shall prepare and submit an AEMR to the Director-General and other relevant agencies. This report must:
  - (a) identify the standards and performance measures that apply to the Project;
  - (b) describe the works carried out in the last 12 months;
  - (c) describe the works that will be carried out in the next 12 months;
  - (d) include a summary of the complaints received during the past year, and compare this to the complaints received in previous years;
  - (e) include a summary of the monitoring results for the Project during the past year;
  - (f) include an analysis of these monitoring results against the relevant:
    - impact assessment criteria;
    - monitoring results from previous years; and
    - predictions in the EA;
  - (g) identify any trends in the monitoring results over the life of the Project;
  - (h) identify any non-compliance during the previous year; and
  - (i) describe what actions were, or are being, taken to ensure compliance.

**INDEPENDENT ENVIRONMENTAL AUDIT**

5. At the end of year 1 of the Project, and on completion of coal mining operations, unless the Director-General directs otherwise, the Proponent shall commission and pay the full cost of an Independent Environmental Audit of the Project. This audit must:
  - (a) be conducted by suitably qualified, experienced, and independent expert/s whose appointment has been endorsed by the Director-General;
  - (b) assess the various aspects of the environmental performance of the Project, and its effects on the surrounding environment;
  - (c) assess whether the Project is complying with the relevant standards, performance measures, and statutory requirements;

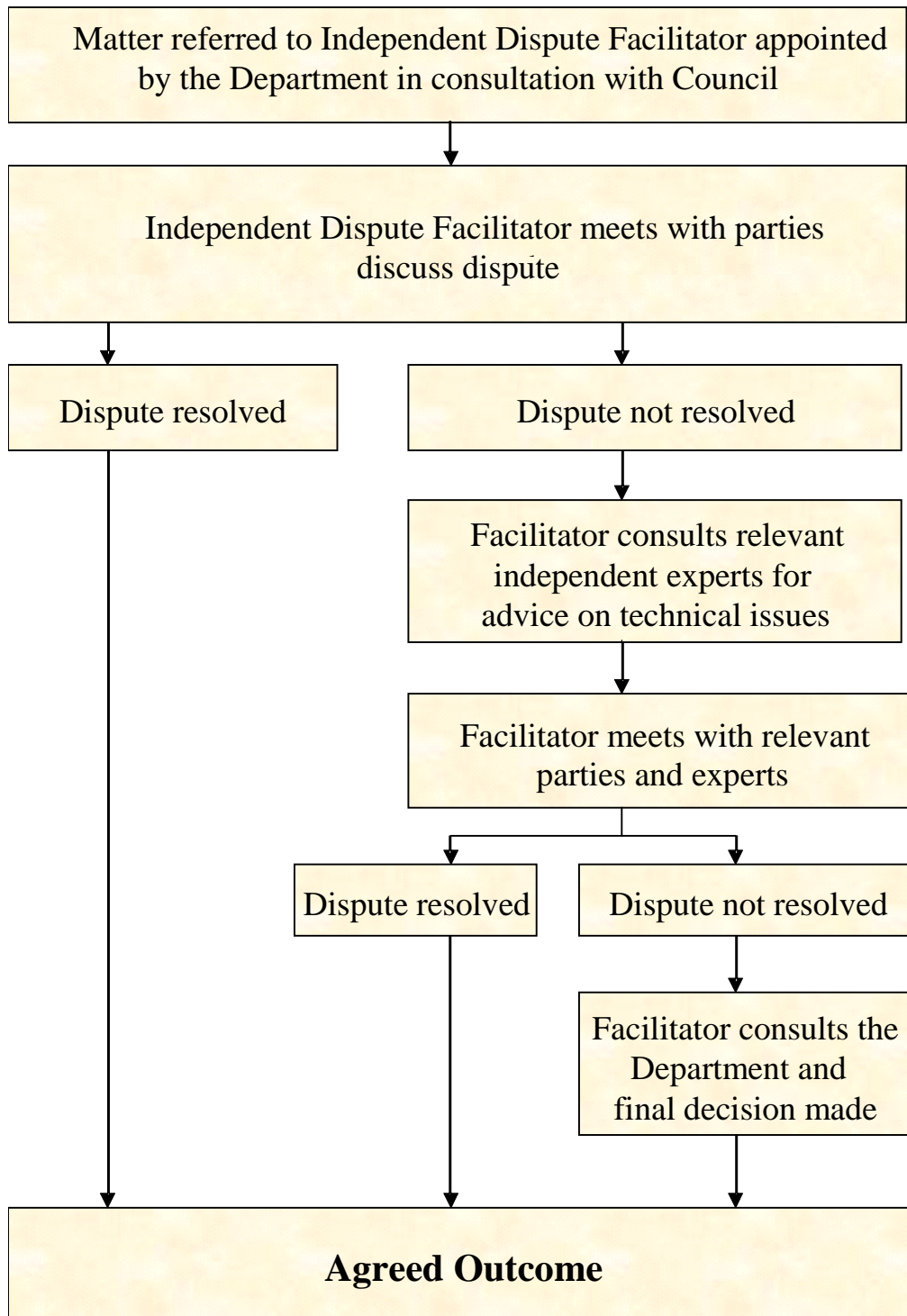
- (d) assess whether the Project is complying with the works as described in the EA and conditions of [approval](#);
  - (e) review the adequacy of any strategy/plan/program required under this approval; and, if necessary,
  - (f) recommend measures or actions to improve the environmental performance of the Project, and/or any strategy/plan/program required under this approval.
6. Within 3 months of commissioning this audit, or as otherwise agreed by the Director-General, the Proponent shall submit a copy of the audit report to the Director-General, with a response to any recommendations contained in the audit report.

#### **ACCESS TO INFORMATION**

7. Within 3 months of the approval of any plan/strategy/program required under this approval (or any subsequent revision of these plans/strategies/programs), the completion of the Independent Environmental Audits required under this approval, or the completion of the AEMR, the Proponent shall:
- (a) provide a copy of the relevant document/s to the Council and relevant agencies;
  - (b) ensure that a copy of the relevant document/s is made publicly available; and
  - (c) put a copy of the relevant document/s on the Proponent's website;
- to the satisfaction of the Director-General.
8. During the life of the Project, the Proponent shall:
- (a) make a summary of monitoring results required under this approval publicly available on its website; and
  - (b) update these results on a regular basis (at least every 6 months),
- to the satisfaction of the Director-General.

APPENDIX 1  
INDEPENDENT DISPUTE RESOLUTION PROCESS

**Independent Dispute Resolution Process  
(Indicative only)**



## APPENDIX 2

