

Dated 8 February 2011

**Undertaking to the Environment
Protection Authority given for the
purposes of section 253A of the
*Protection Of The Environment
Operations Act 1997***

By

Xstrata Mangoola Pty Ltd
ABN 54 127 535 755

Protection of the Environment Operations Act 1997 (NSW)

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of the *Protection Of The Environment Operations Act 1997***

By Xstrata Mangoola Pty Ltd

1 Background

- 1.1 The Environment Protection Authority of New South Wales (the **EPA**) is a statutory body created by the *Protection of the Environment Administration Act 1991* (NSW) which has primary responsibility for the administration and enforcement of the *Protection of the Environment Operations Act 1997* (NSW) (the **POEO Act**).
- 1.2 The Hunter-Central Rivers Catchment Management Authority (the **HCRCMA**) is a statutory body established under the *Catchment Management Authorities Act 2003*. Its role is to carry out or fund catchment activities in accordance with that Act. Methods it adopts to do this include: developing and implementing catchment action plans; funding appropriate catchment activities; entering contracts for work for catchment activities it is authorised to conduct; assisting landholders to further the objectives of its catchment action plan.
- 1.3 Xstrata Mangoola Pty Ltd (**Xstrata**) holds Environment Protection Licence Number 12894 (the **EPL**) in relation to the Mangoola mine site (the **Site**). As at early 2010 works at the Site included bulk earthworks, constructing the Coal Handling and Preparation Plant, and building infrastructure and facilities.
- 1.4 On 11 February 2010 the EPA advised during an inspection of the Site that it had received a complaint that sediment laden water was evident in Wybong Creek downstream of the Site. Commencing on 12 February 2010 Xstrata conducted an inspection of the applicable water catchment areas and commenced an investigation into possible causes for the complaint. Arising out of that investigation, on or about 22 February 2010 it became apparent that on or about 4 and 5 February 2010 a spillway and trench for the dirty water dam had been modified which led to water from the Dirty Water Dam (the **Dam**) being discharged which may have been a cause of the complaint. On 23 February 2010, Xstrata contacted DECCW's Environment Line advising that on or around 4 and 5 February 2010, following heavy rainfall, there had been a discharge(s) from the Dam. Xstrata's consultant also identified improvements that could be made to ensure compliance with the Blue Book. Xstrata's consultant estimated that about 46 megalitres of water had been released between 4 and 7 February and that sediment laden water leaving the Site would have largely been sourced from general site runoff, but Xstrata had taken no water samples at the time (the **Incident**).
- 1.5 The EPA is concerned that the discharge(s) and management of sediment during the Incident were contrary to the EPL. However, there is no evidence that any material environmental harm was caused to the ecology of the riverine habitat downstream and water quality levels for sampled downstream sites were not inconsistent with base-line conditions from time to time.
- 1.6 The contributing factors to the Incident were the release of water from an upstream dam to provide additional capacity, inadequate understanding on Site of the detailed requirements of the EPL and Blue Book (which is referenced in the EPL) and inadequate supervision. If the Site's Pit Water Dam had been constructed at the time of the Incident, the released water would have flowed from the upstream dam into the Pit Water Dam, however the Pit Water Dam had not been constructed, so the water flowed off the Site into Anvil creek and possibly into Wybong Creek.
- 1.7 The EPA is concerned about the Incident, has investigated it and intends to initiate and conclude an appropriate regulatory response in relation to the Incident.

- 1.8 The EPA's investigation into the Incident has included:
- (1) Conducting inspections of the Site;
 - (2) Requiring Xstrata to provide information and/or records under section 191 of the POEO Act, and reviewing that information;
 - (3) Requiring Robson Civil Projects Pty Limited, an on Site contractor for Xstrata, to provide information and/or records under section 191 of the POEO Act, and reviewing that information;
 - (4) Requiring Daracon Mining Pty Ltd, an on Site contractor for Xstrata, to provide information and/or records under section 191 of the POEO Act, and reviewing that information;
 - (5) Conducting Records of Interview with employees of Xstrata;
 - (6) Conducting Record of Interview with an employee of Parsons Brinkerhoff, an on Site contractor for Xstrata;
 - (7) Interviewing witnesses.
- 1.9 Xstrata regrets the occurrence of the Incident and acknowledges the EPA's legitimate concerns in relation to the Incident.
- 1.10 Xstrata has voluntarily implemented measures with the objective of ensuring that an incident of this nature will not occur in the future at the Site. In particular, improvements already undertaken at the Site as a response to the Incident include:
- (1) Engaging independent environmental consultants to investigate the Incident and provide a detailed report to DECCW;
 - (2) Conducting water monitoring of all discharge and overflow events including after rainfall, and when water leaves the Site's sediment and control system;
 - (3) Engaging the Soil Conservation Service to provide advice and training to staff and contractors on sediment and erosion control on the Site, and the Blue Book requirements;
 - (4) Updating the internal ground disturbance permit requirements to include a specific checklist to confirm proper sediment and erosion control structures are in place;
 - (5) Commencing a review of the entire Site against the Site Water Management Plan and the Blue Book, leading to installation of additional controls such as sediment fences, topsoil stockpiles and stabilising temporary diversion drains;
 - (6) Reviewing and updating the Site sediment and erosion control plan;
 - (7) Installing flocculation systems around the Site where practical;
 - (8) Revising and updating the roles and responsibilities of Xstrata staff to inspect, monitor and report specific requirements on sediment and erosion controls under the Sediment and Erosion Control Plan, and confirm compliance with the EPL conditions;
 - (9) Conducting induction training for mining planners, supervisors and personnel on internal reporting requirements, sediment and erosion control measures, and discharge requirements;
 - (10) Implementing an approval process for construction tasks involving the transfer or release of water on and off the Site;

(11) Installing a temporary sediment basin with several flocculation blocs within the disturbance area for the Pit Water Dam, which remained in place until the Pit Water Dam was completed and provided sufficient water storage.

1.11 Xstrata has offered the commitments in this enforceable undertaking, and the EPA has accepted this offer.

2 Undertaking

2.1 Xstrata undertakes to the EPA, for the purposes of section 253A of the POEO Act, to contribute \$100,000 to the HCRCMA. The HCRCMA will use the funds for environmental improvement actions at the Maison Dieu Travelling Stock Reserve (the **Project**), as detailed in Schedule 1 to this undertaking. The Project, identified in a proposal from HCRCMA, will improve land and water quality in the Hunter River catchment.

2.2 The funds will be used by the HCRCMA solely for funding the Project. The HCRCMA will develop a contract with the landholder of the Maison Dieu Travelling Stock Reserve (the Land & Property Management Authority) for ongoing maintenance and management of the Project and all associated works for a period of 10 years.

2.3 Xstrata will pay to the HCRCMA the following:

(1) \$20,000 – within 28 days from the date on which all parties have signed this undertaking;

(2) \$80,000 – on or within 28 days from the date of 1 July 2011.

2.4 Xstrata will pay to DECCW its investigation and legal costs totalling \$15,000, incurred in the course of the EPA's investigation into the Incident.

2.5 The money payable to DECCW in accordance with clause 2.4 must be paid within 28 days from the date on which all parties have signed this undertaking.

2.6 The EPA will notify Xstrata in writing when the EPA is satisfied that the obligations of Xstrata under clauses 2.3, 2.4 and 2.5 of this undertaking have been satisfied.

3 Acknowledgements

3.1 Xstrata acknowledges that the EPA:

(1) may issue a media release on execution of this undertaking referring to its terms and to the concerns of the EPA which led to its execution;

(2) may from time to time publicly refer to this undertaking; and

(3) will place a copy of the executed undertaking on the public register it maintains under the POEO Act.

3.2 Xstrata acknowledges that the EPA's acceptance of this undertaking does not affect the EPA's power under the POEO Act to investigate a contravention, or pursue a criminal prosecution, or to lay charges, or to exercise other civil or regulatory powers as a result of any other past or future conduct.


3.3 Xstrata acknowledges that this undertaking does not affect the rights or remedies available to any other person or entity nor does it affect any statutory obligations under the POEO Act.

3.4 Xstrata acknowledges that this undertaking has no operative force until accepted by the EPA.

- 3.5 Xstrata acknowledges that this undertaking may only be varied in accordance with the POEO Act.
- 3.6 Xstrata acknowledges that this undertaking, as varied from time to time, will remain in force until the EPA notifies Xstrata that the EPA is satisfied that the obligations of Xstrata under this undertaking have been satisfied in accordance with clauses 2.3(1), 2.3(2), 2.4 and 2.5 above or until it is withdrawn in accordance with the POEO Act.
- 3.7 Xstrata is liable to perform the obligations in clauses 2.3, 2.4 and 2.5 and acknowledges that the EPA may enforce the obligations contained within this enforceable undertaking in the event of any non-compliance.

EXECUTED ON 08 February 2011

By Xstrata Mangoola Pty Ltd



Director [signature]

IAN CRABB.

Director [print name]

Accepted by the Environment Protection Authority of New South Wales pursuant to section 253A of the POEO Act by its duly authorised delegate:



EPA Delegate [signature]

Greg Sullivan

Deputy Director General Environment Protection & Regulation

Schedule 1 to Enforceable Undertaking

Works to be carried out at Maison Dieu Travelling Stock Reserve

Item	Action
1	Undertake construction of gully control structures, a rock flume, contour banks and gully shaping to control soil erosion – apply compost, fertiliser and pasture seed as appropriate
2	Fence erosion and riparian areas to exclude stock, and control weeds therein
3	Ongoing control of weeds as a result of significant soil disturbance
4	Test soil to determine optimum application rates of fertiliser and soil ameliorants
5	Cultural heritage survey
6	Exclude stock from all Management Units for a period of 5 years, followed by managed grazing according to a grazing management plan agreed with the HCRCMA based on the percentage of groundcover present in each Management Unit