Director-General's Requirements

Section 75F of the *Environmental Planning and Assessment Act 1979*

Project	Remediation of hydrocarbon contaminated groundwater at an area near Martin Street, Coramba
Site	Martin Street, Coramba
Proponent	Coffs Harbour City Council
Date of Issue	7 July 2007
Date of Expiration	7 July 2009
General Requirements	The Environmental Assessment must include: • an executive summary; • a detailed description of the project including the: – need for the project; – alternatives considered; and – various components and stages of the project; • consideration of any relevant statutory provisions; • a general overview of the environmental impacts of the project, identifying the key issues for further assessment, and taking into consideration any issues raised during consultation; • a detailed assessment of the key issues specified below, and any other significant issues identified in the general overview of environmental impacts of the project (see above), which includes: – a description of the existing environment; and – an assessment of the potential impacts of all components of the project; • a description of the measures that would be implemented to avoid, minimise, mitigate, offset, manage and/or monitor the impacts of the project; • a draft Statement of Commitments, outlining environmental management, mitigation and monitoring measures; • a conclusion justifying the project, taking into consideration the environmental impacts of the proposal; and • a signed statement from the author of the Environmental Assessment certifying that the information contained in the report is neither false nor misleading.
Key Issues	• **Remedial Action Plan** – including characterisation of the nature and extent of contaminated material, and details of proposed management measures, including justification of remediation criteria and compliance with the *Contaminated Land Management Act 1997*; • **Soil and Water** – including surface (particularly on the Orara River), stormwater, groundwater, acid sulphate soils, erosion and sediment control and contingency measures that would be implemented to address any potential risks associated with the proposed remediation works; • **Air Quality** – including odour and vapour; • **Noise** – including construction and operation; • **Traffic** – including details of traffic volumes likely to be generated during the remediation and procedures for transporting any hazardous material leaving the site; • **Waste Management** – including classification of all potential sources of liquid and non-liquid wastes to be generated at the site and describe how this waste would be handled, processed and if necessary disposed of; and • **Flora and Fauna** – particularly on any threatened species, populations, or ecological communities and their habitats.
References	The Environmental Assessment must take into account relevant State government technical and policy guidelines. While not exhaustive, guidelines which may be relevant to the project are included in the attached list.

Consultation	During the preparation of the Environmental Assessment, you should consult with the relevant local, State or Commonwealth government authorities, service providers, community groups or affected landowners. The consultation process and the issues raised must be described in the Environmental Assessment. In particular, you should consult with: • Department of Environment and Climate Change; • Department of Water and Energy; and • RTA. The consultation process and the issues raised must be described in the EA.
Deemed refusal period	60 days

State Government Technical and Policy Guidelines - For Reference

Aspect	Policy /Methodology
Air Quality	
	Protection of the Environment Operations (Clean Air) Regulation 2002
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (DECC)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DECC)
	Technical Framework: Assessment and Management of Odour from Stationary Sources in NSW (DECC)
	Technical Notes: Assessment and Management of Odour from Stationary Sources in NSW (DECC)
Contamination	
	Managing Land Contamination - Planning Guidelines SEPP 55 – Remediation of Land (DUAP and EPA)
	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC & NHMRC)
	Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites (NSW EPA)
	Contaminated Sites: Sampling Design Guidelines (NSW EPA)
	Contaminated Sites: Guidelines for the NSW Auditor Scheme (NSW EPA)
	Contaminated Sites: Guidelines on Significant Risk of Harm from Contaminated Land and Duty to Report (NSW EPA)
	National Environment Protection (Assessment of Site Contamination) Measure 1999 (NEPC)
	Guidelines for the Assessment and Management of Groundwater Contamination (DECC)
Flora and Fauna	
	Draft Guidelines for Threatened Species Assessment under Part 3A of the *Environmental Planning and Assessment Act 1979* (DEC)
Noise	
	NSW Industrial Noise Policy (DECC)
Social Impact Assessment and Human Health	
	Environmental Health Risk Assessment Guidelines for Assessing Human Health Risks from Environmental Hazards (Department of Health and Ageing)
Soil and Waters	
Acid Sulfate Soils	Acid Sulfate Soil Manual (ASSMAC)
Construction	Managing Urban Stormwater: Soils & Construction (Landcom)
Flooding	Floodplain Management Manual (DNR)
Groundwater	NSW State Groundwater Policy Framework Document (DLWC)
	NSW State Groundwater Quality Protection Policy (DLWC)
	NSW State Groundwater Quantity Management Policy (DLWC) Draft
	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
Water Quality	National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC)
	National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC)
Waste	
	Environmental Guidelines: Assessment Classification and Management of Non-Liquid and Liquid Waste (NSW EPA)

Your reference : Major development assessment
Our reference : DOC07/26092
Contact : Jenny Wood 9995 5759

Chris Ritchie
Manager Manufacturing and Rural Industries
Major Development Assessment
Department of Planning
GPO Box 39
SYDNEY NSW 2001

Dear Mr Ritchie

RE: Request for provision of details of key issues and assessment requirements – Remediation, Martin St Coramba

I refer to your request for the Department of Environment and Climate Change (DECC) requirements for the environmental assessment (EA) in regard to the above proposal received by DECC on 28 June 2007. In that correspondence you requested that we provide details of any key issues and assessment requirements which may be included in the Department of Planning Director General's Environment Assessment Requirements for the project application. We provide the following response to your request.

Key Issues

- The EPA (now part of the Department of Environment and Climate Change) determined that the contamination in groundwater at 5 Martin Street Coramba (Lot 121 in Deposited Plan 876790), which includes part of the southern bank of the Orara River, is posing a significant risk of harm (SRoH) to human health and to the environment due to groundwater contaminated with benzene.
- Consequently DECC is regulating the contamination at Martin Street Coramba under the *Contaminated Land Management Act 1997* (CLM Act). The above mentioned site has been declared a Remediation Area under section 21 (Declaration Number 21039 Area Number 3160) and details of the declaration were gazetted on 31 July 2003 and can be viewed on http://www.environment.nsw.gov.au/clm/aboutregister.aspx.
- DECC anticipates entering into a Voluntary Remediation Agreement (under the CLM Act) with Council for Stage 1 remediation works for the installation of an air sparge system with soil vapour extraction (SVE) and treatment of the collected contaminated soil vapour.
- The remediation work is to be undertaken within the riparian zone of the Orara River, in close proximity to residential properties. For this reason DECC considers the key issues to include, noise, air emissions, sediment and erosion control, waste and chemical management.

Environmental Assessment Requirements

- The key Environmental Assessment (EA) requirements are to:
  (a) quantitatively assess impacts of air emissions including odour;
  (b) provide an assessment of operational noise from the development;
  (c) implement and maintain effective erosion and sediment controls; and

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(d) identify, class and manage each waste type generated from the works in accordance with the DECC's Environmental Guidelines.

Specific EA requirements are outlined in Attachment A. The EA requirements should be assessed in accordance with the relevant guidelines provided in Attachment B.

The DECC requests that 4 copies of the EA are provided for assessment. These documents should be lodged at our Sydney Office, PO Box A290, Sydney South 1232. Please contact Jenny Wood on 02 9995 5759 if you wish to discuss the matter.

Yours sincerely

4/7/2007

NIALL JOHNSTON
A/Manager Contaminated Sites

Attachment A – DECC's Standard EA requirements

Environmental impacts of the project

1. The following environmental impacts of the project need to be considered and where specified assessed, quantified and reported on:
   - Air emissions;
   - Noise;
   - Water quality;
   - Human Health;
   - Waste and chemicals;
   - Threatened Species, and;
   - Aboriginal cultural heritage

2. These should be assessed in accordance with the relevant guidelines listed in Attachment B.

3. Confirmation of details on the location of the proposed development, including:
   - The property boundaries of the remediation works; and
   - The location of the affected environment so as to place the proposal in its local and regional environmental context including surrounding landuses, planning zonings and potential sensitive receptors.

4. Describe mitigation and management strategies that will be used to prevent, control, abate or minimise identified environmental impacts 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.

5. Based on the information provided to DECC, the remediation works as described will not constitute 'Scheduled Development Work' or 'Scheduled Activities' under Part 1 of Schedule 1 of the Protection of the Environment Operations (POEO) Act. As a result, an Environment Protection Licence (EPL) would not be required. However, the transportation of potentially contaminated soil and waste activated carbon from the premises may require an EPL (refer to Part 2 of Schedule 1 'Activities Not Premises Based'.

6. The applicant has indicated their intention to enter into a Voluntary Remediation Agreement (VRA) with the DECC under the *Contaminated Land Management Act 1997* for remediation of the premises. The VRA would need to be made prior to any remediation activity commencing.

Air Emissions

The environmental outcomes for the project in relation to air quality should include:

- Emissions should not cause adverse impact upon human health or the environment and there should be no offensive odour impacts on residential premises; and
- National Environment Protection Measures (NEPM) ambient air quality goals should not be compromised.

The proposed treatment and extraction of hydrocarbon vapours via the air sparging and soil vapour extraction (SVE) system has the potential to result in polluted air emissions to atmosphere. The EA will need to quantitatively assess impacts of emissions including odour.

The EA will need to detail the air sparging and SVE system design and operating methodology, establish its expected performance and detail proposed management, monitoring and maintenance strategies for the system. This will be critical as the treatment system will be co-located on a residential property and in close proximity to a number of residential dwellings.

Emissions must be compliant with any relevant requirements of the Protection of the Environment Operations (Clean Air) Regulation 2002.

Noise and Vibration
The environmental outcomes for the project should be that the design, construction, operation and maintenance of the plant and equipment cause no noise related adverse impacts. In particular, noise will be emitted from the operation of the air sparging and SVE system which is to be located in an otherwise quiet environment. All noise sources should be carefully identified and the noise emitted from the operations assessed and measures developed to prevent and mitigate identified noise impacts.

Therefore the EA should include a Noise Impact Assessment (NIA) that assesses potential operational and construction noise and vibration impacts to sensitive receivers and shall include;

- An assessment of operational noise from the development / project following the guidelines contained in the *NSW Industrial Noise Policy*,
- An assessment of vibration arising from the operation and construction of the development / project following the guidelines contained in the *DECC - Environmental Noise Management - Assessing Vibration: a technical guideline*,
- An assessment of road traffic noise impacts following the guidelines in the *EPA Environmental Criteria for Road Traffic Noise*,
- An assessment of construction noise against the construction noise goals formerly published as *Chapter 171 – Environmental Noise Control Manual - Noise Control Guidelines – Construction Site Noise.*

Water Quality
The environmental outcomes for the project in relation to water should be that:

- Effective erosion and sediment controls are implemented and maintained;
- There is no pollution of waters (surface and groundwater);
- The project is acceptable in terms of the achievement or protection of the relevant NSW Water Quality Objectives.

The EA should document the measures that will achieve the above outcomes. The proposal must minimise impacts of discharges to the Orara River arising from construction, installation and operation of the remediation works.

Human Health
The remediation site is immediately adjacent to the Orara River Reserve and to public vehicular & pedestrian accesses. The EA should therefore address the security of the remediation site, including measures to minimise the risk of combustion/explosion which could arise from unauthorised entry to the premises and vandalism of the hydrocarbon SVE system.

Waste and Chemicals
The environmental outcomes of the development should ensure:

- It is in accordance with the principles of the waste hierarchy and cleaner production;
- The handling, processing and storage of all waste materials generated at the premises does not have negative environmental or amenity impacts;
- The beneficial reuse of wastes generated at the premises is maximised where it is safe and practicable to do so;
- No waste disposal occurs on site except in accordance with an Environment Protection Authority licence.

The EA should state the site is to be remediated in accordance with elements of the Remediation Action Plan.

The remediation works will generate some wastes, including soil and waste activated carbon, which may be contaminated and unsuitable for reuse, disposal on site or disposal at nearby Council landfills. Therefore each waste type will need to be identified, classified and managed in accordance with the DECC's Environmental Guidelines: *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes (EPA 1999)).* Waste management principles, starting with minimisation should be applied to each stage of the project's development, including the concept design and construction stages.

If hazardous chemicals are to be stored on the premises for use, these should be identified and measures proposed to prevent their escape to the environment. The EA should address the collection and disposal of groundwater during remediation works.

The EA should address the potential impact of any landscaping on the site, post remediation. In particular the landscaping of the site must not result in increased permeation of surface water into the subsurface levels which remain contaminated and result in increased recharge of the groundwater on the site.

The applicant must have the remediation validation report audited by an accredited site auditor on the appropriateness of the works undertaken to meet the project objectives i.e. to assess all potential impacts from development on soils and groundwater and the risks posed by such disturbance before submitting the report to the EPA for approval.

Threatened Species

A field survey of the site should be conducted and documented in accordance with the Draft "Guidelines for Threatened Species Assessment (July 2005)" for any threatened species that occur on the subject site. The likely impacts on threatened species and their habitat need to be assessed, evaluated and reported on.

The EA should describe the actions that will be taken to avoid or mitigate impacts or compensate to prevent unavoidable impacts of the project on threatened species and their habitat.

Aboriginal and Cultural Heritage

The EA should address and document the information requirements set out in the draft DECC document "*Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation*", involving surveys and consultation with the Aboriginal community.

The assessment will need to identify the nature and extent of impacts on any Aboriginal cultural heritage values across the project site. The extent and significance of this site will need to be assessed and preferably any development in this area would avoid disturbance of the areas eg Aboriginal cultural heritage.

The EA must describe the actions that will be taken to avoid or mitigate impacts or compensate to prevent unavoidable impacts of the project on Aboriginal 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.

Attachment B – Guidance Material

1. Assessing Environmental Impacts

Water quality

- National Water Quality Management Strategy: Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZECC and ARMCANZ 2000).
- NWQMS Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC 2000).
- Healthy Rivers Commission Report into Coastal Lakes and Statement of Joint Intent.
- Independent Inquiry into the Clarence River System: Final Report. Author: Healthy Rivers Commission of NSW and Statement of Joint Intent.
- The relevant targets within the State Water Management Outcomes Plan.
- National Environment Protection (Assessment of Site Contamination) Measure 1999 – Investigation levels for soil and groundwater.
- Australian Drinking Water Guidelines.

Wastewater

- National Water Quality Management Strategy: Guidelines for Sewerage Systems - Effluent Management (ARMCANZ/ANZECC 1997).
- National Water Quality Management Strategy: Australian Guidelines for Water recycling. Managing Health and Environmental Risks (NRMMC/EPHC 2006).
- Environmental Guidelines – Use of Effluent by Irrigation (NSW DEC 2004).
- Environment and Health Protection Guidelines: 'Onsite Sewage Management for Single Households', February 1998 (Silver Book).

Stormwater

- Managing Urban Stormwater: Soils and Construction (NSW Landcom, 2004).
- Managing Urban Stormwater: Source Control (EPA 1998).
- Managing Urban Stormwater: Treatment Techniques (EPA 1998).

Contaminated Land

- Managing Land Contamination: Planning Guidelines - SEPP55 - Remediation of Land, Department of Urban Affairs and Planning and NSW EPA, 1998:
- Contaminated Sites – Guidelines for Consultants Reporting on Contaminated Sites (Environment Protection Authority (EPA) 1997).
- Contaminated Sites – Guidelines on Significant Risk of Harm and Duty to Report (EPA, 1999).

Noise and vibration

- NSW Industrial Noise Policy (EPA, 1999).
- NSW Environmental Criteria for Road Traffic Noise (EPA, 1999).
- Chapter 171 Noise Control Guideline, Construction Site Noise, Environmental Noise Control Manual, 1994.

Air quality

- Protection of the Environment Operations (Clean Air) Regulation 2002.
- Approved Methods for the Sampling and Analysis of Air Pollutants in NSW.
- Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales.
- Technical Framework - Assessment and Management of Odour from Stationary Sources in NSW.

2. *Assessing Threatened Species Impacts*

- Draft Guidelines For Threatened Species Assessment (DECC, July 2005).
- DECC Threatened Species Website (http://www.environment.nsw.gov.au/threatspec/index.htm)

3. Assessing Aboriginal Cultural Heritage Impacts

- Draft Guidelines For Aboriginal Cultural Heritage Impact Assessment and Community Consultation – (DECC, July 2005).
- Interim Community Consultation Requirements for Applicants http://www3.environment.nsw.gov.au/npws.nsf/Content/Protecting+Aboriginal+objects+and+places.
- Aboriginal Cultural Heritage Standards and Guidelines Kit - Available shortly on-line through DECC's webpage.
