



NSW GOVERNMENT
Department of Planning

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Mr Adam Boersma
Manidis Roberts Pty Ltd
Locked Bag 2740
STRAWBERRY HILLS NSW 2010

Our ref: S07/176
Your ref:

Dear Mr Boersma

Proposed Demolition and Remediation of the Incitec Pivot Cockle Creek Site, Boolaroo, Lake Macquarie Local Government Area

Pursuant to section 75F(3) of the *Environmental Planning and Assessment Act 1979* (the EP&A Act), you are hereby notified of the Director-General's Environmental Assessment Requirements for the above proposal.

It should be noted that the Director-General's requirements have been prepared based on the information provided to date, including the major project application and preliminary environmental assessment (February 2007) for the proposal and the feed back obtained from relevant agencies and Lake Macquarie City Council. Under section 75F(3) of the EP&A Act, the Director-General may alter or supplement these requirements if necessary and in light of any additional information that may be provided prior to the proponent seeking approval for the project.

You should ensure that you consult with the Department prior to submission of a draft Environmental Assessment to determine:

- fees applicable to the application;
- consultation and public exhibition arrangements that will apply; and
- number and format (hard-copy or CD-ROM) of the Environmental Assessments that will be required.

Once you have lodged the Environmental Assessment, the Department will consult with the relevant authorities to determine the adequacy of the Environmental Assessment. Following this review period the Environmental Assessment will be made publicly available for a minimum period of 30 days.

You should keep the contact officer for this project, Ricardo Prieto-Curiel ((02) 9228 6112) or via email at ricardo.prieto-curiel@planning.nsw.gov.au, up to date with the progress of preparation of the Environmental Assessment, and seek clarification of any issues that may be unclear or may arise during this process.

Yours sincerely

8.3.07

Chris Wilson
Executive Director
As delegate for the Director-General

DEMOLITION WORKS AND REMEDIATION OF THE INCITEC PIVOT COCKLE CREEK LANDS AT BOOLAROO, LAKE MACQUARIE LOCAL GOVERNMENT AREA

ENVIRONMENTAL ASSESSMENT REQUIREMENTS UNDER PART 3A OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979

Project	Demolition works and remediation of the Incitec Pivot Cockle Creek site, including the construction and use of a containment cell(s) for long-term entombment of contaminated materials.
Site	Lot 1 DP 225720
Proponent	Incitec Pivot Limited
Date of Issue	6 March 2007
Date of Expiration	6 March 2009
General Requirements	<p>The Environmental Assessment must be prepared to a high technical and scientific standard and must include:</p> <ul style="list-style-type: none"> • an executive summary; • a description of the proposal, including construction, operation, and staging; • an assessment of the environmental impacts of the project, with particular focus on the key assessment requirements specified below. Methodologies used and assumptions made in models or monitoring undertaken must be described in the Environmental Assessment as well as an indication of the level of confidence in both the predicted outcomes and the capacity of the environment to cope with predicted impacts; • consideration of remediation options and justification for undertaking the project with consideration of the benefits and impacts of the proposal; • a draft Statement of Commitments detailing measures for environmental mitigation, management and monitoring for the project; and • certification by the author of the Environment Assessment that the information contained in the Assessment is neither false nor misleading.
Key Assessment Requirements	<p>The Environmental Assessment must include assessment of the following key issues:</p> <ul style="list-style-type: none"> • Strategic Planning – the Environmental Assessment must detail the strategic basis for the project with specific reference to the need to remediate the site, proposed future land uses and development on the site, related and relevant existing development approvals and pending applications, and how the remediation outcome will avoid the unnecessary sterilisation of land or potential future land use conflicts. The Environmental Assessment must make specific reference to any remediation-related activities proposed and/or approved that are relevant to the strategic remediation outcomes for the site, but not included in the scope of the application for the project. In that regard, strategic planning for the site needs to be coordinated and framed within the context of future planning arrangements for the Pasminco Cockle Creek site. • Remediation Action Plan – the Environmental Assessment must include a comprehensive Remedial Action Plan (RAP) prepared in accordance with <i>Guidelines for Consultants Reporting on Contaminated Sites</i> (EPA, 1997) and relevant components of other guidelines made or approved under section 105 of the <i>Contaminated Land Management Act 1997</i> (CLM Act) (http://www.epa.nsw.gov.au/clm/guidelines.htm). The RAP and remediation proposal must specifically address the matters contributing to the site representing a Significant Risk of Harm under section 9 of the CLM Act, demonstrate that the proposal will prevent contaminated material moving off site, and demonstrate that on completion of the project the site will be suitable for the proposed land use. Remediation timeframes, including those associated with groundwater treatment works, must be addressed in the RAP. The RAP must assess remediation options and justification of the preferred option. Options for the treatment of material on site or movement of material off the site must be considered. The RAP must be audited by a DEC accredited site auditor. The RAP and site audit statement detailing the findings of the audit must be included in the Environmental Assessment. • Remediation Criteria – the Environmental Assessment must clearly indicate the proposed remediation criteria to be applied to all or respective parts of the site. Remediation criteria must be developed consistently with <i>National Environment Protection (Assessment of Site Contamination) Measure 1999</i> (NEPC, 1999). Where contaminants are present on the site that are not listed under the aforementioned NEPM, specific

remediation criteria for those contaminants must be derived having regard to relevant NSW standards, national standards, then international standards, with justification for use of any criterion not currently endorsed by the NSW Department of Environment and Conservation.

- **Containment Cell Design** – the Environmental Assessment must provide clear details of the design and proposed contents of all containment cells for the project. In particular, details of the types of materials and management of those materials in the containment cell(s) must be provided with consideration of potential material incompatibilities and management measures to address any such incompatibilities. The Environmental Assessment must also demonstrate that the containment cell(s) are of sufficient design and capacity to adequately contain all materials proposed for the cell(s) without generating a significant impact on surrounding groundwater, surface water or air quality. Mine subsidence issues affecting the design of the cell must be addressed in the Environmental Assessment in accordance with the requirements of the Mine Subsidence Board. A geotechnical study of the site, with particular emphasis on the containment cell area, must be included in the Environmental Assessment to assess slope stability and subsidence issues that affect remediation and post-remediation development, and the cell.
- **Air Quality Impacts** – the Environmental Assessment must include a comprehensive assessment of the air quality impacts of the project in accordance with the *Approved Methods for Modelling and Assessment of Air Pollutants in NSW* (EPA, 2001). The Assessment must specifically focus on the impacts of contaminants present on site such as heavy metals and particulates on ambient air quality, from a project-specific and a cumulative perspective. Consideration of the impacts of particulates must include ambient air quality and dust deposition implications. The Environmental Assessment must include details of proposed air quality monitoring during remediation, with consideration for monitoring dust and lead levels. The potential for sharing data and the cost of monitoring could be explored with the monitoring required for Pasminco operations.
- **Health Impacts** – the Environmental Assessment must assess the health implications of the project, both during remediation of the site and in an on-going context once the site is remediate and potentially redeveloped in future. Assessment of health impacts must detail and justify appropriate human exposure scenarios, including for both adults and infants, and demonstrate that the project will not have unacceptable acute or chronic health effects, during or after the remediation works.
- **Water Quality and Water Cycle Management** - the Environmental Assessment must detail and assess the impacts associated with the expected water cycle during each phase of the project. The assessment must cover surface water, stormwater, groundwater and leachate, and must include proposed measures to manage identified impacts. The Environmental Assessment must demonstrate how the project will be designed and operated to meet water quality criteria detailed in *Australian and New Zealand Water Quality Guidelines 2000* (ANZECC, 2000). The Environmental Assessment must also detail and assess the impacts of the project on groundwater flows and quality, and demonstrate that groundwater interception works would be adequate in achieving required remediation outcomes and preventing spread of contaminants. The remediation project must result in the prevention of all contaminated material moving off site, particularly via the movement of contaminated groundwater. The Environmental Assessment must address the NSW State Government Groundwater Policies and approval requirements under the *Water Act, 1912*. The drainage implications of the proposal, during and post remediation, must be assessed in the Environmental Assessment. The water quality studies must include analysis of cumulative impacts.
- **Noise and Vibration Impacts** - the Environmental Assessment must assess the noise impacts resulting from all noise sources associated with project, with a particular focus on demolition and excavation works, and any activities proposed to be undertaken during evening or night time periods. The noise studies must include analysis of cumulative impacts. The noise assessment must be undertaken in accordance with the *NSW Industrial Noise Policy* (EPA, 2000), the *Environmental Noise Control Manual* (EPA, 1994) and *Environmental Criteria for Road Traffic Noise* (EPA, 1999). Vibration impacts must be assessed in the Environmental Assessment.
- **Heritage Impacts** – the Environmental Assessment must include a Heritage Impact Assessment/Statement prepared in accordance with *Statements of Heritage Impact* guidelines issued by the NSW Heritage Office and Lake Macquarie Council requirements.
- **Future Ownership and Management** – the Environmental Assessment must detail how the site will be managed in the longer-term, and after completion of the remediation works. In particular, details must be provided on monitoring and management responsibilities, future ownership provisions, liabilities and how the integrity of the remediation outcome will

	<p>be assured. The Environmental Assessment must explicitly state intended legal arrangements for ownership of and long-term responsibility for the containment cell(s) (eg. covenants or the like). Further, the Environmental Assessment must identify the source of funding for the long-term operation, monitoring and maintenance of the containment cell(s) and the groundwater interception and treatment systems.</p> <ul style="list-style-type: none"> • Coordination of Remediation activities (Pasminco/Incitec) – the Environmental Assessment must provide details of a process for continued liaison and coordination of the two remediation projects. Such process must cover the planning and remediation stages of the project, and must be developed as to facilitate appropriate collaboration between the relevant remediation personnel of Pasminco and Incitec. • General Environmental Risk Analysis – notwithstanding the above key assessment requirements, the Environmental Assessment must include an environmental risk analysis to identify potential environmental impacts associated with the project (construction and operation), proposed mitigation measures and potentially significant residual environmental impacts after the application of proposed mitigation measures. Where additional key environmental impacts are identified through this environmental risk analysis, an appropriately detailed impact assessment of these additional key environmental impacts must be included in the Environmental Assessment.
Consultation Requirements	<p>You must undertake an appropriate and justified level of consultation with the following parties during the preparation of the Environmental Assessment:</p> <ul style="list-style-type: none"> • Department of Environment and Conservation; • NSW Department of Health; • Department of Natural Resources; • Department of Primary Industries; • Mines Subsidence Board; • Lake Macquarie City Council; • The administrators of the Pasminco Cockle Creek Smelter site; and • the local community. <p>The Environmental Assessment must clearly indicate issues raised by stakeholders during consultation, and how those matters have been addressed in the Environmental Assessment.</p>
Deemed refusal period	<p>Under clause 8E(2) of the <i>Environmental Planning and Assessment Regulation 2000</i>, the applicable deemed refusal period is 60 days from the end of the proponent's environmental assessment period for the project.</p>