NSW GOVERNMENT | Planning & Infrastructure

Contact: Deana Burn
Phone: 02 9228 6569
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Email: deana.burn@planning.nsw.gov.au

Mr Richard Chewings
Department of Primary Industries – Crown Lands Division
PO Box 865
DUBBO NSW 2830

Our Ref: SSD - 5357

Dear Mr Chewings

State Significant Development – Director-General's Requirements
Urunga Antimony Plant Remediation Project (SSD-5357)

I have attached a copy of the Director General's environmental assessment requirements (DGRs) for the preparation of an Environmental Impact Statement for the Urunga Antimony Plant Remediation Project.

These requirements are based on the information you have provided to date and have been prepared in consultation with the relevant government agencies and Bellingen Shire Council. Their comments, which you should address appropriately when preparing the EIS, are also attached (see Attachment 2). Please note that the Department may alter these requirements at any time, and that you must consult further with the Department if you do not lodge a development application and EIS for the development within two years of the date of issue of these DGRs. The Department will review the EIS for the development carefully before putting it on public exhibition, and will require you to submit an amended EIS if it does not adequately address the DGRs.

I wish to emphasise the importance of effective and genuine community consultation and the need for proposals to proactively respond to the community's concerns. Accordingly a comprehensive, detailed and genuine community consultation and engagement process must be undertaken during preparation of the EIS. This process must ensure that the community is both informed of the proposal and is actively engaged in issues of concern to them. Sufficient information must be provided to the community so that it has a good understanding of what is being proposed and of the potential impacts.

Your proposal may require a separate approval under Commonwealth *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act). If an EPBC Act approval is required, I would appreciate it if you would advise the Department accordingly, as the Commonwealth approval process may be integrated into the NSW approval process, and supplementary DGR's may need to be issued.

I would appreciate it if you would contact the Department at least two weeks before you propose to submit the development application and EIS for your development. This will enable the Department to:

- confirm the applicable fee (see Division 1AA, Part 15 of the *Environmental Planning and Assessment Regulation 2000*); and
- determine the number of copies (hard-copy and CD-ROM) of the EIS required for review.

If you have any enquiries about these requirements, please contact Deana Burn on the above details.

Yours sincerely

16.7.12

Chris Wilson
Executive Director
Major Projects Assessment
As delegate for the Director-General

Director General's Environmental Assessment Requirements

Section 78A(8A) of the *Environmental Planning and Assessment Act*

State Significant Development

Application Number	SSD-5357
Development	Remediation of contaminated land at the derelict antimony processing site in Urunga
Location	Hillside Drive, Urunga
Applicant	Department of Primary Industries – Crown Lands Division
Date of Issue	July 2012
General Requirements	The Environmental Impact Statement (EIS) must meet the form and content requirements in clauses 6 and 7 of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000.* In addition, the EIS must include a: • detailed description of the development, including: – need for the proposed development; – justification for the proposed development; – likely staging of the development; – likely interactions between the development and existing, approved and proposed operations in the vicinity of the site; – plans of all proposed building works. • consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments. • risk assessment of the potential environmental impacts of the development, identifying the key issues for further assessment. • detailed assessment of the key issues specified below, and any other significant issues identified in this risk assessment, which includes: – a description of the existing environment, using sufficient baseline data; – an assessment of the potential impacts of all stages of the development, including any cumulative impacts, taking into consideration relevant guidelines, policies, plans and statutes; and – a description of the measures that would be implemented to avoid, minimise and if necessary, offset the potential impacts of the development, including proposals for adaptive management and/or contingency plans to manage any significant risks to the environment. • consolidated summary of all the proposed environmental management and monitoring measures, highlighting commitments included in the EIS.
Key issues	The EIS must address the following specific matters: • **Contamination** – including: – a contaminated land assessment carried out in accordance with the requirements of Management Order (20111405) for the site; – a Remedial Action Plan approved by the EPA detailing the works to remediate the site, which includes: o characterisation of the nature and extent of contaminated material and any contaminated groundwater plumes; o details of the proposed remediation process, including treatment methodologies and processes; o justification for the proposed treatment and remediation criteria; o details of proposed remediation management measures including the management of excavated material, stockpiles and

wastewater;
    - a site validation plan; and
    - details of compliance with the *Contaminated Land Management Act 1997*.
  - details of the final landform following remediation and the suitability of any fill material;
  - on-going management of the site following remediation works; and
  - details of the final use of the site.
- **Human Health and Risk** – including:
  - an assessment of the potential risks (on site and off site) associated with the disturbance, transfer and disposal of contaminated material; and
  - details of mitigation and management measures to minimise human health risks and ensure the safety of workers during the development.
- **Soil and Water – including:**
  - an assessment of the potential soil, groundwater and surface water impacts of the development, including a detailed description of surface and groundwater conditions pre and post remediation works;
  - consideration of sea level rise and this would be managed;
  - identification of potential impacts on the SEPP 14 wetlands, Station Creek and Urunga Lagoon;
  - details of water supply, licensing requirements, groundwater works, dewatering and management of contaminated water;
  - an assessment of the potential to impact on acid sulfate soils;
  - identification of potential conflicts with other water users, including other licensed users, recreational users and groundwater dependent ecosystems; and
  - a detailed description of the mitigation and management controls that would be put in place to manage erosion and sediment, stormwater, groundwater and acid sulphate soils (if present) during and after remediation works.
- **Transport and Access** – including:
  - a description of site accesses, haulage routes, internal roads and parking required as a result of the development;
  - predictions of the traffic generated by the development including number and type of vehicle trips;
  - an assessment of the potential impacts on the capacity, efficiency and safety of the road network, including an analysis of intersection sight distances; and
  - details of any upgrades to road infrastructure that would be required.
- **Waste** – including:
  - accurate estimates of the quantity and classification of the potential liquid and non-liquid waste streams of the development;
  - a description of storage, treatment (including immobilisation of contaminants), disposal and re-use for all waste generated by the development; and
  - a description of the measures that would be implemented to ensure that any waste produced is appropriately handled, processed and disposed of.
- **Biodiversity** – including:
  - assessment of the impact on threatened species, populations and ecological communities, including the SEPP 14 coastal wetland; and
  - a description of the measures that would be implemented to minimise and/or offset identified impacts.
- **Noise and Vibration –** including:
  - an assessment of all noise impacts on surrounding residential receivers, including road transportation noise;
  - any vibration impacts; and
  - details of the proposed noise and vibration management and monitoring measures.

	• **Air Quality and Odour** – including: – a quantitative assessment of the air quality and odour impacts of the development on surrounding receivers, including impacts from road transportation; and – details of the proposed management and monitoring measures. • **Heritage** – including: – an Aboriginal cultural heritage assessment including effective consultation with relevant Aboriginal community groups; – a non-Aboriginal cultural heritage assessment, including a statement of heritage impact for any State significant or locally significant historic heritage items; and – details of proposed management and monitoring measures. • **Visual** – including: – impacts on surrounding receivers and from public areas; and – an assessment of the visual impacts and landscaping that would be implemented following the remediation works. • **Social** – including: – a comprehensive community consultation strategy to be implemented during and after remediation works; and – an assessment of public health risks.
Plans and Documents	The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the *Environmental Planning and Assessment Regulation 2000*. These documents should be included as part of the EIS rather than as separate documents.
Consultation	During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners. In particular, you must consult with the: • Environment Protection Authority; • Office of Environment and Heritage; • Bellingen Shire Council; • Department of Primary Industries, including the NSW Office of Water and NSW Fisheries; • NSW Transport (Roads and Maritime Services); • NSW Health; • WorkCover NSW; and • the local community and stakeholders. The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.
Further consultation after 2 years	If you do not lodge an EIS for the development within 2 years of the issue date of these DGRs, you must consult with the Director General in relation to the requirements for lodgement.
References	The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, Attachment 1 contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this development.

ATTACHMENT 1
Technical and Policy Guidelines

The following guidelines may assist in the preparation of the Environmental Impact Statement. This list is not exhaustive and not all of these guidelines may be relevant to your proposal.

Many of these documents can be found on the following websites:
http://www.planning.nsw.gov.au
http://www.bookshop.nsw.gov.au
http://www.publications.gov.au

Aspect	Policy /Methodology
Risk Assessment	
	AS/NZS 4360:2004 Risk Management (Standards Australia)
	HB 203:2006 Environmental Risk Management – Principles & Process (Standards Australia)
Contamination	
	State Environmental Planning Policy No 55 - Remediation of Land
	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC & NHMRC)
	National Environment Protection (Assessment of Site Contamination) Measure 1999 (NEPC)
	Managing Land Contamination - Planning Guidelines SEPP 55 – Remediation of Land (DUAP and EPA)
	Contaminated Sites: Sampling Design Guidelines (NSW EPA)
	Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites (NSW EPA)
	Guidelines for the Assessment and Management of Groundwater Contamination (DECC)
Soil and Water	
Coastal	NSW Coastal Policy (NSW Government 1997)
	State Environmental Planning Policy No 71 - Coastal Protection
	NSW Coastal Planning Guideline – Adapting to Sea Level Rise (NSW Govt. 2010)
	Floodplain Risk Management Guideline - Practical Consideration of Climate Change (DECC)
Surface Water	National Water Quality Management Strategy: Water quality management - an outline of the policies (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Policies and principles - a reference document (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Implementation guidelines (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ)
	Bunding and Spill Management (EPA)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC, 2004)
	Using the ANZECC Guideline and Water Quality Objectives in NSW (DEC)
	The NSW State Rivers and Estuaries Policy (NSW Water Resources Council)
Groundwater	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
	NSW State Groundwater Policy Framework Document (DLWC)

	NSW State Groundwater Quality Protection Policy (DLWC)
	NSW State Groundwater Dependent Ecosystem Policy (DLWC)
	NSW Wetlands Policy
Acid Sulfate Soils	Acid Sulfate Soil Manual (ASSMAC 1998)
	Acid Sulfate Soil Planning Maps
	Acid Sulfate Soils Laboratory Methods Guidelines (2004)
Erosion and Sediment	Managing Urban Stormwater: Soils & Construction (Landcom)
	Design Manual for Soil Conservation Works - Technical Handbook No. 5 (Soil Conservation Service of NSW)
	Soil and Landscape Issues in Environmental Impact Assessment (DLWC)
	Wind Erosion – 2nd Edition
Stormwater	Managing Urban Stormwater: Strategic Framework. Draft (EPA)
	Managing Urban Stormwater: Council Handbook. Draft (EPA)
	Managing Urban Stormwater: Treatment Techniques (EPA)
	Managing Urban Stormwater: Source Control. Draft (EPA)
	Managing Urban Stormwater: Harvesting and Reuse (DEC)
Wastewater	National Water Quality Management Strategy: Guidelines for Sewerage Systems - Effluent Management (ARMCANZ/ANZECC)
	National Water Quality Management Strategy: Guidelines for Sewerage Systems - Use of Reclaimed Water (ARMCANZ/ANZECC)
	National Water Quality Management Strategy - Guidelines For Water Recycling: Managing Health And Environmental Risks (Phase1) (EPHC, NRMMC & AHMC)
	National Water Quality Management Strategy - Guidelines For Water Recycling: Managing Health And Environmental Risks (Phase1) (EPHC, NRMMC & AHMC)
Transport and Access	
	State Environmental Planning Policy (Infrastructure)
	Guide to Traffic Generating Developments (RTA)
	Road Design Guide (RTA)
Waste	
	Waste Classification Guidelines (EPA 2008)
	Waste Avoidance and Resource Recovery Strategy 2007 - Overview (DECC)
	Waste Avoidance and Resource Recovery Performance Report 2006 (DECC)
	Resource Recovery Exemptions (DECC)
Biodiversity	
	Threatened Species Survey and Assessment Guidelines: Field Survey Methods for Fauna – Amphibians (DECCW 2009)
	Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities – Working Draft (DECC 2004)
	Threatened Species Assessment Guidelines: the Assessment of Significance (DECC 2007)
	Guidelines for Threatened Species Assessment (DoP 2005)
	NSW State Groundwater Dependent Ecosystem Policy (DLWC)
	State Environmental Planning Policy (Coastal Wetlands)
	Policy & Guidelines - Aquatic Habitat Management and Fish Conservation (NSW Fisheries)
Noise	
	NSW Industrial Noise Policy (EPA, 2000)
	NSW Road Noise Policy (OEH, 2011)
	Interim Construction Noise Guideline (DECC, 2009)
Vibration	
	Environmental Noise Management – Assessing Vibration: a technical guide (DEC)
	DIN 4150 Part 3 – Structural Vibration: effects of vibration on structures (ISO, 1999)
	Assessing Vibration – A Technical Guide 2006 (DEC)

Air Quality	
	Protection of the Environment Operations (Clean Air) Regulation 2002
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (DEC)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC)
Odour	
	Technical Framework: Assessment and Management of Odour from Stationary Sources in NSW (DEC)
	Technical Notes: Assessment and Management of Odour from Stationary Sources in NSW (DEC)
Heritage	
Aboriginal	Draft Guidelines for Aboriginal Cultural Heritage Assessment and Community Consultation (DEC 2005)
	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)
Non-Aboriginal	NSW Heritage Manual (NSW Heritage Office & DUAP)
	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)
Social and Economic	
	Draft Economic Evaluation in Environmental Impact Assessment (DOP)

ATTACHMENT 2

Government Authority and Council Responses to Request for Key Issues

NSW EPA

Our reference: DOC12/25136
Contact: Matthew James, (02) 9995 5707
or John Coffey , (02) 9995 5621

Ms Deana Burn
Mining and Industry Projects
Department of Planning
GPO Box 39
Sydney NSW 2001

Dear Ms Burn

Re: Urunga Antimony Plant Remediation (SSD 5357)

I refer to your letter of 21st June 2012 requesting the Environmental Protection Authority (EPA) review the project application and provide our requirements for the preparation of the Environmental Impact Statement (EIS) for potential inclusion in the Department of Planning's Director General's Requirements (DGRs) for the proposed remediation of the above site.

The EPA considers that the key environmental issues that Crown Lands need to address in the Environmental Impact Statement (EIS) for the Urunga Remediation Project are:

- Contaminated Sites Assessment and Remediation
- Air quality (dust management)
- Noise impacts
- Waste (including soil treatment by immobilisation of contaminants in waste)
- Soil and Sediment (including the assessment and management of Acid Sulfate Soil)
- Water Quality (groundwater and surface water)
- Threatened Species (Flora and Fauna including SEPP 14 wetland)

Other issues which should be considered are:

- Cultural heritage (Aboriginal and non-Aboriginal)
- Occupational Health and Safety (including traffic management)

Further detail on these issues is detailed in attachment 1a and 1b.

Currently the site is regulated under the *Contaminated Land Management Act, 1997* and is subject to a Management Order (20111405) for the remediation of the site. Given the contamination present at the site (associated with the former minerals processing) and the proposed use of the site as public open space, the Management Order obligates Crown Lands to the following:

- The proponent will engage a suitably qualified, experienced and reputable environmental consultant to undertake a contaminated land assessment at the site, including further investigation of the contamination of soil, sediment and groundwater due to the use of part of the site as a mineral processing plant. The investigation must be conducted and reported in

PO Box A290 Sydney South NSW 1232
59-61 Goulburn St Sydney NSW 2000
Tel: (02) 9995 5000 Fax: (02) 9995 5999
TTY (02) 9211 4723
ABN 30 841 387 271
www.environment.nsw.gov.au

accordance with all relevant guidance, including the EPA publication titled *Guidelines for Consultants Reporting on Contaminated Sites*, September 2000.

- The proponent will prepare a remedial action plan (RAP) and submit the RAP to the EPA. Upon approval of the RAP by the EPA the proponent must implement the RAP. Following the remedial action the proponent will submit a validation report to the EPA for review.

We recommend that the DGRs are concurrent with the obligations of the Management Order.

Further, we have provided two documents:

- The **Key Environmental Issues,** Attachment 1a, provides a summary of potential environmental impacts. We recommend these issues be considered as potential DGRs.
- The **Environmental Impact Statement (EIS) requirements,** Attachment 1b, have been provided as additional guidance for the proponent for matters that the EIS should address.

Additionally, we recommend that a Construction Environmental Management Plan be provided to address the Key Environmental Issues. The plan must provide mitigation and management options describing measures to prevent, control, abate or minimise the identified environmental impacts of the project and to reduce and/or manage the risks to the environment and human health.

In our review of the Project Application we identified five major points which need clarification and/or revision by Soil Conservation on behalf of Crown Lands. Our review is provided in Attachment 2.

If you have any queries regarding the matters discussed in this letter please contact John Coffey on (02) 9995 5621 or Matthew James on (02) 9995 5707.

Yours sincerely

3/7/2012

NIALL JOHNSTON
Manager Contaminated Sites
Environment Protection Authority

Attachment 1a:

KEY ENVIRONMENTAL ISSUES

- **Contaminated Sites Assessment and Remediation**

Compliance with the existing Management Order (20111405) on the site under the Contaminated Land Management Act, 1997

- **Air Quality** (dust management)

Assess the risk of dust emissions and monitor dust levels during project works. Report on the measures to prevent dust emissions from the project site.

- **Noise impacts**

Identify the source, nature and scope of possible noise impacts and detail feasible and reasonable noise mitigation measures.

- **Waste**

Provide classification of all potential sources of liquid and non-liquid wastes that will be taken off site for disposal. Describe quantities, storage, treatment (including immobilisation of contaminants) and disposal or re-use of all waste generated.

- **Soil and Sediments**

Provide an assessment and details of the management of Acid Sulfate Soil. Detail the erosion and sediment controls during excavation, stockpiling, treatment and backfilling.

- **Water Quality** (groundwater and surface water)

Detail the existing background and pre-remediation water quality. Provide an impact assessment and details of monitoring over time.

- **Threatened Species (**Flora and Fauna including SEPP 14 wetland)

Detail the existing environment including discussion on flora and fauna characteristics. Provide a description of the measures proposed to mitigate and / or ameliorate the impact of the development on the flora and fauna species identified. As the project encroaches across a State Environmental Planning Policy No 14 (SEPP 14) Coastal Wetland, a specific assessment of the potential impacts on the wetland and the measures proposed to minimise those impacts must be presented.

Other Issues Summary

- **Cultural heritage** (Aboriginal and non-Aboriginal)

Assess the potential impacts of the remediation and operational phase of the project on sites and places of aboriginal and non-aboriginal cultural heritage, including areas of archaeological potential.

- **Occupational Health and Safety** (including traffic management)

Identify the risks associated with the remediation works and prepare an OH&S Plan which describes what mitigation and management measures are proposed to be used to eliminate, prevent, control, abate or minimize the identified OH&S risks. Include a Traffic Management Plan in the OH&S plan.

Impacts should be assessed in accordance with relevant guidelines.

Attachment 1b:

ENVIRONMENT IMPACT STATEMENT REQUIRMENTS

Contaminated Sites Assessment and Remediation

The EIS should:

1. Include an assessment of the contaminated site that is conducted in accordance with the guidelines made or approved under section 105 of the Contaminated Land Management Act 1997.
2. Provide the details on how the site contamination will be remediated and/or managed to the site is, or can be, made suitable for the proposed use.

All reports should be prepared in accordance with the Guidelines for Consultants Reporting on Contaminated Sites (2000).

Air Quality (dust management)

The EIS should assess and report on the risk of dust emissions during project construction / remediation works and the measures to prevent dust emissions from the project site, including how real time monitoring of local meteorological conditions might be used as:

1. An indicator of the risk of dust emissions from the project site; and

2. The trigger for implementing dust control measures, including the cessation of certain work during unfavourable meteorological conditions.

Noise impacts

The EIS should:

1. Identify the source, nature and scope of possible noise impacts.
2. Identify the project duration and normal operational hours.
3. Identify feasible and reasonable noise mitigation measures.

Waste

The EIS should include:

1. Details of the quantity and type of liquid and/or non-liquid waste(s) generated, handled, treated or disposed of at the site. Waste to be removed from the site must be classified according to the EPA's *Waste Classification Guidelines 2008*.

2. Details of liquid waste and non-liquid waste management at the site, including:
    a. The assessment, handling, treatment and transportation of waste generated at the site;
    b. Any stockpiling of wastes or recovered materials and procedures to prevent cross-contamination at the site;
    c. And waste processing related to the project, including reuse, recycling, reprocessing or treatment (including immobilisation) both on and off site;
    d. The method for disposing of all wastes or recovered materials generated by the project; and
    e. The proposed controls for managing the environmental impacts of these activities.

3. Details of procedures for the assessment, handling, storage, transport and disposal of all hazardous materials used, stored, processed or disposed of at the site, in addition to the requirements for liquid and non-liquid wastes.

4. Details of the type and quantity of any chemical substances to be used or stored and a describe arrangements for their safe use and storage.

Soil and Sediment (including the assessment and management of Acid Sulfate Soil)

The EIS should include:

1. Erosion and sediment controls during excavation, stockpiling, treatment and backfilling. Particular attention should be given to soil erosion and sediment transport – in accordance with *Managing urban stormwater: soils and construction*, vol. 1 (Landcom 2004) and vol. 2 (DECCW 2008)

Acid Sulfate Soil

If the proposed development (or part thereof) is located on land marked Class 1, 2, 3 or 4 on the relevant Acid Sulfate Soil Planning Map, or within 500 metres of adjacent Class 2, 3 or 4 land that is below 5 metres Australian Height Datum (AHD), The EIS should:

2. Assess the potential impacts of the development on acid sulfate soils in accordance with the relevant guidelines in the Acid Sulfate Soils Manual (Stone et al. 1998) and the Acid Sulfate Soils Laboratory Methods Guidelines (Ahern et al. 2004).
3. Describe mitigation and management options that will be used to prevent, control, abate or minimise potential impacts from the disturbance of acid sulfate soils associated with the project and to reduce risks to human health and prevent the degradation of the environment. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.

Water Quality (groundwater and surface water)

Background Conditions

The EIS should include:

1. Describe existing surface and groundwater quality prior to remediation works. An assessment needs to be undertaken for any water resource likely to be affected by the proposal.
2. Provide an outline of baseline surface and groundwater information, including, for example, depth to water table, flow direction and gradient, groundwater quality, reliance on groundwater by surrounding users and by the environment, tidal levels, flood levels, connectivity of local creeks, stormwater systems, wetlands and receiving waters.
3. State the Water Quality Objectives for the receiving waters relevant to the proposal. These refer to the community's agreed environmental values and human uses endorsed by the NSW Government as goals for ambient waters (http://www.environment.nsw.gov.au/ieo/index.htm). Where groundwater may be impacted the assessment should identify appropriate groundwater environmental values.
4. State the indicators and associated trigger values or criteria for the identified environmental values. This information should be sourced from the ANZECC (2000) Guidelines for Fresh and Marine Water Quality (http://www.daff.gov.au/oldmincos/publications/australian_and_new_zealand_guidelines_for_fresh_and_marine_water_quality).
5. State any locally specific objectives, criteria or targets which have been endorsed but the NSW Government.

Impact Assessment

6. Describe the nature and degree of impact that any proposed discharges will have on the receiving environment.
7. Assess impacts against the relevant ambient water quality outcomes. Demonstrating how the proposal will be designed and operated to:
    a. Protect the Water Quality Objectives for receiving waters where they are currently being achieved; and
    b. Contribute towards achievement of the Water Quality Objectives over time where they are not currently being achieved.
8. Assess impacts on groundwater and groundwater dependant ecosystems.
9. Describe how stormwater will be managed both during and after the project.
10. Provide an assessment of flooding frequency, levels and what impact a major flooding event may have on the site. Include details of contingency measures that will be adopted if a major flooding event occurs during and following the remediation works.

Monitoring

11. Describe how the predicted impacts will be monitored and assessed over time.

Threatened Species (Flora, Fauna and SEPP 14 wetlands)

Detail the existing environment including discussion on flora and fauna characteristics. Make use of previous investigations and complete further desktop evaluations. Provide a description of the measures proposed to mitigate and / or ameliorate the impact of the development on the flora and fauna species identified. As the project encroaches across a State Environmental Planning Policy No 14 (SEPP 14) Coastal Wetland, a specific assessment of the potential impacts on the wetland and the measures proposed to minimise those impacts must be presented.

OTHER ISSUES

Cultural heritage (Aboriginal and non-Aboriginal)

The EIS should:

1. Identify the nature and extent of impacts on cultural heritage values across the project area.
2. Describe the actions that will be taken to avoid or mitigate impacts or compensate to prevent unavoidable impacts of the project on cultural heritage values. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.
3. If items of Aboriginal cultural heritage are identified, clearly demonstrate and document that effective community consultation with Aboriginal communities has been undertaken in determining and assessing impacts, developing options and making final recommendations.

Occupational Health and Safety (including traffic management)

The EIS should:

1. Identify the risks associated with the remediation works such as; exposure to contaminated media and increase in heavy vehicles; to:
    a. Workers onsite;
    b. Off site residents;
    c. Local community members; and
    d. Pacific Highway users.

2. Prepare an Occupational Health and Safety Management Plan which describes what mitigation and management measures are proposed to be used to eliminate, prevent, control, abate or minimize the identified OH&S risks.
3. Include a Traffic Management Plan in the OH&S plan.

Attachment 2:

EPA Review of the Project Application

The EPA is generally satisfied with the Project Application (PA) document;

Urunga Antimony Processing Plant Contaminated Site – Project Application & Preliminary Environmental Assessment, prepared by Department of Primary Industries, Soil Conservation Service, June 2012.

We have 5 major points which need clarification and/or revision:

- **Section 2.1 Location and Land Titles** & **Section 4.5 Post Remediation Landuse**

  Figure 4 includes the north-west corner of the site as part of the remediation site. We note that this part of the site is not currently regulated as a declared area of significant contamination under the existing Management Order. The PA should note that this part of the site is not regulated and describe the area as potentially being utilised as part of the remediation process. The north-west corner of the site may be proposed as the location of a containment cell. This should be clearly presented in the PA so that the Planning Approval allows for utilisation of this area as part of the remediation of the site.

- **Section 4.6 Validation**

  The EPA will not be requiring a NSW EPA accredited Site Auditor to review the remediation works nor to provide a Site Audit Statement/Report for the site.

  The proponent will submit a Validation report to the EPA following the remediation works.

  Note: The EPA understands that the Post Remediation land use of the entire site, including the former residential areas in the north-west corner of the site will become Public Open Space.

- **Section 5.2 State Legislation, Protection of the Environment Operations Act 1997**

  It is our understanding that the remediation works will **not** require an Environment Protection Licence as the PA suggests. The PA quotes Clause 15 (2) (a) which refers to treatment of contaminated soil received from 'off site'. As the site will not be receiving or treating any soil from 'off site' this section of the Act is not applicable.

  With regard to Section (2) (b); contaminated soil originating exclusively from on site sources may potentially be treated however the treatment will **not** involve:
  - Incineration (i);
  - Treatment or storage of over 30,000m3 of contaminated soil (ii); or
  - Disturbing more than an aggregate area of 3 hectares of contaminated soil (iii).

- **Section 6.1 Environmental Factors**

  The PA mentions in section 3.3 'Contamination', that acid sulphate soil has the potential when disturbed and exposed to oxygen to generate acid. The acid could potentially exacerbate the mobilisation of metal contaminants from the tailings or contaminated soil.

  Thus, we request that Acid Sulfate Soil / Potential Acid Sulfate Soil (ASS/PASS) is addressed as an individual key environmental factor and removal from the Waste section. Mitigation strategies are to be employed to ensure that the ASS/PASS are handled and treated appropriately during excavation works.

- **Section 6.6 Air Quality & Section 6.11 OH&S**

  In Section 6.6 Air Quality, the **Risk** section part (ii) needs clarification and further information. Specifically what “inorganic toxic gases” are being referred to as a potential exposure risk upon “exposure to oxygen”?

  In Section 6.11 OH&S, the **Risk** section part (i) needs clarification and further information. Specifically what risk of infection is posed from tailings contaminated with heavy metals and what gases are being referred to.

  Note: the word “plume” refers to water and air bodies only. Hence, we would consider replacing ‘tailings plume’ with ‘tailings’ or ‘tailing material’ throughout the document.

Additionally, we have these **minor comments regarding the Application**.
Page 2: The report has not been signed by the report reviewer.
Page 13: Source Zone, paragraph 3: typographical error for mercury.

Transport
Roads & Maritime
Services

NTH12/00063, CR2012/006515
Your ref: SSD 5357

The Director
Mining & Infrastructure Projects
NSW Planning & Infrastructure
GPO Box 39
SYDNEY NSW 2001

Attn: Deana Burn

Dear Sir/Madam,

Urunga Antimony Plant Remediation (SSD 5357), Lot 1 DP 874874, Hillside Drive, Urunga

I refer to your letter of 21 June 2012 seeking comment on the abovementioned state significant development proposal.

The key concern for Roads and Maritime Services (RMS) is the safety and efficiency of the state classified road network, in particular the Pacific Highway (HW10), which connects with Hillside Drive.

RMS requests that the DGRs include the following issues to be addressed by any Environmental Impact Statement (EIS).

A detailed traffic study should be undertaken that takes into account the key issues relevant to the scale of this proposal as set out in Table 2.1 of the Roads and Traffic Authority's current 'Guide to Traffic Generating Developments" (copy attached). The traffic study should include information relating to:

- An assessment of the potential traffic impacts on the capacity, efficiency and safety of the state classified road network, particularly the impacts of heavy vehicles.
- The number and type of vehicle trips to be generated by the proposed development.
- Existing and proposed access conditions.
- Intersection sight distances of connections with the Pacific Highway including;
    - Safe Intersection Sight Distance (SISD),
    - Approach Sight Distance (ASD),
    - Truck Safe Sight Distance (TSSD).
- Improvements for roads, junctions / intersections.
- Proposed Haulage routes for removed materials
- Detail of servicing and parking arrangements
- Connectivity to existing developments
- Impact on Transport (Public and School Bus Routes)
- Provisions for pedestrians, alternative transport modes such as bicycles
- Road Traffic Noise

To ensure that haulage routes do not adversely impact on the safety of the road network adjoining these proposals, RMS recommends that the traffic study be supported by a Road Safety Audit, undertaken by a suitably qualified person.

Current AUSTROADS standards should be adopted for any necessary upgrading of the surrounding road infrastructure.

To fulfil legislative, construction and environmental requirements, RMS will require the developer to enter into a Works Authorisation Deed (WAD) to carry out any works on the Pacific Highway. Prior to any construction activities on a state road, a number of prescribed requirements and conditions will need to be undertaken, including the process for geometric and pavement design approval, project management arrangements, insurances, WHS and environmental management during construction, construction specifications and the process for approval of road occupancies. All works will need to be undertaken by an RMS approved Contractor and be at no cost to RMS. Additionally, RMS will require payment of costs for the administration of the WAD.

Should you have any further questions please contact Matt Adams of RMS Development Northern on (02) 6640 1300 or via email at: development.northern@rms.nsw.gov.au

Yours faithfully,

10 JUL 2012

for David Bell
Regional Manager, Northern

BELLINGEN SHIRE COUNCIL

33-39 Hyde Street, Bellingen NSW

All communications to be addressed to the General Manager
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L10011
my
Anthony Brandie
Direct Line: (02) 66 557 326

3 July 2012

Deana Burn
NSW Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001

Dear Madam

URUNGA ANTIMONY PLANT REMEDIATION (SSD 5357)

I refer to your correspondence dated 21 June 2012 requesting Council's requirements for the preparation of the Environmental Impact Statement (EIS) for the referenced project. The Project Application and Preliminary Environmental Assessment documents prepared by Clayton Colmer of the Soil Conservation Service have been reviewed and Council hereby requests that the following matters be given consideration in the preparation of the EIS for the subject project;

- *Local traffic impacts and potential conflict with the existing vehicular access to the site being adjacent to the Pacific Highway.*
- *Potential conflicts with downstream users of the watercourse during the remediation phase ie. fishing and other recreational activities.*
- *Management of public perception and community expectations during the remediation phase (pollution management) and post remediation (future land use).*
- *The potential for remediation works to adversely impact on Aboriginal objects and/or Aboriginal places of heritage significance and the limitation to desktop investigations to identify this potential.*
- *Contemporary legislative provisions, noting that the preliminary report references repealed material.*

Thank you for the opportunity to comment on this project.

Should you have any further enquiries contact the undersigned between 8.30am –10.30 am. **NB:** The Division of Environmental Health and Planning Office hours are Monday to Friday 8.30am to 4.30pm.

Yours faithfully

Anthony Brandie
Environmental Health and Building Surveyor

From: Chris Ritchie
To: Deana Burn
Date: 7/5/2012 12:29 pm
Subject: Fwd: 6/22 Urunga Antimony Processing Plan - DGRs

>>> "Lawrence, Kerryn" <Kerryn.Lawrence@ncahs.health.nsw.gov.au> 7/5/2012 12:28 pm >>>
Hi Chris,

Please find below two recommendations from NSW Ministry of Health for inclusions in the DGRs for application 6/22, remediation of the contaminated site at the old Antimony processing plant in Urunga.

Thank you for this opportunity.

Regards,
Kerryn

1. A comprehensive Communication and Community Consultation Strategy should be undertaken in Stage 1 of the project. This should include but not be limited to the residents in the neighbourhood, the nearby Child Care Centre management and the parents of children attending the Centre, concerned citizens of the area and the Coffs Harbour Local Aboriginal Land Council.

2. An assessment of public health risk should be undertaken. This should include but not be limited to fugitive dust emmissions from the site and public access to the site.

Kerryn Lawrence
Senior Environmental Health Officer (Tue-Fri) |**Public Health**
PO Box 126 Port Macquarie NSW 2444
Tel. 02 6588 2792 | Fax. 02 6588 2837 | Mob. 0418 112 248 |
Kerryn.Lawrence@ncahs.health.nsw.gov.au
www.ncahs.nsw.gov.au/public-health

NSW GOVERNMENT | Department of Primary Industries

OUT12/15878

16 JUL 2012

Ms Deana Burn
Mining & Industry Projects
NSW Department of Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001

Email: Deana.Burn@planning.nsw.gov.au

Dear Ms Burn

Re: Urunga antimony plant remediation (SSD 5357) - input into Director-General's requirements for the environmental assessment.

Reference is made to your letter to the NSW Office of Water, which is now an agency within the Department of Primary Industries (DPI), in respect to this matter.

The Office of Water advises that the environmental assessment should demonstrate consideration of the following points, and address the expanded list of assessment requirements detailed in Attachment A.

1. An adequate and secure water supply for the proposal.
2. Existing and proposed water licensing requirements in accordance with the *Water Act 1912* and the *Water Management Act 2000*.
3. All proposed groundwater works, including bores for the purpose of investigation, extraction, dewatering, incidental pit water, testing or monitoring must be identified in the proposal.
4. An assessment of impact of the remediation works on adjacent licensed water users, basic landholder rights or groundwater-dependent ecosystems (GDEs).
5. Requirements to intercept groundwater and predicted dewatering volumes, water quality and disposal/retention methods of contaminated water.
6. An assessment of the associated impacts on the local and regional groundwater system due to the proposed remediation works.
7. An assessment of the potential impact on groundwater and surface water due to the potential on-site disposal/ containment of contaminated material.
8. A detailed monitoring program and mitigation plan to address surface and groundwater impacts on and off-site.
9. Identification and assessment of any impacts on watercourses and drainage lines on site and adjacent to the site and the future management of these areas, in particular the adjacent SEPP 14 wetland, Station Creek and Urunga Lagoon.

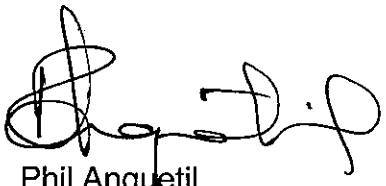
NSW Department of Primary Industries
Level 6, 201 Elizabeth Street, Sydney NSW 2000
PO Box K220, Haymarket NSW 1240
Tel: 02 8289 3999 Fax: 02 9286 3208 www.dpi.nsw.gov.au ABN: 72 189 919 072

10. An assessment of the occurrence of Acid Sulfate Soils on the site and the management of these soils during the remediation of the site, including the development of an Acid Sulfate Management Plan.

For further information please contact Christie Jackson, Planning and Assessment Coordinator (Tamworth office) on 6701 9652 or at: christie.jackson@water.nsw.gov.au.

Discussion with your office on 11 July 2012 advised that there was no other referral to DPI generally. A perusal of the application suggests that the matter may be of interest to Fisheries NSW, also an agency within DPI. An internal referral to Fisheries NSW has now been made. However, in the meantime it is suggested that direct consultation with Fisheries NSW by the proponent be a further requirement by the Director-General. For further information please contact Greg Paine, Senior Policy Officer (Planning), Business Services Department of Primary Industries on 8289 3951 or by email at: greg.paine@industry.nsw.gov.au.

Yours sincerely



Phil Anquetil
Executive Director Business Services

ATTACHMENT A

NSW Office of Water Environmental Assessment Requirements Urunga Antimony Plant Remediation (SSD 5357) [Our Ref: ER21925]

1. Legislation

The assessment is required to take into account the objects and water management principles of the *Water Management Act 2000* (WMA 2000) and statutory requirements of the *Water Act 1912*, as applicable.

2. Water Sharing Plans

Gazetted Water Sharing Plans (WSPs) prepared under the provisions of the WMA 2000 establish rules for access to, and the sharing of water between the environmental needs of the surface or groundwater source and water users. As such the assessment is required to demonstrate consistency with the rules of the WSP. The remediation site is located within the *Water Sharing Plan for the Bellinger River Area Unregulated and Alluvial Water Sources 2008.*

Refer to: *http://www.water.nsw.gov.au/Water-Management/Water-sharing/default.aspx*

3. State Government technical and policy documents

The assessment is required to take into account the following NSW Government policies, as applicable:

- *NSW Groundwater Policy Framework Document - General*
- *NSW Groundwater Quality Protection Policy*
- *NSW State Groundwater Dependent Ecosystem Policy*
- *NSW State Rivers and Estuaries Policy*
- *NSW Wetlands Policy*
- *Australian and New Zealand Guidelines for Fresh and Marine Water Quality*
- *Australian and New Zealand Guidelines for Water Quality Monitoring and Reporting*
- *Guidelines for the Assessment and Management of Groundwater Contamination*
- *Guidelines for Groundwater Protection in Australia*

4. Controlled Activity Guidelines

The assessment is required to take into account the NSW Office of Water Guidelines for Controlled Activities, as applicable, for all activities to occur on *waterfront land,* as defined in the WMA 2000. Refer to:
http://www.water.nsw.gov.au/Water-Licensing/Approvals/Controlled-activities/default.aspx

5. Groundwater

a) Licensing

All proposed groundwater works, including bores for the purpose of investigation, extraction, dewatering, testing or monitoring must be identified in the proposal and an approval obtained from the NSW Office of Water prior to their installation.

b) Groundwater source

The assessment is required to identify groundwater issues and potential degradation to the groundwater source and provide the following:

- Details of any works likely to intercept, connect with or infiltrate the groundwater sources.
- Details of any proposed groundwater extraction, including purpose, location and construction details of all proposed bores and expected annual extraction volumes.

- Describe the flow directions and rates and the physical and chemical characteristics of the groundwater source.
- Details of the predicted impacts of any final landform on the groundwater regime.
- Details of the existing groundwater users within the area (including the environment) and include details of any potential impacts on these users.
- Assessment of the quality of the groundwater for the local groundwater catchment.
- Details of how the proposed development will not potentially diminish the current quality of groundwater, both in the short and long term.
- Details on preventing groundwater pollution.
- Details on protective measures for any groundwater dependent ecosystems (GDEs).
- Details of proposed methods of the disposal of waste water and approval from the relevant authority.
- Assessment of the need for an Acid Sulfate Management Plan (prepared in accordance with ASSMAC guidelines).
- Assessment of the potential for saline intrusion of the groundwater and measures to prevent such intrusion into the groundwater aquifer.
- Details of the results of any models or predictive tools used.

c) Groundwater dependent ecosystems (GDEs)

The assessment is required to identify any impacts on GDEs and address the following:

- Identification of potential GDEs within the development site and adjacent area.
- Current GDEs condition, water quantity and quality required by the ecosystems (minimum 2 year fortnightly baseline data).
- Flora and fauna assessment for all ecosystems which includes macro invertebrate and macrophyte diversity and abundance assessments within all watercourses within and adjacent to the development site.
- Determine critical thresholds for negligible impacts.
- Manage groundwater extraction within defined limits thereby providing flow sufficient to sustain ecological processes and maintain biodiversity.
- Ensure sufficient groundwater of suitable quality is available to ecosystems when needed.
- Ensure the precautionary principle is applied to protect GDEs, particularly the dynamics of flow and availability and the species reliant on these attributes.
- Details on protective measures to minimise any impacts on GDEs and any potential offset areas which will be monitored and protected.

d) Contingency measures

Where potential impacts are identified the assessment will need to identify limits to the level of impact and contingency measures that would remediate, reduce or manage potential impacts to the existing groundwater resource and any dependent groundwater environment or water users, including information on:

- Details of proposed monitoring programs, including water levels and quality data.
- Reporting procedures monitoring programs including mechanism for transfer of information to the Office of Water.
- An assessment of any groundwater source that may be sterilised as a consequence of the proposal.
- Identification of any nominal thresholds as to the level of impact beyond which remedial measures or contingency plans would be initiated (this may entail water level triggers or a beneficial use category).
- Description of the remedial measures or contingency plans proposed.
- Any funding assurances covering the anticipated post development maintenance cost, for example on-going groundwater monitoring for the nominated period.

6. Surface water and riparian protection

The assessment is required to consider the impact of the proposal on watercourses and associated riparian vegetation within the site and provide the following (where applicable):

- Identify the sources of surface water.
- Details of stream order (using the Strahler System).
- Details of any proposed surface water extraction, including purpose, location of existing pumps, dams, diversions, cuttings and levees.
- Detailed description of any proposed development or diversion works including all construction, clearing, draining, excavation and filling.
- An evaluation of the proposed methods of excavation, construction and material placement.
- A detailed description of all potential environmental impacts of any proposed development in terms of vegetation, sediment movement, water quality and hydraulic regime.
- A description of the design features and measures to be incorporated into any proposed development to guard against long term actual and potential environmental disturbances, particularly in respect of maintaining the natural hydrological regime and sediment movement patterns and the identification of riparian buffers.
- Details of the impact on water quality and remedial measures proposed to address any possible adverse effects.

7. Rehabilitation, final landform and final void management

The assessment must include:

- Justification of the proposed final landform with regards to its impact on local and regional groundwater systems and surface water systems.
- A detailed description of how the site will be progressively rehabilitated and integrated into the surrounding landscape.
- Detailed modelling of potential groundwater volume, flow and quality impacts of the presence of an inundated final void on identified receptors, specifically considering those environmental systems likely to be groundwater dependent.
- A detailed description of the measures to be put in place to ensure that sufficient resources are available to implement the proposed rehabilitation.
- The measures that would be established for the long-term protection of local and regional aquifer and surface water systems and for the ongoing management of the site following the cessation of the project.

End Attachment A

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