Secretary's Environmental Assessment Requirements

State Significant Infrastructure

Section 115Y of the *Environmental Planning and Assessment Act 1979*

Application Number	SSI 17_8272
Project	Western Slopes Gas Pipeline
Location	From the Newell Highway south of Narrabri to Bundure approximately 100km west of Condobolin, NSW
Proponent	APA Western Slopes Pipeline Pty Limited
Date of Issue	12 May 2017
General Requirements	The Environmental Impact Statement (EIS) for the project must comply with the requirements in Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*. In particular, the EIS must include: • a stand-alone executive summary; • a full description of the project, including: – details of construction, operation and decommissioning, including any proposed staging of the project or refurbishing of infrastructure over time; – all infrastructure and facilities, such as mainline valves, scraper and meter stations, construction compounds, access roads, and road upgrades (including any infrastructure that would be required for the project, but the subject of a separate approvals process); – site plans and maps at an adequate scale with dimensions showing: o the location and dimensions of all project components including coordinates in latitude / longitude; o existing infrastructure, land use, and environmental features in the vicinity of the project (including any other existing, approved or proposed infrastructure in the region); and o the project corridor that has been assessed, including any allowance for micro-siting and identification of the key environmental constraints that have been considered in the design of the project; - details of the progressive rehabilitation of the site during and following construction and decommissioning of the pipeline infrastructure; - the likely interactions between the project and any other existing, approved or proposed major resource or infrastructure project in the vicinity of the site, including the Narrabri Gas Project and the Inland Rail Project; • justification as to why the proposed project is preferred over any other alternatives; • a list of any approvals that must be obtained before the project may commence; • an assessment of the likely impacts of the project on the environment, focussing on the specific issues identified below, including: – a description of the existing environment likely to be affected by the project, using sufficient baseline data; – an assessment of the likely impacts of all stages of the project, including any cumulative impacts, taking into consideration any relevant legislation, environmental planning instruments, guidelines, policies, plans and industry codes of practice;

	– a description of the measures that would be implemented to avoid, mitigate and/or offset residual impacts of the project, and the likely effectiveness of these measures; and – a description of the measures that would be implemented to monitor and report on the environmental performance of the project if it is approved; • a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS; • consideration of the project against all relevant environmental planning instruments*;* and • the reasons why the project should be approved having regard to biophysical, economic and social considerations, including the principles of ecologically sustainable project. While not exhaustive, Attachment 1 contains a list of some of the environmental planning instruments, guidelines, policies, and plans that may be relevant to the environmental assessment of this project. The EIS must be accompanied by a signed report from a suitably qualified expert that includes an accurate estimate of the capital investment value (as defined in Clause 3 of the *Environmental Planning and Assessment Regulation 2000*) of the project, including details of all the assumptions and components from which the capital investment value calculation is derived. The EIS must also address the requirements of the Commonwealth Department of the Environment and Energy issued in accordance with the Bilateral Agreement under the *Environment Protection and Biodiversity Conservation Act 1999* (see Attachment 2).
Key Issues	The EIS must address the following specific issues with the level of assessment of likely impacts proportionate to the significance of, or degree, of impact on, the issue, within the context of the project location and the surrounding environment: • **Water and Soils**– including: - a description of water demand, a breakdown of water supplies and the measures to minimise water use; - an assessment of the likely impacts of the project on the quantity and/or quality of the region's surface, groundwater and soil resources, having regard to the EPA's and DPI's requirements (see Attachment 2); - an assessment of the likely impacts of the project on watercourses, riparian land, water related infrastructure and other water users, and soil resources - including use and discharge of water during construction, commissioning and maintenance of the pipeline infrastructure; - description of construction erosion and sediment controls including how project on areas of erosion, salinity or acid-sulphate risk, including steep gradient land or erodible soils types, would be managed and any contingency requirements to address residual impacts; and - an assessment of the potential flooding impacts of the project, having regard to the OEH's requirements (see Attachment 3); • **Biodiversity** – including: - an assessment of the biodiversity values and the likely biodiversity impacts of the project in accordance with the *Framework for Biodiversity Assessment* (OEH, 2014), unless otherwise agreed by OEH, and having regard to the OEH's requirements (see Attachment 3); - impacts on koalas or their habitat in accordance with the requirements in *State Environmental Planning Policy No. 44 – Koala Habitat Protection;*

	- a detailed description of the proposed regime for minimising, managing and reporting on the biodiversity impacts of the project over time; - a strategy to offset any residual impacts of the project in accordance with the *NSW Biodiversity Offsets Policy for Major Projects* (OEH, 2014), unless otherwise agreed by OEH; • **Heritage** – including: - an assessment of the likely Aboriginal and historic heritage (cultural and archaeological) impacts of the project, having regard to OEH's requirements (see Attachment 2); and - adequate consultation with Aboriginal stakeholders having regard to the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (OEH, 2010); • **Air Quality** – including: - an assessment of the likely air quality impacts of the project in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (EPA, 2016), and having regard to EPA's requirements (see Attachment 3); - demonstrated ability to comply with the relevant regulatory framework, specifically the *Protection of the Environment Operations Act 1997* and the *Protection of the Environment Operations (Clean Air) Regulation* 2010*;* and - an assessment of the likely greenhouse gas impacts of the project; • **Noise and Vibration** – including: - an assessment of the likely construction noise impacts of the project under the *Interim Construction Noise Guideline* (DECCW, 2009); - an assessment of the likely operational noise impacts of the project under the *NSW Industrial Noise Policy (EPA, 2000)*; - an assessment of the likely road noise impacts of the project under the *NSW Road Noise Policy* (EPA, 2011); and - an assessment of the likely vibration amenity and structural impacts of the project under *Assessing Vibration: A Technical Guideline* (DEC. 2006) and *German Standard DIN 4150-3 Structural Vibration – effects of vibration on structures*; and - where blasting is required during construction, an assessment of blast impacts in accordance with relevant guidelines (see Attachment 1); • **Transport** – including: - details of traffic types and volumes likely to be generated by the project; - an assessment of the likely transport impacts of the project on the capacity, condition, safety and efficiency of the road network, in particular heavy vehicles, oversize/ over-mass vehicles and traffic associated with worker accommodation facilities, having regard to RMS and local council requirements (see Attachment 3); and - details of measures to mitigate and / or manage potential impacts including a schedule of all required road upgrades, road maintenance contributions, and any other traffic control measures, developed in consultation with the relevant road authority; • **Visual** – including: - an assessment of the likely visual impacts of the project on private landowners in the vicinity of the project, key vantage points in the public domain, and the Dark Sky Region having regard to the *Dark Sky Planning Guideline* (DPE, 2016)*,* including consultation with the Director of the Siding Springs Observatory; • **Hazards and Risks** – including: - an assessment of the hazards and risk impacts likely to be associated with the project, including gas leaks and transport, handling and management of dangerous goods, to determine the potential for offsite impacts, prepared generally consistent with the approach outlined in the Department's *Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis* (DoP, 2011), *Multi-level Risk Assessment* (DoP, 2011) and demonstrate the proposal would comply

	with the criteria set out in *Hazardous Industry Planning Paper No. 4 – Risk Criteria for Land Use Safety Planning* (DoP, 2011) and with reference to applicable Australian Standards (including AS2885 Pipelines – Gas and Liquid Petroleum - Operation and Maintenance); and - on-going maintenance and safety management of the project, including potential impacts on and from bushfires and floods; • **Social & Economic** – including: - an assessment of the likely social impacts of the project, paying particular attention to potential impacts from workers accommodation facilities; - an assessment of the demand for the provision of local infrastructure, services and housing generated by the project including consideration of developer and community enhancement contributions; and - an assessment of the likely impacts on significant mineral resources including any operating mines, known mineral or petroleum resources, and exploration activities, having regard to DRE's (now Division of Resources and Geosciences within the Department) requirements (see Attachment 3); • **Waste Management** – including: - identification, quantification and classification of the likely waste streams likely to be generated during construction and operation, and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste.
Consultation	During the preparation of the EIS, you must establish and operate a Community Consultative Committee (CCC) for the project in accordance with the *Community Consultative Committee Guidelines State Significant Projects November 2016.* Given the length of the pipeline, the CCC may be operated as two committees under a single chairperson. You should also consult with relevant local, State or Commonwealth Government authorities, infrastructure and service providers, community groups and affected landowners (including holders or applicants of mineral exploration licences). The EIS must describe the consultation that was carried out, identify the issues raised during this consultation (including by the CCC), and explain how these issues have been addressed in the EIS.
Further consultation after 2 years	If an EIS for the project is not lodged within 2 years of the issue date of these Environmental Assessment Requirements, the Applicant must consult further with the Secretary in relation to the preparation of the EIS.

ATTACHMENT 1

Environmental Planning Instruments, Policies, Guidelines & Plans

Water	
Water Sharing Plans	Relevant Water Sharing Plans along the pipeline route
Groundwater	NSW State Groundwater Policy Framework Document and component policies (DPI)
	NSW Aquifer Interference Policy 2012 (DPI)
	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
Flooding	Floodplain Project Manual (OEH)
	Floodplain Risk Management Guideline (OEH)
Surface Water	NSW State Rivers and Estuary Policy (DPI Water)
	NSW Government Water Quality and River Flow Objectives at http://www.environment.nsw.gov.au/ieo/
	Using the ANZECC Guideline and Water Quality Objectives in NSW (DEC, 2006)
	National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DECC, 2008)
	Managing Urban Stormwater: Soils & Construction (Landcom)
	Technical Guidelines: Bunding & Spill Management (EPA)
	NSW Guidelines for Controlled Activities (various) (DPI)
	NSW Government Water Quality and River Flow Environmental Objectives for the water catchments along the pipeline route.
Land and Soils	
	The land and soil capability assessment scheme: Second approximation (OEH)
	Guidelines for Surveying Soil and Land Resources (CSIRO)
	Australian Soil and Land Survey Handbook CSIRO)
	Soil and Landscape Issues in Environmental Impact Assessment (DPI)
	Primefact 1063: Infrastructure proposals on rural land (DPI)
	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC)
Biodiversity	
	NSW Biodiversity Offset Policy for Major Projects (OEH, 2014)
	Framework for Biodiversity Assessment (OEH, 2014)
	BioBanking Assessment Methodology (OEH)
	Policy and Guidelines for Fish Habitat Conservation and Management – Update (DPI, 2013)
	Threatened Species Survey and Assessment Guidelines (various –OEH)
	Environmental Offsets Policy (Commonwealth DoEE)
	NSW State Groundwater Dependent Ecosystem Policy (DPI Water)
	Risk Assessment Guidelines for Groundwater Dependent Ecosystems (DPI Water)
Heritage	
	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)
	Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH, 2011)
	Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW, 2010)

	Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW (OEH)
	NSW Heritage Manual (Heritage Office and Department of Urban Affairs and Planning , 1994)
	Assessing Heritage Significance (NSW Heritage Office, 2001)
	Statements of Heritage Impact (Heritage Office and Department of Urban Affairs and Planning , 2002)
Air	
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA 2016)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC, 2005)
	Technical Framework – Assessment and Management of Odour from Stationary Sources in NSW (DEC, 2006)
	National Greenhouse Accounts Factors (Commonwealth)
Noise, Vibration and Blasting	
	NSW Industrial Noise Policy and associated Application Notes (EPA)
	NSW Road Noise Policy and associated Application Notes (EPA)
	Interim Construction Noise Guideline (DECCW, 2009)
	Assessing Vibration: a Technical Guideline (DEC, 2006)
	German Standard DIN 4150-3: Structural Vibration – effects of vibration on structures
	Technical Basis for Guidelines to Minimise Annoyance Due to Blasting Overpressure and Ground Vibration (ANZECC, 1990)
Transport	
	Guide to Traffic Generating Projects (RMS)
	Road Design Guide (RMS) & relevant Austroads Standards
	Austroads Guide to Traffic Management Part 12: Traffic Impacts of Project
Lighting and Visual	
	Dark Sky Planning Guideline: Protecting the observing conditions at Siding Spring
	AS4282-1997 Control of the obtrusive effects of outdoor lighting
Hazards and Risks	
	State Environmental Planning Policy No. 33 – Hazardous and Offensive Project
	Hazardous and Offensive Project Application Guidelines – Applying SEPP 33
	Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis
	Planning for Bushfire Protection (NSW RFS)
Waste	
	Waste Classification Guidelines (EPA)
Environmental Planning Instruments – General	
	State Environmental Planning Policy (State and Regional Project) 2011
	State Environmental Planning Policy (Infrastructure) 2007
	State Environmental Planning Policy (Rural Lands) 2008
	State Environmental Planning Policy No. 55 – Remediation of Land
	State Environmental Planning Policy No. 44 – Koala Habitat Protection
	Relevant Local Environmental Plans along the pipeline route
Consultation	
	Community Consultative Committee Guidelines for State Significant Projects (DPE)

ATTACHMENT 2

EPBC ACT - ASSESSMENT REQUIREMENTS

Guidelines for preparing Environment Impact Statement relevant to the EPBC Act for proposals being assessed under the NSW Bilateral.

WESTERN SLOPES PIPELINE, NSW (EPBC 2017/7894)

Introduction

1. These guidelines provide information on assessment requirements in relation to matters of national environmental significance (MNES) in accordance with the *New South Wales Bilateral Agreement relating to environmental assessment (February 2015)*. To meet requirements, the project must be assessed in the manner specified in Schedule 1 to that agreement including that the assessment documentation contains:
    i. An assessment of all impacts that the action is likely to have on each matter protected by a provision of Part 3 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).
    ii. Enough information about the proposal and its relevant impacts to allow the Commonwealth Minister to make an informed decision on whether or not to approve.
    iii. Information addressing the matters outlined in Schedule 4 of the *Environment Protection and Biodiversity Conservation Regulations (2000)*.

2. In the circumstance that a proposal has been determined to be a 'controlled action' requiring full assessment, the decision will identify which MNES protected under the EPBC Act have triggered for assessment. These are called the controlling provisions. Proponents are only required to provide an assessment of protected matters under the controlling provisions that have been triggered. Following is the full list of possible controlling provisions:

    World Heritage Properties (sections 12 and 12A)

    National Heritage Places (sections 15B and 15C)

    wetlands of international importance (sections 16 and 17B)

    listed threatened species and communities (sections 18 and 18A)

    listed migratory species (sections 20 and 20A)

    protection of the environment from nuclear actions (sections 21 and 22)

    A water resource, in relation to coal seam gas development and large coal mining development (sections 24D and 24E)

    Commonwealth marine areas (sections 23 and 24A) (for actions outside the Commonwealth marine area that may impact the environment in the Commonwealth marine area)

    The environment on Commonwealth land (for actions outside Commonwealth Land that may impact on the environment on Commonwealth Land).

3. The proponent must consider each of the protected matters under the triggered controlling provisions that may be significantly impacted by the development. The proponent will be informed in the assessment requirements issued by the Department of Planning and Environment, which protected matters i.e. species and communities, World Heritage values etc, are considered likely to be significantly impacted. Note that this may not be a complete list and it is the responsibility of the proponent to undertake an analysis of the significance of the relevant impacts and ensure all protected matters that are likely to be significantly impacted are assessed for the Commonwealth Minister's consideration.

Relevant Regulations

4. Assessment documentation prepared for the purposes of approval under the EPBC Act must, in addition to providing sufficient information for a decision, address the matters outlined in Schedule 4 of the *Environment Protection and Biodiversity Conservation Regulations 2000 (*Cth). The following includes requirements that have been identified as additional to the requirements prescribed in Schedule 2 of the NSW *Environmental Planning and Assessment Regulations 2000*. Proponents are advised to check that requirements in Schedule 4 of the EPBC Regulations have been appropriately addressed. http://www.austlii.edu.au/au/legis/cth/consol_reg/epabcr2000697/

General Requirements

Project Description

5. The title of the action, background to the development of the action and current status.
6. The precise location and description of all works to be undertaken, structures to be built or elements of the action (including the final pipeline alignment, above-ground infrastructure and facilities, and access tracks) that may have impacts on MNES.
7. The footprint of all works, structures and elements of the action must be identified by co-ordinates and/or map(s) at an appropriate scale.
8. How the action relates to any other actions that have been, or are being taken in the region affected by the action.
9. How the works are to be undertaken and design parameters for those aspects of the structures or elements of the action that may have relevant impacts on MNES.

Impacts

10. The EIS must include a description of the environment and land uses within the pipeline alignment (i.e. 30m wide easement/right-of-way) and study area (i.e. 10km wide buffer around pipeline alignment as per referral boundary), and other surrounding areas that may be affected by the action.
11. The EIS must include an assessment of the relevant impacts of the action on the matters protected by the controlling provisions. Impacts during the construction, operational and the decommissioning phases of the project must be addressed, including:
    i. a description and detailed assessment of the nature and extent of the likely direct, indirect and consequential impacts, including short term and long term relevant impacts;
    ii. a statement whether any relevant impacts are likely to be unknown, unpredictable or irreversible;
    iii. analysis of the significance of the relevant impacts; and
    iv. any technical data and other information used or needed to make a detailed assessment of the relevant impacts.
12. The EIS must identify each EPBC-listed threatened species and community likely to be significantly impacted by the action.
13. For each of the EPBC-listed threatened species and communities likely to be significantly impacted by the action, the EIS must provide a separate:
    i. description of the habitat (including suitable breeding habitat, suitable foraging habitat, important populations and habitat critical for survival), with consideration of, and reference to, any relevant Commonwealth guidelines and policy statements including listing advice, conservation advice and recovery plans;

ii. details of the scope, timing and methodology for studies or surveys used and how they are consistent with (or justification for divergence from) published Australian Government guidelines and policy statements;

iii. for species, map(s) showing the location of previous and current records of the speices and the location and extent of suitable habitat within the pipeline alignment and study area. The EIS must clearly define the vegetation types (PCTs/BVTs) and vegetation zones that provide suitable habitat for threatened species.

iv. for communities, map(s) showing the location and extent of the ecological community within the pipeline alignment and study area. The EIS must clearly define the vegetation types (PCTs/BVTs) and vegetation zones that are equivalent to EPBC-listed ecological communities.

v. description of the relevant impacts of the action having regard to the full national extent of the species or community's range;

vi. description of the specific proposed avoidance and mitigation measures to deal with relevant impacts of the action;

14. The EIS must address all EPBC-listed threatened species and communtites that are known to occur, likely to occur or have potential to occur within the study area as identified in the referral form (section 2.4.1) and **Appendix 1**.

15. If the conclusion is made that the proposed action is unlikely to have a significant impact on a threatened species or ecological community, the EIS must provide evidence why they will not be significantly impacted in accordance with the *Matters of National Environmental Significance - Significant impact guidelines 1.1* (2013) EPBC Act.

16. The EIS should identify and address cumulative impacts, where potential project impacts are in addition to: (1) existing impacts of other activities; and (2) possible impacts from known potential future expansions or developments by the proponent and other proponents in the region (particularly, the Narrabri Gas Project).

Avoidance, mitigation and offsetting

17. The EIS must provide information on proposed avoidance and mitigation measures to manage the relevant impacts of the action. Where appropriate, each project phase (construction, operation, decommission) should be addressed separately, including:

i. a description, and an assessment of the expected or predicted effectiveness of the mitigation measures,

ii. any statutory or policy basis for the mitigation measures, or available best-practice;

iii. the likely cost of the proposed mitigation measures;

iv. an outline of an environmental management plan that sets out the framework for continuing management, mitigation and monitoring programs for the relevant impacts of the action, including any provisions for independent environmental auditing;

v. the name of the agency responsible for endorsing or approving each mitigation measure or monitoring program.

18. The EIS must include any feasible alternatives to the action to the extent reasonably practicable, including a comparative description of the impacts of each alternative on threatened species and

communities, and sufficient detail to make clear why any alternative is preferred to another. The short, medium and long-term advantages and disadvantages of the options should be discussed.

19. The EIS must identify the significant residual adverse impacts likely to occur after the proposed activities to avoid and mitigate all impacts on EPBC protected matters are taken into account;

20. Where a significant residual adverse impact to a relevant protected matter is considered likely, the EIS must provide information on the proposed offset strategy, including discussion of the conservation benefit associated with the proposed offset strategy.

    i. a description of any offsets proposed to address residual adverse significant impacts and how these offsets will be established.

    ii. details of how the current published NSW Framework for Biodiversity Assessment (FBA) has been applied in accordance with the objects of the EPBC Act to offset significant residual adverse impacts;

    iii. details of the offset package to compensate for significant residual impacts in accordance with the FBA and/or mapping and descriptions of the extent and condition of the relevant habitat and/or threatened communities occurring on proposed offset sites;

    iv. if BBAM is used the EIS must include the credit report and a reference table for protected matters as set out at **Appendix 2**.

    [Note: For the purposes of approval under the EPBC Act, it is a requirement that offsets directly contribute to the ongoing viability of the specific protected matter impacted by a proposed action and deliver an overall conservation outcome that improves or maintains the viability of the MNES i.e. 'like for like'. In applying the FBA, residual impacts on EPBC Act listed threatened ecological communities must be offset with Plant Community Type(s) (PCT) that are ascribed to the specific EPBC listed ecological community. PCTs from a different vegetation class will not generally be acceptable as offsets for EPBC listed communities.]

21. Any significant residual impacts not addressed by the FBA may need to be addressed in accordance with the Environment Protection and Biodiversity Conservation Act 1999 Environmental Offset Policy. http://www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy.

22. For each of the relevant matters likely to be significantly impacted by the action, the EIS must provide reference to, and consideration of, relevant Commonwealth guidelines and policy statements including any:

    i. conservation advice or recovery plan for the species or community,

    ii. relevant threat abatement plan for a process that threatens the species or community

    iii. strategic assessment (i.e. strategic assessment of some NSW road and traffic management works)

[Note: the relevant guidelines and policy statements for each species and community are available from the Department of the Environment Species Profiles and Threats Database. http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl]

Other approvals and conditions

23. Information in relation to any other approvals or conditions required must include the information prescribed in Schedule 4 Clause 5 (a) (b) (c) and (d) of the EPBC Regulations 2000.

Other information

24. The EIS must contain details of any consultation about the action that has already taken place, and any documented response to, or result of, the consultation.
25. The EIS must contain details of the projected economic costs and benefits of the project, including the basis for their estimation through cost/benefit analysis or similar studies.
26. The EIS must include a discussion on how consideration has been given to the objects of the EPBC Act, the principles of ecologically sustainable development, and the precautionary principle.

Environmental Record of person proposing to take the action

27. Information in relation to the environmental record of a person proposing to take the action must include details as prescribed in Schedule 4 Clause 6 of the EPBC Regulations 2000.

Information Sources

28. For information given in an EIS, the EIS must state the source of the information, how recent the information is, how the reliability of the information was tested; and what uncertainties (if any) are in the information.

REFERENCES

- *Environment Protection and Biodiversity Conservation Act 1999* - section 51-55, section 96A(3)(a)(b), 101A(3)(a)(b), section 136, section 527E
- *Environment Protection and Biodiversity Conservation Regulations 2000 Schedule 4*
- NSW Assessment Bilateral Agreement (2015) - Item 18.1, Item 18.5, Schedule 1
- *Matters of National Environmental Significance - Significant impact guidelines 1.1* (2013) EPBC Act
- *Environment Protection and Biodiversity Conservation Act 1999* Environmental Offsets Policy October 2012

Appendix 1

RELEVANT THREATENED SPECIES AND ECOLOGICAL COMMUNITIES

The controlled action is considered likely to have a significant impact on the following listed threatened species and ecological communities:

- Brigalow (*Acacia harpophylla* dominant and co-dominant) – endangered
- Weeping Myall Woodlands – endangered
- Coolibah - Black Box Woodlands of the Darling Riverine Plains and the Brigalow Belt South Regions – endangered
- Grey Box (*Eucalyptus microcarpa*) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia – endangered

The controlled action is considered to potentially have a significant impact on the following listed threatened species and ecological communities:

- Australasian Bittern (*Botaurus poiciloptilus*) – critically endangered
- Australian Painted Snipe (*Rostratula australis*) – endangered
- Painted Honeyeater (*Grantiella picta*) – vulnerable
- Mallefowl (*Leipoa ocellata*) – vulnerable
- Red-lored Whistler (*Pachycephala rufogularis*) – vulnerable
- Superb Parrot (*Polytelis swainsonii*) – vulnerable
- Corben's Long-eared Bat (*Nyctophilus corbeni*) – vulnerable
- Koala (*Phascolarctos cinereus*) combined populations of Qld, NSW and ACT – vulnerable
- Pilliga Mouse (*Pseudomys pilligaensis*) – vulnerable
- Five-clawed Worm-skink (*Anomalopus mackayi*) – vulnerable
- Trout Cod (*Maccullochella macquariensis*) – endangered
- Murray Cod (*Maccullochella peelii*) – vulnerable
- *Acacia curranii* (Curly-bark Wattle) – vulnerable
- *Androcalva procumbens* – vulnerable
- *Austrostipa metatoris* – vulnerable
- *Dicanthium setosum* (Bluegrass) – vulnerable
- *Eriocaulon australasicum* (Austral Pipewort) – endangered
- *Lepidium aschersonii* (Spiny Peppercress) – vulnerable
- *Swainsona murrayana* (Slender Darling-pea) – vulnerable
- *Tylophora linearis* – endangered

Appendix 2

TABLE 1: BBAM CREDIT REPORT / PROTECTED MATTERS REFERENCE TABLE

EPBC species or community	Extent of impact (ha or individuals)	PCTs	Credits Required

ATTACHMENT 3

AGENCIES' CORRESPONDENCE

DOC17/186862
SSI 17_8272

Mr Stephen Shoesmith
Senior Planning Officer
Resource Assessments and Business Systems
Department of Planning and Environment
GPO Box 39
SYDNEY 2001

Dear Stephen

RE: SEARs for the Western Slopes Gas Pipeline

I refer to your email dated 20 March 2017 seeking input into the Department of Planning and Environment Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Assessment for the Western Slopes Gas Pipeline.

The Office of Environment and Heritage (OEH) understands that the proposal involves the construction of approximately 450 kilometres of buried, steel gas transmission line between the Narrabri Gas Project (the Leewood processing facility) and the existing Moomba Sydney Gas Pipeline at the Bundure mainline valve station, approximately 100 kilometres west of Condobolin. The project may also include a range of above-ground infrastructure including mainline valves, scraper stations, meter stations, pressure let-down facilities, communication towers, marker signs, temporary construction worker campsites and temporary laydown areas.

OEH has considered your request and provides SEARs for the proposed development in **Attachments A**, **B**, **C, D** and **E**.

OEH recommends the EIS needs to appropriately address the following, if applicable:

1. Biodiversity and offsetting
2. Aboriginal cultural heritage
3. Water and soils
4. Flooding.

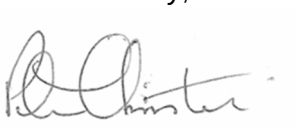
Please note that the NSW Biodiversity Offsets Policy for Major Projects http://www.environment.nsw.gov.au/resources/biodiversity/140672biopolicy.pdf is now being implemented. The policy provides a standard method for assessing impacts of major projects on biodiversity and determining offsetting arrangements. The policy is underpinned by the Framework for Biodiversity Assessment (FBA) http://www.environment.nsw.gov.au/resources/biodiversity/140675fba.pdf which contains the assessment methodology that is adopted by the policy to quantify and describe the impact

PO Box 2111 Dubbo NSW 2830
Level 1 48-52 Wingewarra Street Dubbo NSW
Tel: (02) 6883 5330 Fax: (02) 6884 8675
ABN 30 841 387 271
www.environment.nsw.gov.au

assessment requirements and offset guidance that applies to Major Projects. The FBA must be used by a proponent to assess all biodiversity values on the development site.

If you have any questions regarding this matter further please contact David Geering on 02 6883 5335.

Yours sincerely,



PETER CHRISTIE
A/ Director North West
Regional Operations Division

31 March 2017

Contact officer: David Geering
02 6883 5335

Attachment A - Standard Environmental Assessment Requirements
Attachment B - Project Specific Environmental Assessment Requirements
Attachment C - Threatened Species and Threatened Ecological Communities Which Require Further Consideration
Attachment D - Critically Endangered Entities Specifically Excluded From Requiring Further Consideration
Attachment E - Guidance Material

Attachment A – Standard Environmental Assessment Requirements

Biodiversity
1. Biodiversity impacts related to the proposed Western Slopes Gas Pipeline are to be assessed and documented in accordance with the Framework for Biodiversity Assessment, unless otherwise agreed by OEH, by a person accredited in accordance with s142B(1)(c) of the *Threatened Species Conservation Act 1995.*
Aboriginal Cultural Heritage
2. The EIS must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the Western Slopes Gas Pipeline and document these in the EIS. This may include the need for surface survey and test excavation. The identification of cultural heritage values should be guided by the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011) and consultation with OEH regional officers.
3. Where Aboriginal cultural heritage values are identified, consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the Western Slopes Gas Pipeline.
4. Impacts on Aboriginal cultural heritage values are to be assessed and documented in the EIS. The EIS must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the EIS must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.
Historic Heritage
5. The Western Slopes Gas Pipeline must provide a heritage assessment including but not limited to an assessment of impacts to *State and local heritage* including conservation areas, natural heritage areas, places of Aboriginal heritage value, buildings, works, relics, gardens, landscapes, views, trees should be assessed. Where impacts to State or locally significant heritage items are identified, the assessment shall: a. outline the proposed mitigation and management measures (including measures to avoid significant impacts and an evaluation of the effectiveness of the mitigation measures) generally consistent with the NSW Heritage Manual (1996), b. be undertaken by a suitably qualified heritage consultant(s) (note: where archaeological excavations are proposed the relevant consultant must meet the NSW Heritage Council's Excavation Director criteria), c. include a statement of heritage impact for all heritage items (including significance assessment), d. consider impacts including, but not limited to, vibration, demolition, archaeological disturbance, altered historical arrangements and access, landscape and vistas, and architectural noise treatment (as relevant), and e. where potential archaeological impacts have been identified develop an appropriate archaeological assessment methodology, including research design, to guide physical

archaeological test excavations (terrestrial and maritime as relevant) and include the results of these test excavations.

Water and Soils

6. The EIS must map the following features relevant to water and soils including:
   a. Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map).
   b. Rivers, streams, wetlands, estuaries (as described in Appendix 2 of the Framework for Biodiversity Assessment).
   c. Groundwater.
   d. Groundwater dependent ecosystems.
   e. Proposed intake and discharge locations.

7. The EIS must describe background conditions for any water resource likely to be affected by the Western Slopes Gas Pipeline , including:
   a. Existing surface and groundwater.
   b. Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations.
   c. Water Quality Objectives (as endorsed by the NSW Government http://www.environment.nsw.gov.au/ieo/index.htm) including groundwater as appropriate that represent the community's uses and values for the receiving waters.
   d. Indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the ANZECC (2000) Guidelines for Fresh and Marine Water Quality and/or local objectives, criteria or targets endorsed by the NSW Government.

8. The EIS must assess the impacts of the Western Slopes Gas Pipeline on water quality, including:
   a. The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the Western Slopes Gas Pipeline protects the Water Quality Objectives where they are currently being achieved, and contributes towards achievement of the Water Quality Objectives over time where they are currently not being achieved. This should include an assessment of the mitigating effects of proposed stormwater and wastewater management during and after construction.
   b. Identification of proposed monitoring of water quality.

9. The EIS must assess the impact of the Western Slopes Gas Pipeline on hydrology, including:
   a. Water balance including quantity, quality and source.
   b. Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas.
   c. Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems.
   d. Impacts to natural processes and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches).
   e. Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water.
   f. Mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options.

g. Identification of proposed monitoring of hydrological attributes.

Flooding

10. The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:
    a. Flood prone land
    b. Flood planning area, the area below the flood planning level.
    c. Hydraulic categorisation (floodways and flood storage areas).

11. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 1 in 10 year, 1 in 100 year flood levels and the probable maximum flood, or an equivalent extreme event.

12. The EIS must model the effect of the proposed Western Slopes Gas Pipeline (including fill) on the flood behaviour under the following scenarios:
    a. Current flood behaviour for a range of design events as identified in 11 above. This includes the 1 in 200 and 1 in 500 year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.

13. Modelling in the EIS must consider and document:
    a. The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood.
    b. Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazards and hydraulic categories.
    c. Relevant provisions of the NSW Floodplain Development Manual 2005.

14. The EIS must assess the impacts on the proposed Western Slopes Gas Pipeline on flood behaviour, including:
    a. Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure.
    b. Consistency with Council floodplain risk management plans.
    c. Compatibility with the flood hazard of the land.
    d. Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.
    e. Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site.
    f. Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.
    g. Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the SES and Council.
    h. Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the SES and Council.
    i. Emergency management, evacuation and access, and contingency measures for the development considering the full range or flood risk (based upon the probable maximum flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the SES.

j. Any impacts the development may have on the social and economic costs to the community as consequence of flooding.

Attachment B – Project Specific Environmental Assessment Requirements

Biodiversity

A. Impacts on the species/populations/ecological communities listed in **Attachment C** will require further consideration and provision of the information specified in s9.2 of the Framework for Biodiversity Assessment.

B. The EIS must identify:

   a. In the case of a project that adjoins, is in the immediate vicinity or upstream of NPWS estate, the assessment of impacts must address the matters outlined in the *Guidelines for developments adjoining land and water managed by DECCW* (DECCW 2010) and include:

      i. The nature of the impacts, including direct and indirect impacts.

      ii. The extent of the direct and indirect impacts.

      iii. The duration of the direct and indirect impacts.

      iv. The objectives of the reservation of the land.

   b. Measures proposed to prevent, control, abate, minimise and manage the direct and indirect impacts including an evaluation of the effectiveness and reliability of the proposed measures.

   c. Residual impacts.

Aboriginal Cultural Heritage

C. Where the project's footprint occurs in areas identified by the EIS as sensitive ACH areas, surface surveys must be undertaken by a qualified archaeologist to determine the presence or absence of Aboriginal objects and the significance of those objects. The result of the surface survey is to inform the need for targeted subsurface test excavation to better assess the integrity, extent, distribution, nature and overall significance of the archaeological record. The results of surface surveys and test excavations undertaken at this stage are to be documented in the EIS.

D. Where the project's footprint is unknown at the submission of the EIS, point C above applies if the future footprint occurs in areas identified by the EIS as sensitive ACH areas.

E. The EIS must outline procedures to be followed if Aboriginal objects are found at any stage of the life of the Western Slopes Gas Pipeline to formulate appropriate measures to manage unforeseen impacts.

F. The EIS must outline procedures to be followed in the event Aboriginal burials or skeletal material is uncovered during construction to formulate appropriate measures to manage the impacts to this material.

Cumulative Impact

G. The cumulative impacts from all clearing activities and operations, associated edge effects and other indirect impacts on cultural heritage, biodiversity and OEH Estate need to be comprehensively assessed in accordance with the *Environmental Planning and Assessment Act 1979.*

This should include the cumulative impact of the proponent's existing and proposed development and associated infrastructure (such as access tracks etc.) as well as the cumulative impact of other developments located in the vicinity. This assessment should include consideration of both construction and operational impacts.

Attachment C – Threatened Species and Threatened Ecological Communities Which Require Further Consideration

Class	Scientific Name	Common Name	NSW Status	Comm. Status
Aves	*Anthochaera phrygia*	Regent Honeyeater	Critically Endangered	Critically Endangered
Flora	*Cyperus conicus*		Endangered	Not listed

Attachment D - Critically Endangered Entities Specifically Excluded From Requiring Further Consideration *

Class	Scientific Name	Common Name	NSW Status	Comm. Status
Aves	*Pachycephala rufogularis*	Red-lored Whistler	Critically Endangered	Vulnerable
EEC	*White Box Yellow Box Blakely's Red Gum Woodland*	White Box Yellow Box Blakely's Red Gum Woodland	Endangered Ecological Community	Critically Endangered Ecological Community
EEC	*Artesian Springs Ecological Community in the Great Artesian Basin*	Artesian Springs Ecological Community in the Great Artesian Basin	Critically Endangered Ecological Community	Endangered Ecological Community

* Further information, as detailed in section 9.2.5.2 of the FBA, is not required for the excluded entities above. However, assessment of impacts and offset requirements must still be included in the Biodiversity Assessment Report for these entities in accordance with the FBA.

Attachment E – Guidance Material

Title	Web address
Relevant Legislation	
Coastal Protection Act 1979	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+13+1979+cd+0+N
Commonwealth Environment Protection and Biodiversity Conservation Act 1999	http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/
Environmental Planning and Assessment Act 1979	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
Fisheries Management Act 1994	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N
Marine Parks Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N
National Parks and Wildlife Act 1974	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N
Protection of the Environment Operations Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
Threatened Species Conservation Act 1995	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+101+1995+cd+0+N
Water Management Act 2000	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N
Wilderness Act 1987	http://www.legislation.nsw.gov.au/viewtop/inforce/act+196+1987+FIRST+0+N
Biodiversity	
NSW Biodiversity Offsets Policy for Major Projects (OEH, 2014)	http://www.environment.nsw.gov.au/biodivoffsets/bioffsetspol.htm
Framework for Biodiversity Assessment (OEH, 2013)	http://www.environment.nsw.gov.au/resources/biodiversity/140675fba.pdf
Fisheries NSW policies and guidelines	http://www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,-guidelines-and-manuals/fish-habitat-conservation
List of national parks	http://www.environment.nsw.gov.au/NationalParks/parksearchatoz.aspx
Revocation, recategorisation and road adjustment policy (OEH, 2012)	http://www.environment.nsw.gov.au/policies/RevocationOfLandPolicy.htm
Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water (DECCW, 2010)	http://www.environment.nsw.gov.au/protectedareas/developmntadjoiningdecc.htm
Heritage	
The Burra Charter (The Australia ICOMOS charter for places of cultural significance)	http://australia.icomos.org/wp-content/uploads/The-Burra-Charter-2013-Adopted-31.10.2013.pdf
Statements of Heritage Impact 2002 (HO & DUAP)	http://www.environment.nsw.gov.au/resources/heritagebranch/heritage/hmstatementsofhi.pdf
NSW Heritage Manual (DUAP) (scroll through alphabetical list to 'N')	http://www.environment.nsw.gov.au/Heritage/publications/

Title	Web address
Aboriginal Cultural Heritage	
Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010)	http://www.environment.nsw.gov.au/resources/cultureheritage/commconsultation/09781ACHconsultreq.pdf
Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010)	http://www.environment.nsw.gov.au/resources/cultureheritage/10783FinalArchCoP.pdf
Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH 2011)	http://www.environment.nsw.gov.au/resources/cultureheritage/20110263ACHguide.pdf
Aboriginal Site Recording Form	http://www.environment.nsw.gov.au/resources/parks/SiteCardMainV1_1.pdf
Aboriginal Site Impact Recording Form	http://www.environment.nsw.gov.au/resources/cultureheritage/120558asirf.pdf
Aboriginal Heritage Information Management System (AHIMS) Registrar	http://www.environment.nsw.gov.au/contact/AHIMSRegistrar.htm
Care Agreement Application form	http://www.environment.nsw.gov.au/resources/cultureheritage/20110914TransferObject.pdf
Water and Soils	
Acid Sulphate Soils	
Acid Sulfate Soils Planning Maps via Data.NSW	http://data.nsw.gov.au/data/
Acid Sulfate Soils Manual (Stone et al. 1998)	http://www.environment.nsw.gov.au/resources/epa/Acid-Sulfate-Manual-1998.pdf
Acid Sulfate Soils Laboratory Methods Guidelines (Ahern et al. 2004)	http://www.environment.nsw.gov.au/resources/soils/acid-sulfate-soils-laboratory-methods-guidelines.pdf This replaces Chapter 4 of the Acid Sulfate Soils Manual above.
Flooding and Coastal Erosion	
Reforms to coastal erosion management	http://www.environment.nsw.gov.au/coasts/coastalerosionmgmt.htm
Floodplain development manual	http://www.environment.nsw.gov.au/floodplains/manual.htm
Guidelines for Preparing Coastal Zone Management Plans	Guidelines for Preparing Coastal Zone Management Plans http://www.environment.nsw.gov.au/resources/coasts/130224CZMPGuide.pdf
NSW Climate Impact Profile	http://climatechange.environment.nsw.gov.au/
Climate Change Impacts and Risk Management	Climate Change Impacts and Risk Management: A Guide for Business and Government, AGIC Guidelines for Climate Change Adaptation
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	www.environment.gov.au/water/publications/quality/australian-and-new-zealand-guidelines-fresh-marine-water-quality-volume-1
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	http://deccnet/water/resources/AWQGuidance7.pdf

Title	Web address
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf

NSW EPA

General Manager
NSW Department of Planning and Environment
Level 3, 23-33 Bridge Street
SYDNEY NSW 2000

Attention: Stephen Shoesmith

File Number EF13/5437
Date 31 March 2017

RE: "Western Slopes Pipeline"

I refer to your request for the Environment Protection Authority's (EPA) requirements for the Environmental Assessment (EA) in regard to the above proposal received by EPA on 20 March 2017.

The EPA has considered the details of the proposal as provided by APA Group and has identified the information it requires to assess the project and required conditions of consent in Attachment A. In summary, the EPA's key information requirements for the proposal include an adequate assessment of:

1. Air - assessment of impacts during construction particularly in relation to dust; including mitigation strategies and management of dust.

2. Noise and vibration - assessment of impacts during construction from noise and blasting related activities, including traffic noise. The assessment should address the impacts on nearby receptors and noise amenity in accordance with the NSW Industrial Noise Policy; and identify strategies to mitigate potential noise impacts.

3. Water - assessment of impacts to surface and groundwater; including proposed monitoring and mitigation measures to protect water. This must include water demand and management requirements.

4. Land - assessment of impacts to land including management of contaminated soil, sediment and erosion control and proposed management and mitigation measures. This must account for any naturally occurring elements that may cause pollution of land and/or water.

In carrying out the assessment, the proponent should refer to the relevant guidelines as listed in Attachment B and any relevant industry codes of practice and best practice management guidelines.

Please note that this response does not cover biodiversity or Aboriginal cultural heritage issues, which are the responsibility of the Office of Environment and Heritage.

It is also noted that the EPA is not a consent authority or the appropriate regulatory authority for this proposal. Whilst there is no requirement for the EPA to review a subsequent EA, the EPA would appreciate regular updates during the process. APA Group should also contact the EPA for advice regarding Environment Protection Licences if required.

If you have any queries please contact Karen Edwards on 02 6883 5337 or via email karen.edwards@epa.nsw.gov.au.

Yours sincerely,

.....

Jenny Rushton

Acting Head of Operations - Gas Regulation Branch

(by Delegation)

ATTACHMENT A: EIS REQUIREMENTS FOR

Western Slopes Pipeline

How to use these requirements

The EPA requirements have been structured in accordance with the DIPNR EIS Guidelines, as follows. It is suggested that the EIS follow the same structure:

A. Executive summary

B. The proposal

C. The location

D. Identification and prioritisation of issues

E. The environmental issues

F. List of approvals and licences

G. Compilation of mitigation measures

H. Justification for the proposal

A Executive summary

The executive summary should include a brief discussion of the extent to which the proposal achieves identified environmental outcomes.

B The proposal

1. Objectives of the proposal

- The objectives of the proposal should be clearly stated and refer to:
  a) the size and type of the operation, the nature of the processes and the products, by-products and wastes produced
  b) a life cycle approach to the production, use or disposal of products
  c) the anticipated level of performance in meeting required environmental standards and cleaner production principles
  d) the staging and timing of the proposal and any plans for future expansion
  e) the proposal's relationship to any other industry or facility.

2. Description of the proposal

General

- Outline the production process including:
  a) the environmental "mass balance" for the process – quantify in-flow and out-flow of materials, any points of discharge to the environment and their respective destinations (sewer, stormwater, atmosphere, recycling, landfill etc)
  b) any life-cycle strategies for the products.
- Outline cleaner production actions, including:
  a) measures to minimise waste (typically through addressing source reduction)
  b) proposals for use or recycling of by-products
  c) proposed disposal methods for solid and liquid waste
  d) air management systems including all potential sources of air emissions, proposals to re-use or treat emissions, emission levels relative to relevant standards in regulations, discharge points
  e) water management system including all potential sources of water pollution, proposals for re-use, treatment etc, emission levels of any wastewater discharged, discharge points, summary of options explored to avoid a discharge, reduce its frequency or reduce its impacts, and rationale for selection of option to discharge.
  f) soil contamination treatment and prevention systems.
- Outline construction works including:
  a) actions to address any existing soil contamination
  b) any earthworks or site clearing; re-use and disposal of cleared material (including use of spoil on-site)
  c) construction timetable and staging; hours of construction; proposed construction methods

d) environment protection measures, including noise mitigation measures, dust control measures and erosion and sediment control measures.

Air

- Identify all sources of air emissions from the development.
  Note: emissions can be classed as either:
  - *point (eg emissions from stack or vent) or*
  - *fugitive (from wind erosion, leakages or spillages, associated with loading or unloading, conveyors, storage facilities, plant and yard operation, vehicle movements (dust from road, exhausts, loss from load), land clearing and construction works).*
- Provide details of the project that are essential for predicting and assessing air impacts including:
  a) the quantities and physio-chemical parameters (eg concentration, moisture content, bulk density, particle sizes etc) of materials to be used, transported, produced or stored
  b) an outline of procedures for handling, transport, production and storage
  c) the management of solid, liquid and gaseous waste streams with potential for significant air impacts.

Noise and vibration

- Identify all noise sources from the development (including both construction and operation phases). Detail all potentially noisy activities including ancillary activities such as transport of goods and raw materials.
- Specify the times of operation for all phases of the development and for all noise producing activities.
- For projects with a significant potential traffic noise impact provide details of road alignment (include gradients, road surface, topography, bridges, culverts etc), and land use along the proposed road and measurement locations – diagrams should be to a scale sufficient to delineate individual residential blocks.

Water

- Provide details of the project that are essential for predicting and assessing impacts to waters:
  a) including the quantity and physio-chemical properties of all potential water pollutants and the risks they pose to the environment and human health, including the risks they pose to Water Quality Objectives in the ambient waters (as defined on http://www.environment.nsw.gov.au/ieo/index.htm, using technical criteria derived from the Australian and New Zealand Guidelines for Fresh and Marine Water Quality, ANZECC 2000)
  b) the management of discharges with potential for water impacts
  c) drainage works and associated infrastructure; land-forming and excavations; working capacity of structures; and water resource requirements of the proposal.
- Outline site layout, demonstrating efforts to avoid proximity to water resources (especially for activities with significant potential impacts eg effluent ponds) and showing potential areas of modification of contours, drainage etc.

- Outline how total water cycle considerations are to be addressed showing total water balances for the development (with the objective of minimising demands and impacts on water resources). Include water requirements (quantity, quality and source(s)) and proposed storm and wastewater disposal, including type, volumes, proposed treatment and management methods and re-use options.

Waste and chemicals

- Provide details of the quantity and type of both liquid waste and non-liquid waste generated, handled, processed or disposed of at the premises. Waste must be classified according to the *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-liquid Wastes* (NSW EPA, 1999).
- Provide details of liquid waste and non-liquid waste management at the facility, including:
  a) the transportation, assessment and handling of waste arriving at or generated at the site
  b) any stockpiling of wastes or recovered materials at the site
  c) any waste processing related to the facility, including reuse, recycling, reprocessing (including composting) or treatment both on- and off-site
  d) the method for disposing of all wastes or recovered materials at the facility
  e) the emissions arising from the handling, storage, processing and reprocessing of waste at the facility
  f) the proposed controls for managing the environmental impacts of these activities.
- Provide details of spoil disposal with particular attention to:
  a) the quantity of spoil material likely to be generated
  b) proposed strategies for the handling, stockpiling, reuse/recycling and disposal of spoil
  c) the need to maximise reuse of spoil material in the construction industry
  d) identification of the history of spoil material and whether there is any likelihood of contaminated material, and if so, measures for the management of any contaminated material
  e) designation of transportation routes for transport of spoil.
- Provide details of procedures for the assessment, handling, storage, transport and disposal of all hazardous and dangerous materials used, stored, processed or disposed of at the site, in addition to the requirements for liquid and non-liquid wastes.
- Provide details of the type and quantity of any chemical substances to be used or stored and describe arrangements for their safe use and storage.
- Reference should be made to the guidelines: *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes* (NSW EPA, 1999).

ESD

- Demonstrate that the planning process and any subsequent development incorporates objectives and mechanisms for achieving ESD, including:

an assessment of a range of options available for use of the resource, including the benefits of each option to future generations

proper valuation and pricing of environmental resources

  f) identification of who will bear the environmental costs of the proposal.

3. Rehabilitation

- Outline considerations of site maintenance, and proposed plans for the final condition of the site (ensuring its suitability for future uses).

4. Consideration of alternatives and justification for the proposal

- Consider the environmental consequences of adopting alternatives, including alternative:
  a) sites and site layouts
  b) access modes and routes
  c) materials handling and production processes
  d) waste and water management
  e) impact mitigation measures
  f) energy sources
- Selection of the preferred option should be justified in terms of:
  a) ability to satisfy the objectives of the proposal
  b) relative environmental and other costs of each alternative
  c) acceptability of environmental impacts and contribution to identified environmental objectives
  d) acceptability of any environmental risks or uncertainties
  e) reliability of proposed environmental impact mitigation measures
  f) efficient use (including maximising re-use) of land, raw materials, energy and other resources.

C The location

1. General

- Provide an overview of the affected environment to place the proposal in its local and regional environmental context including:
  a) meteorological data (eg rainfall, temperature and evaporation, wind speed and direction)
  b) topography (landform element, slope type, gradient and length)
  c) surrounding land uses (potential synergies and conflicts)
  d) geomorphology (rates of landform change and current erosion and deposition processes)
  e) soil types and properties (including erodibility; engineering and structural properties; dispersibility; permeability; presence of acid sulfate soils and potential acid sulfate soils)
  f) ecological information (water system habitat, vegetation, fauna)
  g) availability of services and the accessibility of the site for passenger and freight transport.

2. Air

- Describe the topography and surrounding land uses. Provide details of the exact locations of dwellings, schools and hospitals. Where appropriate provide a perspective view of the study area such as the terrain file used in dispersion models.
- Describe surrounding buildings that may effect plume dispersion.
- Provide and analyse site representative data on following meteorological parameters:
  a) temperature and humidity
  b) rainfall, evaporation and cloud cover
  c) wind speed and direction
  d) atmospheric stability class
  e) mixing height (the height that emissions will be ultimately mixed in the atmosphere)
  f) katabatic air drainage
  g) air re-circulation.

3. Noise and vibration

- Identify any noise sensitive locations likely to be affected by activities at the site, such as residential properties, schools, churches, and hospitals. Typically the location of any noise sensitive locations in relation to the site should be included on a map of the locality.
- Identify the land use zoning of the site and the immediate vicinity and the potentially affected areas.

4. Water

- Describe the catchment including proximity of the development to any waterways and provide an assessment of their sensitivity/significance from a public health, ecological and/or economic perspective. The Water Quality and River Flow Objectives on the website: http://www.environment.nsw.gov.au/ieo/index.htm should be used to identify the agreed environmental values and human uses for any affected waterways. This will help with the description of the local and regional area.

5. Soil Contamination Issues

- Provide details of site history – if earthworks are proposed, this needs to be considered with regard to possible soil contamination, for example if the site was previously a landfill site or if irrigation of effluent has occurred.

D Identification and prioritisation of issues / scoping of impact assessment

- Provide an overview of the methodology used to identify and prioritise issues. The methodology should take into account:
  a) relevant NSW government guidelines
  b) industry guidelines
  c) EISs for similar projects
  d) relevant research and reference material
  e) relevant preliminary studies or reports for the proposal
  f) consultation with stakeholders.
- Provide a summary of the outcomes of the process including:
  a) all issues identified including local, regional and global impacts (eg increased/ decreased greenhouse emissions)
  b) key issues which will require a full analysis (including comprehensive baseline assessment)
  c) issues not needing full analysis though they may be addressed in the mitigation strategy
  d) justification for the level of analysis proposed (the capacity of the proposal to give rise to high concentrations of pollution compared with the ambient environment or environmental outcomes is an important factor in setting the level of assessment).

E The environmental issues

1. General

- The potential impacts identified in the scoping study need to be assessed to determine their significance, particularly in terms of achieving environmental outcomes, and minimising environmental pollution.
- Identify gaps in information and data relevant to significant impacts of the proposal and any actions proposed to fill those information gaps so as to enable development of appropriate management and mitigation measures. This is in accordance with ESD requirements.

Note: The level of detail should match the level of importance of the issue in decision making which is dependent on the environmental risk.

Describe baseline conditions

- Provide a description of existing environmental conditions for any potential impacts.

Assess impacts

- For any potential impacts relevant for the assessment of the proposal provide a detailed analysis of the impacts of the proposal on the environment including the cumulative impact of the proposal on the receiving environment especially where there are sensitive receivers.
- Describe the methodology used and assumptions made in undertaking this analysis (including any modelling or monitoring undertaken) and indicate the level of confidence in the predicted outcomes and the resilience of the environment to cope with the predicted impacts.
- The analysis should also make linkages between different areas of assessment where necessary to enable a full assessment of environmental impacts eg assessment of impacts on air quality will often need to draw on the analysis of traffic, health, social, soil and/or ecological systems impacts; etc.
- The assessment needs to consider impacts at all phases of the project cycle including: exploration (if relevant or significant), construction, routine operation, start-up operations, upset operations and decommissioning if relevant.
- The level of assessment should be commensurate with the risk to the environment.

Describe management and mitigation measures

- Describe any mitigation measures and management options proposed to prevent, control, abate or mitigate identified environmental impacts associated with the proposal 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.
- Proponents are expected to implement a 'reasonable level of performance' to minimise environmental impacts. The proponent must indicate how the proposal meets reasonable levels of performance. For example, reference technology based criteria if available, or identify good practice for this type of activity or development. A 'reasonable level of performance' involves adopting and implementing technology and management practices to achieve certain pollutant emissions levels in economically

viable operations. Technology-based criteria evolve gradually over time as technologies and practices change.

- Use environmental impacts as key criteria in selecting between alternative sites, designs and technologies, and to avoid options having the highest environmental impacts.
- Outline any proposed approach (such as an Environmental Management Plan) that will demonstrate how commitments made in the EIS will be implemented. Areas that should be described include:

  a) operational procedures to manage environmental impacts

  b) monitoring procedures

  c) training programs

  d) community consultation

  e) complaint mechanisms including site contacts

  f) strategies to use monitoring information to improve performance

  g) strategies to achieve acceptable environmental impacts and to respond in event of exceedences.

4. Air

Describe baseline conditions

- Provide a description of existing air quality and meteorology, using existing information and site representative ambient monitoring data.

Assess impacts

- Identify all pollutants of concern and estimate emissions by quantity (and size for particles), source and discharge point.
- Estimate the resulting ground level concentrations of all pollutants. Where necessary (eg potentially significant impacts and complex terrain effects), use an appropriate dispersion model to estimate ambient pollutant concentrations. Discuss choice of model and parameters with the DECCW.
- Describe the effects and significance of pollutant concentration on the environment, human health, amenity and regional ambient air quality standards or goals.
- Describe the contribution that the development will make to regional and global pollution, particularly in sensitive locations.
- For potentially odorous emissions provide the emission rates in terms of odour units (determined by techniques compatible with EPA / DECCW procedures). Use sampling and analysis techniques for individual or complex odours and for point or diffuse sources, as appropriate.

  Note: With dust and odour, it may be possible to use data from existing similar activities to generate emission rates.

- Reference should be made to *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (DEC, 2001); *Approved Methods for the Sampling and Analysis of Air Pollutants in NSW* (DEC, 2007); *Assessment and Management of Odour from Stationary Sources in NSW* (DEC, 2006); *Technical Notes: Assessment and Management of Odour from Stationary Sources in NSW (DEC,*

2006); Load Calculation Protocol for use by holders of NSW Environment Protection Licences when calculating Assessable Pollutant Loads (DECC, 2009).

Describe management and mitigation measures

- Outline specifications of pollution control equipment (including manufacturer's performance guarantees where available) and management protocols for both point and fugitive emissions. Where possible, this should include cleaner production processes.

5. Noise and vibration

Describe baseline conditions

- Determine the existing background (LA90) and ambient (LAeq) noise levels in accordance with the *NSW Industrial Noise Policy.*
- Determine the existing road traffic noise levels in accordance with the *NSW Environmental Criteria for Road Traffic Noise*, where road traffic noise impacts may occur.
- The noise impact assessment report should provide details of all monitoring of existing ambient noise levels including:
  a) details of equipment used for the measurements
  b) a brief description of where the equipment was positioned
  c) a statement justifying the choice of monitoring site, including the procedure used to choose the site, having regards to the definition of 'noise sensitive locations(s)' and 'most affected locations(s)' described in Section 3.1.2 of the *NSW Industrial Noise Policy*
  d) details of the exact location of the monitoring site and a description of land uses in surrounding areas
  e) a description of the dominant and background noise sources at the site
  f) day, evening and night assessment background levels for each day of the monitoring period
  g) the final Rating Background Level (RBL) value
  h) graphs of the measured noise levels for each day should be provided
  i) a record of periods of affected data (due to adverse weather and extraneous noise), methods used to exclude invalid data and a statement indicating the need for any re-monitoring under Step 1 in Section B1.3 of the *NSW Industrial Noise Policy*
  j) determination of LAeq noise levels from existing industry.

Assess impacts

- Determine the project specific noise levels for the site. For each identified potentially affected receiver, this should include:
  a) determination of the intrusive criterion for each identified potentially affected receiver
  b) selection and justification of the appropriate amenity category for each identified potentially affected receiver

c) determination of the amenity criterion for each receiver

d) determination of the appropriate sleep disturbance limit.

- Maximum noise levels during night-time period (10pm-7am) should be assessed to analyse possible affects on sleep. Where LA1(1min) noise levels from the site are less than 15 dB above the background LA90 noise level, sleep disturbance impacts are unlikely. Where this is not the case, further analysis is required. Additional guidance is provided in Appendix B of the *NSW Environmental Criteria for Road Traffic Noise.*
- Determine expected noise level and noise character (eg tonality, impulsiveness, vibration, etc) likely to be generated from noise sources during:

  a) site establishment

  b) construction

  c) operational phases

  d) transport including traffic noise generated by the proposal

  e) other services.

  Note: The noise impact assessment report should include noise source data for each source in 1/1 or 1/3 octave band frequencies including methods for references used to determine noise source levels. Noise source levels and characteristics can be sourced from direct measurement of similar activities or from literature (if full references are provided).

- Determine the noise levels likely to be received at the most sensitive locations (these may vary for different activities at each phase of the development). Potential impacts should be determined for any identified significant adverse meteorological conditions. Predicted noise levels under calm conditions may also aid in quantifying the extent of impact where this is not the most adverse condition.
- The noise impact assessment report should include:

  a) a plan showing the assumed location of each noise source for each prediction scenario

  b) a list of the number and type of noise sources used in each prediction scenario to simulate all potential significant operating conditions on the site

  c) any assumptions made in the predictions in terms of source heights, directivity effects, shielding from topography, buildings or barriers, etc

  d) methods used to predict noise impacts including identification of any noise models used. Where modelling approaches other than the use of the ENM or SoundPlan computer models are adopted, the approach should be appropriately justified and validated

  e) an assessment of appropriate weather conditions for the noise predictions including reference to any weather data used to justify the assumed conditions

  f) the predicted noise impacts from each noise source as well as the combined noise level for each prediction scenario under any identified significant adverse weather conditions as well as calm conditions where appropriate

  g) for developments where a significant level of noise impact is likely to occur, noise contours for the key prediction scenarios should be derived

  h) an assessment of the need to include modification factors as detailed in Section 4 of the *NSW Industrial Noise Policy.*

- Discuss the findings from the predictive modelling and, where relevant noise criteria have not been met, recommend additional mitigation measures.

- The noise impact assessment report should include details of any mitigation proposed including the attenuation that will be achieved and the revised noise impact predictions following mitigation.
- Where relevant noise/vibration criteria cannot be met after application of all feasible and cost effective mitigation measures the residual level of noise impact needs to be quantified by identifying:
  a) locations where the noise level exceeds the criteria and extent of exceedence
  b) numbers of people (or areas) affected
  c) times when criteria will be exceeded
  d) likely impact on activities (speech, sleep, relaxation, listening, etc)
  e) change on ambient conditions
  f) the result of any community consultation or negotiated agreement.
- For the assessment of existing and future traffic noise, details of data for the road should be included such as assumed traffic volume; percentage heavy vehicles by time of day; and details of the calculation process. These details should be consistent with any traffic study carried out in the EIS.
- Where blasting is intended an assessment in accordance with the *Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration* (ANZECC, 1990) should be undertaken. The following details of the blast design should be included in the noise assessment:
  a) bench height, burden spacing, spacing burden ratio
  b) blast hole diameter, inclination and spacing
  c) type of explosive, maximum instantaneous charge, initiation, blast block size, blast frequency.

Describe management and mitigation measures

- Determine the most appropriate noise mitigation measures and expected noise reduction including both noise controls and management of impacts for both construction and operational noise. This will include selecting quiet equipment and construction methods, noise barriers or acoustic screens, location of stockpiles, temporary offices, compounds and vehicle routes, scheduling of activities, etc.
- For traffic noise impacts, provide a description of the ameliorative measures considered (if required), reasons for inclusion or exclusion, and procedures for calculation of noise levels including ameliorative measures. Also include, where necessary, a discussion of any potential problems associated with the proposed ameliorative measures, such as overshadowing effects from barriers. Appropriate ameliorative measures may include:
  a) use of alternative transportation modes, alternative routes, or other methods of avoiding the new road usage
  b) control of traffic (eg: limiting times of access or speed limitations)
  c) resurfacing of the road using a quiet surface
  d) use of (additional) noise barriers or bunds
  e) treatment of the façade to reduce internal noise levels buildings where the night-time criteria is a major concern
  f) more stringent limits for noise emission from vehicles (i.e. using specially designed 'quite' trucks and/or trucks to use air bag suspension
  g) driver education

h) appropriate truck routes

i) limit usage of exhaust breaks

j) use of premium muffles on trucks

k) reducing speed limits for trucks

l) ongoing community liaison and monitoring of complaints

m) phasing in the increased road use.

4. Water

Describe baseline conditions

- Describe existing surface and groundwater quality – an assessment needs to be undertaken for any water resource likely to be affected by the proposal and for all conditions (e.g. a wet weather sampling program is needed if runoff events may cause impacts).

  Note: Methods of sampling and analysis need to conform with an accepted standard (e.g. Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC 2004) *or be approved and analyses undertaken by accredited laboratories).*

- Provide site drainage details and surface runoff yield.
- State the ambient Water Quality and River Flow Objectives for the receiving waters. These refer to the community's agreed environmental values and human uses endorsed by the Government as goals for the ambient waters. These environmental values are published on the website: http://www.environment.nsw.gov.au/ieo/index.htm. The EIS should state the environmental values listed for the catchment and waterway type relevant to your proposal. NB: A consolidated and approved list of environmental values are not available for groundwater resources. Where groundwater may be affected the EIS should identify appropriate groundwater environmental values and justify the choice.
- 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.environment.gov.au/water/publications/quality/nwqms-guidelines-4-vol1.html) (Note that, as at 2004, the NSW Water Quality Objectives booklets and website contain technical criteria derived from the 1992 version of the ANZECC Guidelines. The Water Quality Objectives remain as Government Policy, reflecting the community's environmental values and long-term goals, but the technical criteria are replaced by the more recent ANZECC 2000 Guidelines). NB: While specific guidelines for groundwater are not available, the ANCECC 2000 Guidelines endorse the application of the trigger values and decision trees as a tool to assess risk to environmental values in groundwater.
- State any locally specific objectives, criteria or targets, which have been endorsed by the government e.g. the Healthy Rivers Commission Inquiries or the NSW Salinity Strategy (DLWC, 2000) (http://www.environment.nsw.gov.au/salinity/government/nswstrategy.htm).
- Where site specific studies are proposed to revise the trigger values supporting the ambient Water Quality and River Flow Objectives, and the results are to be used for regulatory purposes (e.g. to assess whether a licensed discharge impacts on water quality objectives), then prior agreement from the EPA on the approach and study design must be obtained.
- Describe the state of the receiving waters and relate this to the relevant Water Quality and River Flow Objectives (i.e. are Water Quality and River Flow Objectives being achieved?). Proponents are

generally only expected to source available data and information. However, proponents of large or high risk developments may be required to collect some ambient water quality / river flow / groundwater data to enable a suitable level of impact assessment. Issues to include in the description of the receiving waters could include:

a) lake or estuary flushing characteristics

b) specific human uses (e.g. exact location of drinking water offtake)

c) sensitive ecosystems or species conservation values

d) a description of the condition of the local catchment e.g. erosion levels, soils, vegetation cover, etc

e) an outline of baseline groundwater information, including, but not restricted to, depth to watertable, flow direction and gradient, groundwater quality, reliance on groundwater by surrounding users and by the environment

f) historic river flow data where available for the catchment.

Assess impacts

- No proposal should breach clause 120 of the *Protection of the Environment Operations Act* 1997 (i.e. pollution of waters is prohibited unless undertaken in accordance with relevant regulations).
- Identify and estimate the quantity of all pollutants that may be introduced into the water cycle by source and discharge point including residual discharges after mitigation measures are implemented.
- Include a rationale, along with relevant calculations, supporting the prediction of the discharges.
- Describe the effects and significance of any pollutant loads on the receiving environment. This should include impacts of residual discharges through modelling, monitoring or both, depending on the scale of the proposal. Determine changes to hydrology (including drainage patterns, surface runoff yield, flow regimes, wetland hydrologic regimes and groundwater).
- Describe water quality impacts resulting from changes to hydrologic flow regimes (such as nutrient enrichment or turbidity resulting from changes in frequency and magnitude of stream flow).
- Identify any potential impacts on quality or quantity of groundwater describing their source.
- Identify potential impacts associated with geomorphological activities with potential to increase surface water and sediment runoff or to reduce surface runoff and sediment transport. Also consider possible impacts such as bed lowering, bank lowering, instream siltation, floodplain erosion and floodplain siltation.
- Identify impacts associated with the disturbance of acid sulfate soils and potential acid sulfate soils.
- Containment of spills and leaks shall be in accordance with the technical guidelines section 'Bunding and Spill Management' of the *Authorised Officers Manual* (EPA, 1995) (http://www.epa.nsw.gov.au/mao/bundingspill.htm) and the most recent versions of the Australian Standards referred to in the Guidelines. Containment should be designed for no-discharge.
- The significance of the impacts listed above should be predicted. When doing this it is important to predict the ambient water quality and river flow outcomes associated with the proposal and to demonstrate whether these are acceptable in terms of achieving protection of the Water Quality and River Flow Objectives. In particular the following questions should be answered:

  a) will the proposal protect Water Quality and River Flow Objectives where they are currently achieved in the ambient waters; and

b) will the proposal contribute towards the achievement of Water Quality and River Flow Objectives over time, where they are not currently achieved in the ambient waters.

- Consult with the EPA as soon as possible if a mixing zone is proposed (a mixing zone could exist where effluent is discharged into a receiving water body, where the quality of the water being discharged does not immediately meet water quality objectives. The mixing zone could result in dilution, assimilation and decay of the effluent to allow water quality objectives to be met further downstream, at the edge of the mixing zone). The EPA will advise the proponent under what conditions a mixing zone will and will not be acceptable, as well as the information and modelling requirements for assessment.

  Note: The assessment of water quality impacts needs to be undertaken in a total catchment management context to provide a wide perspective on development impacts, in particular cumulative impacts.

- Where a licensed discharge is proposed, provide the rationale as to why it cannot be avoided through application of a reasonable level of performance, using available technology, management practice and industry guidelines.
- Where a licensed discharge is proposed, provide the rationale as to why it represents the best environmental outcome and what measures can be taken to reduce its environmental impact.
- Reference should be made to *Managing Urban Stormwater: Soils and Construction* (DECC, 2008), *Guidelines for Fresh and Marine Water Quality* ANZECC 2000), *Environmental Guidelines: Use of effluent by Irrigation* (DEC, 2004).

Describe management and mitigation measures

- Outline stormwater management to control pollutants at the source and contain them within the site. Also describe measures for maintaining and monitoring any stormwater controls.
- Outline erosion and sediment control measures directed at minimising disturbance of land, minimising water flow through the site and filtering, trapping or detaining sediment. Also include measures to maintain and monitor controls as well as rehabilitation strategies.
- Describe waste water treatment measures that are appropriate to the type and volume of waste water and are based on a hierarchy of avoiding generation of waste water; capturing all contaminated water (including stormwater) on the site; reusing/recycling waste water; and treating any unavoidable discharge from the site to meet specified water quality requirements.
- Outline pollution control measures relating to storage of materials, possibility of accidental spills (eg preparation of contingency plans), appropriate disposal methods, and generation of leachate.
- Describe hydrological impact mitigation measures including:

  a) site selection (avoiding sites prone to flooding and waterlogging, actively eroding or affected by deposition)

  b) minimising runoff

  c) minimising reductions or modifications to flow regimes

  d) avoiding modifications to groundwater.

- Describe groundwater impact mitigation measures including:

  a) site selection

  b) retention of native vegetation and revegetation

c) artificial recharge

d) providing surface storages with impervious linings

e) monitoring program.

- Describe geomorphological impact mitigation measures including:

a) site selection

b) erosion and sediment controls

c) minimising instream works

d) treating existing accelerated erosion and deposition

e) monitoring program.

- Any proposed monitoring should be undertaken in accordance with the *Approved Methods for the Sampling and Analysis of Water Pollutants in NSW* (DEC 2004).

5. Soils and contamination

Describe baseline conditions

- Provide any details (in addition to those provided in the location description - Section C) that are needed to describe the existing situation in terms of soil types and properties and soil contamination.

Assess impacts

- Identify any likely impacts resulting from the construction or operation of the proposal, including the likelihood of:

a) disturbing any existing contaminated soil

b) contamination of soil by operation of the activity

c) subsidence or instability

d) soil erosion

e) disturbing acid sulfate or potential acid sulfate soils.

- Reference should be made to *Contaminated Sites – Guidelines for Consultants Reporting on Contaminated Sites* (OEH, 2011); *Contaminated Sites – Guidelines on Significant Risk of Harm from Contaminated Land and the Duty to Report* (EPA, 2003).

Describe management and mitigation measures

- Describe and assess the effectiveness or adequacy of any soil management and mitigation measures during construction and operation of the proposal including:

a) erosion and sediment control measures

b) proposals for site remediation – see *Managing Land Contamination, Planning Guidelines SEPP 55 – Remediation of Land* (Department of Urban Affairs and Planning and Environment Protection Authority, 1998)

c) proposals for the management of these soils – see *Assessing and Managing Acid Sulfate Soils,* Environment Protection Authority, 1995 (note that this is the only methodology accepted by the EPA).

6. Waste and chemicals

Describe baseline conditions

- Describe any existing waste or chemicals operations related to the proposal.

Assess impacts

- Assess the adequacy of proposed measures to minimise natural resource consumption and minimise impacts from the handling, transporting, storage, processing and reprocessing of waste and/or chemicals.
- Reference should be made to *Environmental Guidelines: Assessment, Classification and Management of Liquid and Non-Liquid Wastes* (EPA, 1999).

Describe management and mitigation measures

- Outline measures to minimise the consumption of natural resources.
- Outline measures to avoid the generation of waste and promote the re-use and recycling and reprocessing of any waste.
- Outline measures to support any approved regional or industry waste plans.

7. Cumulative impacts

- Identify the extent that the receiving environment is already stressed by existing development and background levels of emissions to which this proposal will contribute.
- Assess the impact of the proposal against the long term air, noise and water quality objectives for the area or region.
- Identify infrastructure requirements flowing from the proposal (eg water and sewerage services, transport infrastructure upgrades).
- Assess likely impacts from such additional infrastructure and measures reasonably available to the proponent to contain such requirements or mitigate their impacts (eg travel demand management strategies).

F. List of approvals and licences

- Identify all approvals and licences required under environment protection legislation including details of all scheduled activities, types of ancillary activities and types of discharges (to air, land, water).

G. Compilation of mitigation measures

- Outline how the proposal and its environmental protection measures would be implemented and managed in an integrated manner so as to demonstrate that the proposal is capable of complying with statutory obligations under EPA licences or approvals (eg outline of an environmental management plan).
- The mitigation strategy should include the environmental management and cleaner production principles which would be followed when planning, designing, establishing and operating the proposal. It should include two sections, one setting out the program for managing the proposal and the other outlining the monitoring program with a feedback loop to the management program.

H. Justification for the Proposal

- Reasons should be included which justify undertaking the proposal in the manner proposed, having regard to the potential environmental impacts.

ATTACHMENT B: GUIDANCE MATERIAL

Title	Web address
Relevant Legislation	
Contaminated Land Management Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+140+1997+cd+0+N
Environmentally Hazardous Chemicals Act 1985	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+14+1985+cd+0+N
Environmental Planning and Assessment Act 1979	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
Protection of the Environment Operations Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
Water Management Act 2000	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N
Licensing	
Guide to Licensing	www.epa.nsw.gov.au/licensing/licenceguide.htm
Air Issues	
Air Quality	
Approved methods for modelling and assessment of air pollutants in NSW (2005)	http://www.epa.nsw.gov.au/resources/air/ammodelling05361.pdf
POEO (Clean Air) Regulation 2010	http://www.legislation.nsw.gov.au/maintop/view/inforce/subordleg+428+2010+cd+0+N
Noise and Vibration	
Interim Construction Noise Guideline (DECC, 2009)	http://www.epa.nsw.gov.au/noise/constructnoise.htm
Assessing Vibration: a technical guideline (DEC, 2006)	http://www.epa.nsw.gov.au/noise/vibrationguide.htm
Industrial Noise Policy Application Notes	http://www.epa.nsw.gov.au/noise/applicnotesindustnoise.htm
Environmental Criteria for Road Traffic Noise (EPA, 1999)	http://www.epa.nsw.gov.au/resources/noise/roadnoise.pdf
Interim Guideline for the Assessment of Noise from Rail Infrastructure Projects (DECC, 2007)	http://www.epa.nsw.gov.au/noise/railinfranoise.htm
Environmental assessment requirements for rail traffic-generating developments	http://www.epa.nsw.gov.au/noise/railnoise.htm

Waste, Chemicals and Hazardous Materials and Radiation	
Waste	
Environmental Guidelines: Solid Waste Landfills (EPA, 1996)	http://www.epa.nsw.gov.au/resources/waste/envguidlns/solidlandfill.pdf
Draft Environmental Guidelines - Industrial Waste Landfilling (April 1998)	http://www.epa.nsw.gov.au/resources/waste/envguidlns/industrialfill.pdf
Waste Classification Guidelines (DECC, 2009)	http://www.epa.nsw.gov.au/waste/envguidlns/index.htm
Resource recovery exemption	http://www.epa.nsw.gov.au/waste/RRecoveryExemptions.htm
Chemicals subject to Chemical Control Orders	
Chemical Control Orders (regulated through the EHC Act)	http://www.epa.nsw.gov.au/pesticides/CCOs.htm
National Protocol - Approval/Licensing of Trials of Technologies for the Treatment/Disposal of Schedule X Wastes - July 1994	Available in libraries
National Protocol for Approval/Licensing of Commercial Scale Facilities for the Treatment/Disposal of Schedule X Wastes - July 1994	Available in libraries
Water and Soils	
Acid sulphate soils	
Coastal acid sulfate soils guidance material	http://www.environment.nsw.gov.au/acidsulfatesoil/
Acid Sulfate Soils Planning Maps	http://www.environment.nsw.gov.au/acidsulfatesoil/riskmaps.htm
Contaminated Sites Assessment and Remediation	
Managing land contamination: Planning Guidelines – SEPP 55 Remediation of Land	http://www.planning.nsw.gov.au/assessingdev/pdf/gu_contam.pdf
Guidelines for Consultants Reporting on Contaminated Sites (EPA, 2000)	http://www.epa.nsw.gov.au/resources/clm/20110650consultantsglines.pdf
Guidelines for the NSW Site Auditor Scheme - 2nd edition (DEC, 2006)	http://www.epa.nsw.gov.au/resources/clm/auditorglines06121.pdf
Sampling Design Guidelines (EPA, 1995)	Available by request from EPA's Environment Line

National Environment Protection (Assessment of Site Contamination) Measure 1999 (or update)	http://www.scew.gov.au/nepms/assessment-site-contamination
Soils – general	
Managing land and soil	http://www.environment.nsw.gov.au/soils/landandsoil.htm
Managing urban stormwater for the protection of soils	http://www.environment.nsw.gov.au/stormwater/publications.htm
Landslide risk management guidelines	http://www.australiangeomechanics.org/resources/downloads/
Site Investigations for Urban Salinity (DLWC, 2002)	http://www.environment.nsw.gov.au/resources/salinity/booklet3siteinvestigationsforurbansalinity.pdf
Local Government Salinity Initiative Booklets	http://www.environment.nsw.gov.au/salinity/solutions/urban.htm
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	http://www.environment.gov.au/water/publications/quality/nwqms-guidelines-4-vol1.html
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	Contact the EPA on 131555
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf

Department of Primary Industries

OUT17/13142

Mr Stephen Shoesmith
Resource Assessments
NSW Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Stephen.shoesmith@planning.nsw.gov.au

Dear Mr Shoesmith

Western Slopes Pipeline (SSI 8272)
Request for Secretary's Environmental Assessment Requirements (SEARs)

I refer to your email of 20 March 2017 to the Department of Primary Industries (DPI) in respect to the above matter. Comment has been sought from relevant divisions of DPI. Views were also sought from NSW Department of Industry - Lands that are now a division of the broader Department and no longer within NSW DPI.
Any further referrals to DPI can be sent by email to landuse.enquiries@dpi.nsw.gov.au.

DPI has reviewed the Preliminary Environmental Assessment and the standard SEARs. The Key Issues and Desired Performance Outcomes, and Current Guidelines adequately address the requirements of the Department. The following information is included to assist the proponent in their preparation of the Environmental Impact Assessment:

- Whilst decommissioning will involve leaving the pipeline in place, an outline of how other pipeline features will be removed needs to be addressed especially in areas that are to be used for agriculture.
- The Primefact: Infrastructure proposals on rural land can assist in assessing the impacts of this proposal on agricultural land. This is available at: http://www.dpi.nsw.gov.au/__data/assets/pdf_file/0020/359030/infrastructure-proposals-on-rural-land.pdf
- Any use or occupation of Crown land or roads for any purpose associated with the Western Slopes Pipeline Project requires the consent of the Minister for Lands and Forestry prior to the commencement of any use or occupation.

Yours sincerely

Mitchell Isaacs
Director, Planning Policy & Assessment Advice
29 March 2017

DPI appreciates your help to improve our advice to you. Please complete this three minute survey about the advice we have provided to you, here:
https://goo.gl/o8TXWz

Department of Industry
Resources & Energy

31st March 2017

Stephen Shoesmith
Senior Planning Officer – Resource Assessments and Business Systems
NSW Planning & Environment
GPO Box 39
Sydney NSW 2001

Emailed: Stephen.Shoesmith@planning.nsw.gov.au
Cc: industry.coordination@industry.nsw.gov.au

Your Reference: SSI 17_8272
Our Reference (TRIM):OUT17/12399

Dear Mr Shoesmith

Re: Western Slopes Pipeline (SSI 17_8272) – Request for Secretary's Environmental Assessment Requirements

I refer to your email of 20th March 2017 requesting advice on issues concerning the preparation of Secretary's Environmental Assessment Requirements for the above project. This is a response from the NSW Department of Industry – Division of Resources & Energy - Geological Survey of NSW (GSNSW).

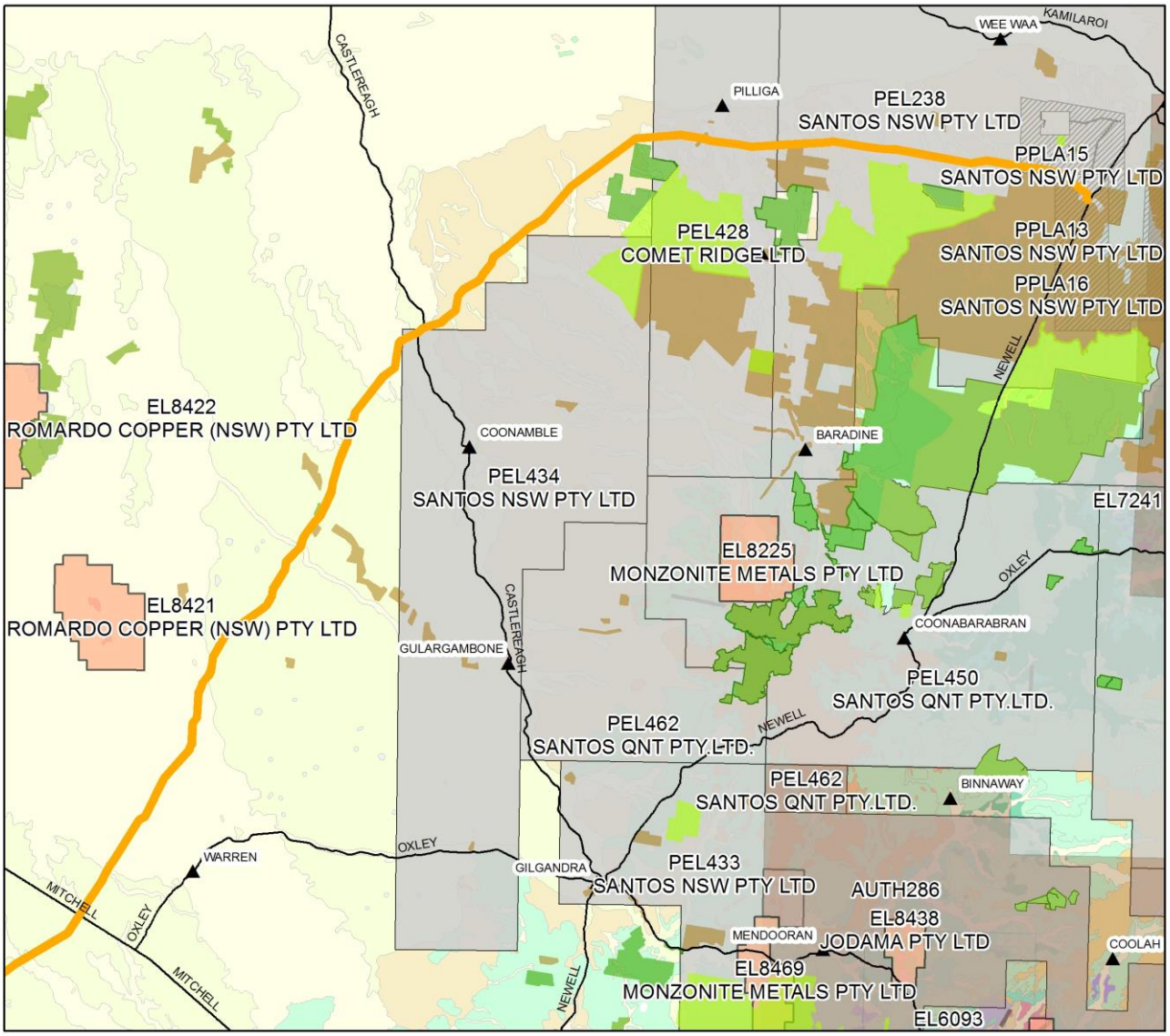
GSNSW's key issue to be incorporated in the SEARs is the requirement for authentic consultation with mineral resource stakeholders including GSNSW and affected mineral title holders and quarry operators in the vicinity of the Western Slopes Pipeline route, as outlined below.

The EA must consider the potential for the project to impact upon any significant mineral resources, including metallic and industrial minerals, construction materials, petroleum and coal resources. A significant aspect of mineral resource evaluation and development in regards to land use planning is that the locations of mineable deposits cannot always be predicted. This makes it imperative that known resources are protected from sterilisation by incompatible zoning or development, and that access to land for mineral exploration should be maintained over as much of the project area as possible.

Petroleum Titles, Projects and Resources

The Western Slopes Pipeline route traverses diverse geological settings and mineral resource potential. From Narrabri west, the surface geology is largely comprised of Cainozoic alluvium and sediments, underlain by the energy-related resources of the Surat-Gunnedah Basin, including extensive coal, coal seam methane and conventional gas deposits and accumulations. Figure 1 shows Petroleum exploration licenses (PEL) PEL428 held by Comet Ridge Ltd, PEL434 and PEL238 held by Santos NSW Pty Ltd as well as Petroleum Production Lease Applications (PPLA) in the vicinity of the pipeline route.

FIGURE 1: Western Slopes Pipeline - Energy Resources



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Legend

- Western Slopes Pipeline Alignment
- Pipelines
- Towns
- Highway
- Petroleum Titles
- Petroleum Title Applications
- Mineral Titles
- Mineral Title Applications
- Coal Titles
- Coal Title Applications
- National Parks
- Nature Reserve
- State Conservation Area
- State Forests

NSW GOVERNMENT Department of Industry Resources & Energy

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Between the Pilliga and Warren areas, Cainozoic sediments overlie the eastern side of the Lachlan Orogen, an extensive geological province hosting significant mineralisation. Geophysical data indicates the potential for buried rocks which may host mineralisation. Despite the general thick cover of younger rocks and alluvial material over the mineral-prospective older rocks, it can be assumed that the area will retain high mineral prospectivity.

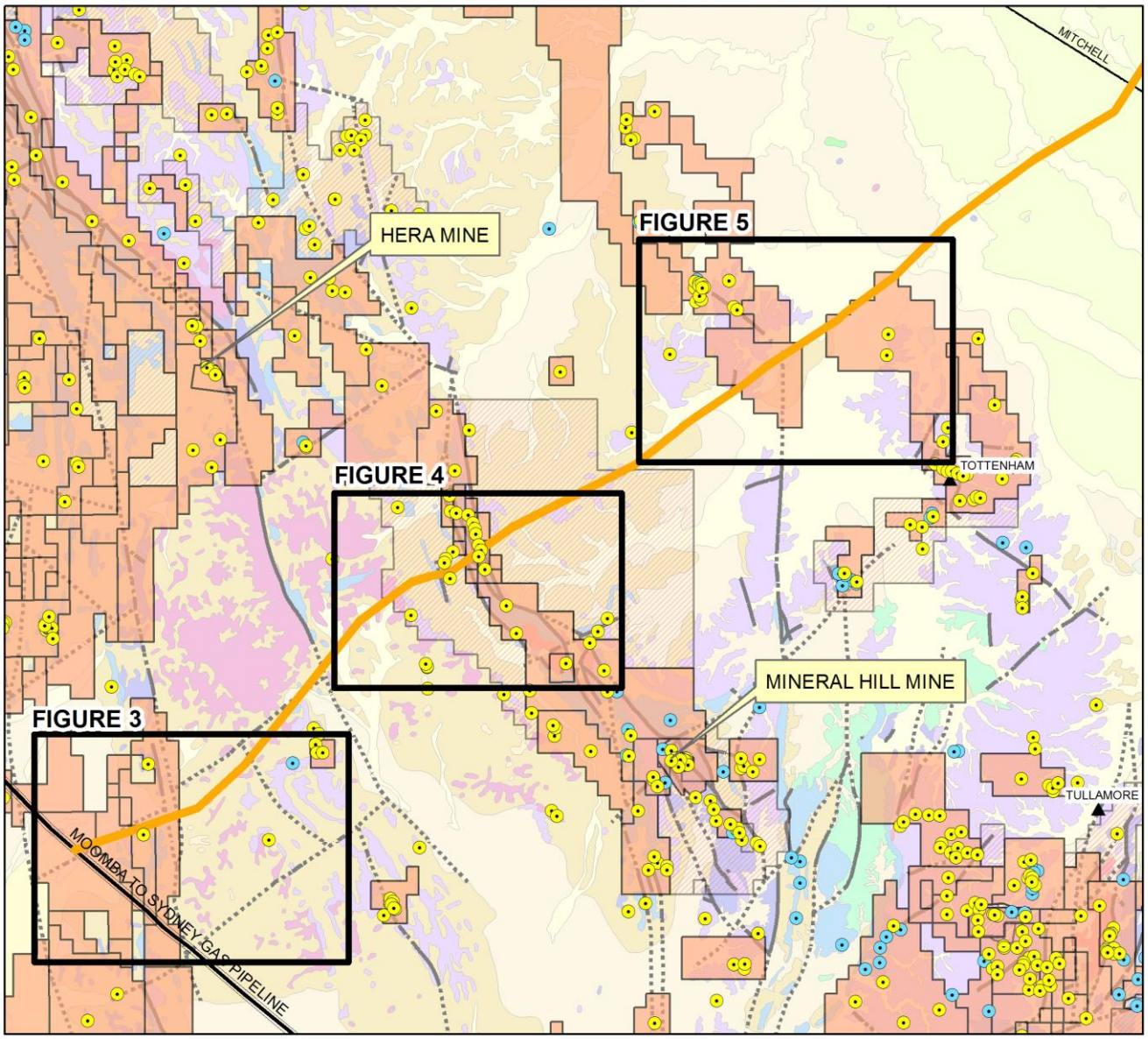
Additionally there are a number of construction material quarries extracting roadbase in the vicinity of the route operated by the respective Shire Councils.

Mineral Titles, Projects and Resources

The Lachlan Orogen is an extensive geological province of significant historical and current mining production, mineral potential and active exploration activities for a wide range of resources, including gold, copper, silver, lead, zinc, iron, cobalt, nickel and scandium. Currently Hera Mine and Mineral Hill are active in the area (Figure 2). There is significant potential in the subject area for extensions of the north-westerly structurally trending Cobar – Nymagee mineralisation of the Lachlan Orogen.

Due to the wide distribution of the prospective rock packages and associated structures, a substantial part of the area is covered by current mineral exploration licences. In the vicinity of the project area, significant exploration is also being conducted on lateritic nickel-cobalt and scandium prospects in the Nyngan area. A number of prospects are under advanced evaluation as potential mineable resources. Exploration Licenses in the vicinity of the proposed pipeline route are detailed further in APPENDIX A: Mineral Tiles Figures 3 – 5. Metallic and industrial mineral occurrences as well as boreholes from previous exploration programs held in Department databases are shown to illustrate the high level of interest in the area.

FIGURE 2: Western Slopes Pipeline - Mineral Titles Overview



NSW Surface Geology 3rd Edition - 1:1 000 000

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Legend

- Western Slopes Pipeline Alignment
- Pipelines
- Towns
- Highway
- Metallic minerals - MetIndex Database
- Industrial minerals - MetIndex database
- Mineral Titles
- Mineral Title Applications

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Department of Industry
Resources & Energy

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General Requirements:

The proponent must conduct an assessment as part of the EA, regarding the potential impacts of the project, on any significant mineral resources, including:

- Any operating mines, extractive industries or known mineral or petroleum resources.
- Exploration activities in the vicinity of the proposed development.
- Access for future exploration in the area.

GSNSW note from the Preliminary Environmental Assessment that incompatible resource tenures, specifically mining leases have been avoided in determining the proposed route and that further stakeholder consultation will inform the final alignment.

In this regard GSNSW requires the proponent specifically to:

- Identify the current and in force mineral exploration titles. The proponent must make contact with the titleholders identified in **Table 1: Minerals and Petroleum Title Holders** to determine their level of interest. This should include a letter of notification of the proposal to the title holder including a map indicating the proposal area in relation to the exploration title boundaries, and a letter of response from the title holder to the proponent.

  The Western Slopes Pipeline is being developed in conjunction with the Narrabri Gas Project. Petroleum titles should be addressed in the EIS, however the Department understands Santos NSW Pty Ltd have no issues with the pipeline alignment and that consultation with mineral titleholders has commenced. The Department can assist in providing titleholder contact details at the proponent's request. Additionally current titles may be viewed at: http://www.resourcesandenergy.nsw.gov.au/landholders-and-community/common-ground%20%20

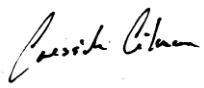
  TABLE 1: Mineral and Petroleum Title Holders

TITLE	TITLEHOLDER
PEL434	SANTOS NSW PTY LTD
PEL428	COMET RIDGE LTD
PEL238	SANTOS NSW PTY LTD
EL6336	AUGUR RESOUCES LTD
EL8384	MINCOR COPPER PTY LTD
EL7439	OXLEY EXPLORATION PTY LTD (HELIX RESOURCES LTD)
EL8525	PROVIDENCE METALS PTY LTD
EL8267	OCHRE RESOURCES PTY LTD (HERON RESOURCES LIMITED)
EL7941	OCHRE RESOURCES PTY LTD (HERON RESOURCES LIMITED)
EL5878	OCHRE RESOURCES PTY LTD (HERON RESOURCES LIMITED)
EL8334	KBL MINING LIMITED
ELA5275	BACCHUS RESOURCES PTY LTD
ELA5456	HAVERFORD HOLDINGS PTY LTD
EL8201	PEEL (CSP) PTY LTD
EL8345	PEEL (CSP) PTY LTD
EL8270	GOLDEN CROSS OPERATIONS PTY LTD
ELA5343	PEEL (CSP) PTY LTD
EL6699	STANNUM PTY LTD

GSNSW recommend consultation with Shire Council's include Council operated extractive industry quarries in the vicinity of the route, in regards to ongoing operation and opportunities to supply the project with construction materials.

The Division of Resources & Energy contact for this project is Zane West, Manager Royalty and Advisory Services. Queries regarding the above information, and future requests for advice in relation to this matter, should be directed to industry.coordination@industry.nsw.gov.au as well as the GSNSW Land Use team at landuse.minerals@industry.nsw.gov.au.

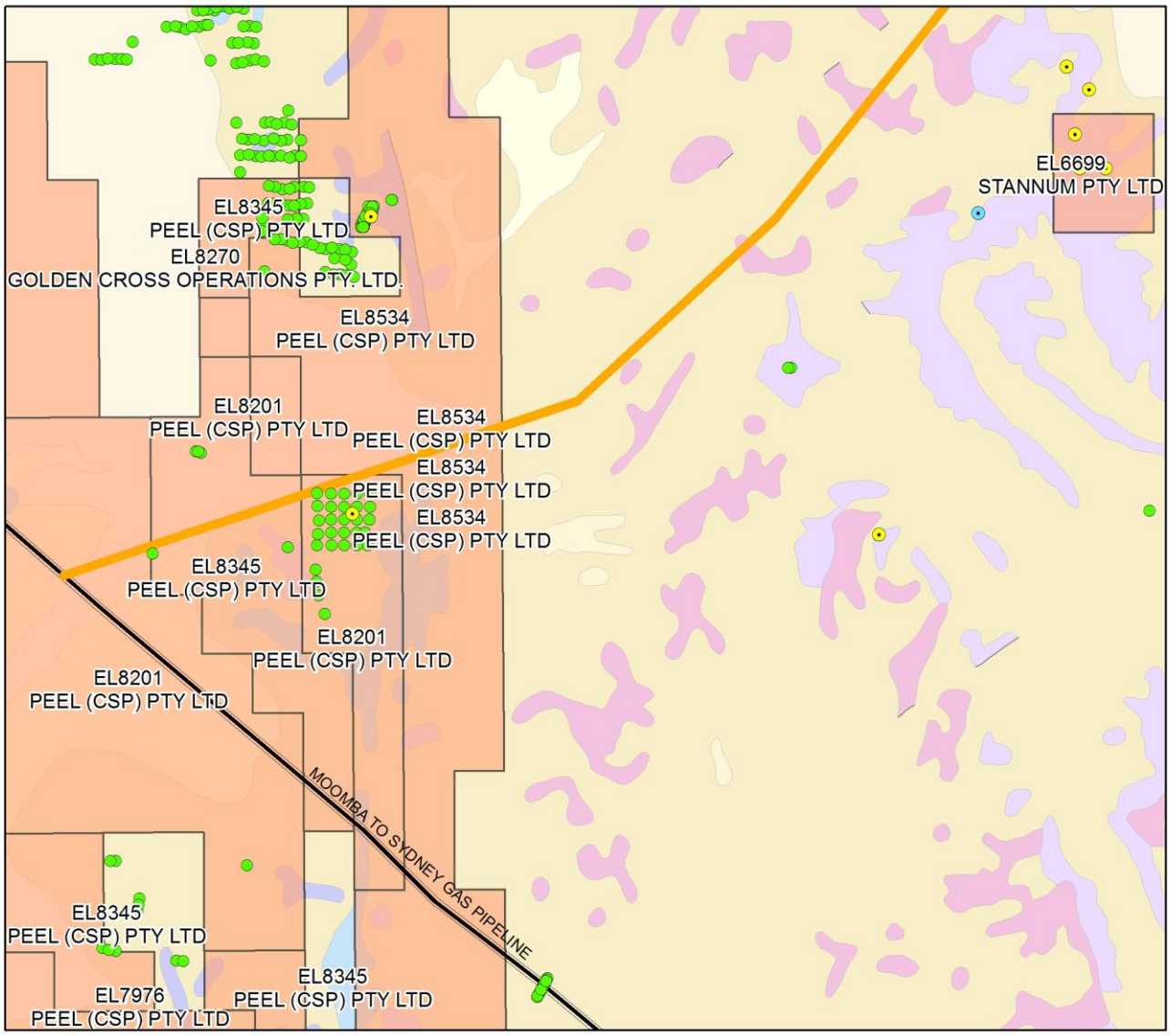
Yours sincerely



Cressida Gilmore
Manager - Land Use

ATTACHMENT A (Figures 3-5 Mineral Titles and Prospects)

FIGURE 3: Western Slopes Pipeline - Mineral Titles Map 1



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Legend

- Western Slopes Pipeline Alignment
- Metallic & Industrial Mineral bores from GBIS
- Metallic minerals - MetIndex database
- Industrial minerals - MetIndex database
- Pipelines
- Towns
- Highway
- Current Mineral Titles
- Current Mineral Applications

NSW GOVERNMENT Department of Industry Resources & Energy

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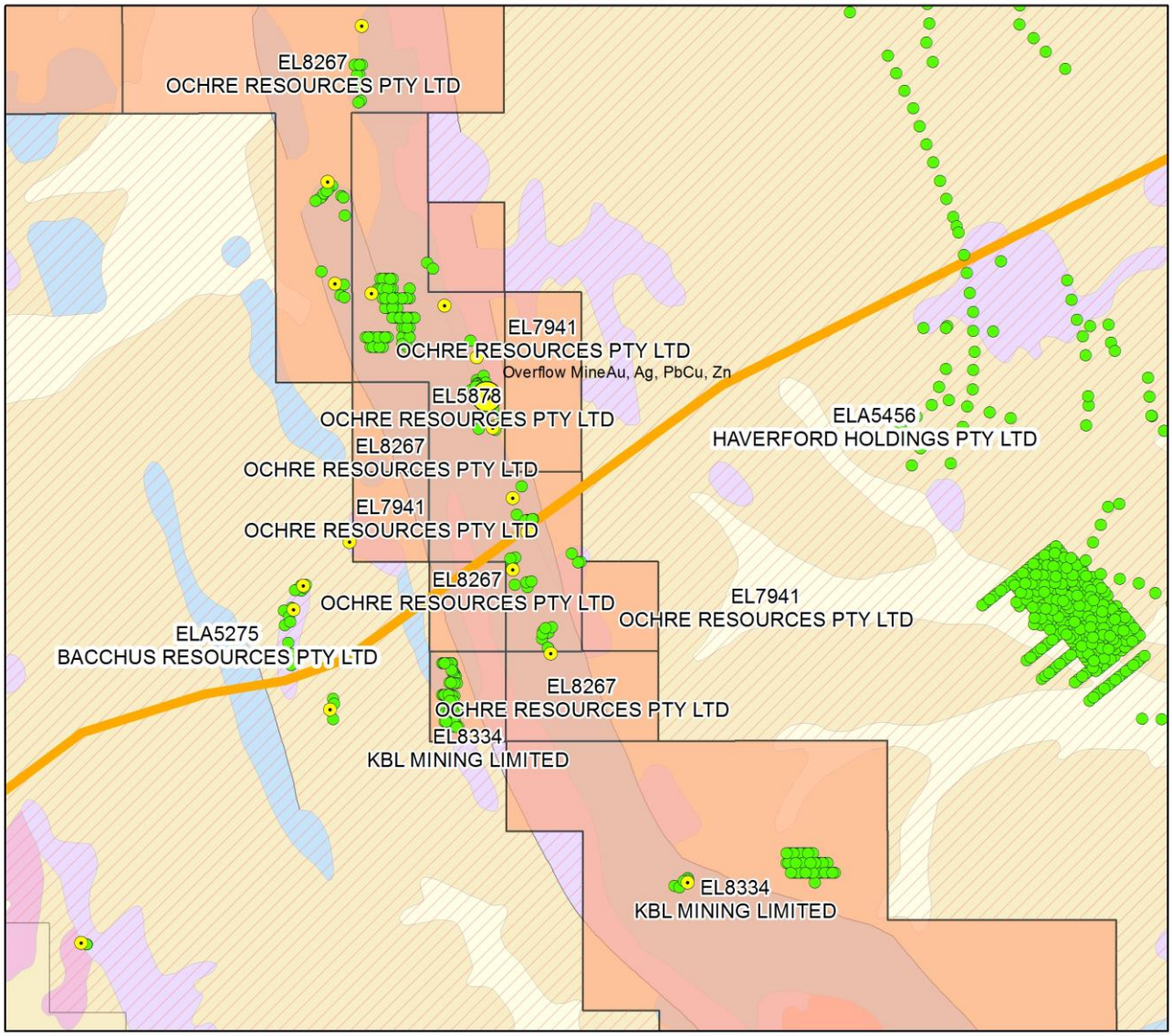
FIGURE 4: Western Slopes Pipeline - Mineral Titles Map 2



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Legend

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- Highway
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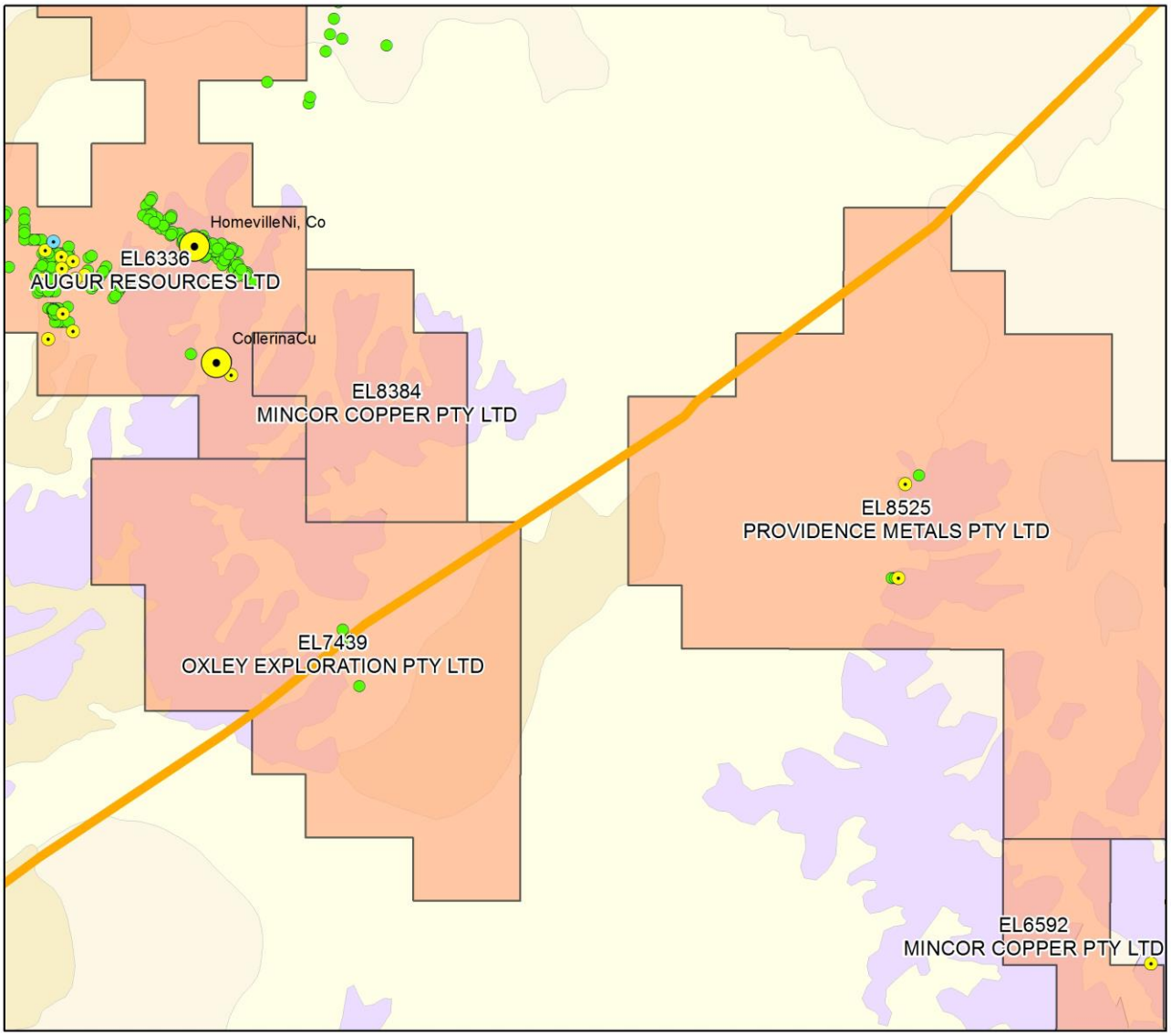
Path: G:\Geosurvey\MINLU\MINLU_Landuse\LU_ARCGIS\2017\UTILITIES\APA_Western Slopes Pipeline\Projects_Outputs\Western Slopes Gas Pipeline - Mineral Titles Map 2.mxd

FIGURE 5: Western Slopes Pipeline - Mineral Titles Map 3



NSW Surface Geology 3rd Edition - 1:1 000 000

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- Western Slopes Pipeline Alignment
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- Highway
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- Current Mineral Applications

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Date Saved: 31/03/2017 10:55:58 AM

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29 March 2017

SF2017/059742; WST17/00049/01

Mr Stephen Shoesmith
Senior Planning Officer
Resource Assessments and Business Systems
Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Dear Mr Shoesmith,

SSI 17_8272:_WesternSlopes Pipeline Project; Narrabri to Condobolin;
Request for input into Secretary's Environmental Assessment Requirements (SEARs)

Thank you for your email on 20 March 2017 requesting input into SEARs from Roads and Maritime Services for a proposed gas pipeline from Narrabri to Condobolin. Reference is also made to a planning focus meeting held in Dubbo on 15 March 2017.

Following review of the preliminary information and attendance at the meeting, Roads and Maritime notes that the proposal involves:

- Construction of a 450 kilometre long, 400-450mm diameter, gas transmission pipeline between the Narrabri Gas Project and the Moomba Sydney Pipeline.
- The pipeline is proposed to be predominately below ground level across private and public lands. The pipeline will also need to cross the Mitchell Highway (HW7) and Castlereagh Highway (HW18).
- The exact location/alignment of the proposed pipeline and pipeline crossings of public roads is yet to be determined.
- The pipeline will be located in Narrabri, Coonamble, Warren, Bogan and Lachlan local government areas.

Roads and Maritime has identified and recommends the following matters be included in the Environmental Assessment to be prepared by the proponent:

- Vehicular accesses to any work stations/camps are to achieve Safe Intersection Sight Distance (SISD). For a 100km/h speed zone SISD is 262 metres and for a 110km/h speed zone, SISD is 300 metres.
- Works within classified road reserves require prior concurrence from Roads and Maritime under section 138(2) of the *Road Act 1993.*

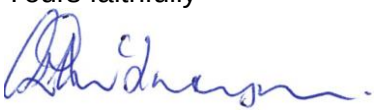
- Where the pipeline needs to cross any State classified road(s), the following minimum clearances are to be achieved:
    - 0.9 metre below the bottom of the table drain
    - 1.5 metres below the road surface.

  Pipeline crossings of classified roads are to be minimised. Where crossing are required, the pipeline is to be at, or as near as possible, to perpendicular to the roadway.
- The pipeline is not to be attached to or below any Roads and Maritime road bridge or culvert structure.
- Pipeline crossings should be carried out using mechanical underboring construction rather than hydraulic means.
- Should construction workers camp(s) be proposed, plans and supporting documentation of the camp are to be provided.
- A traffic impact study prepared in accordance with the methodology set out in Section 2 of the *RTA's Guide to Traffic Generating Developments 2002* and including:
    - For the construction of the gas transmission pipeline and associated infrastructure (accommodation camps), road transport volumes and vehicle types broken down into:
        - origin and destination
        - travel routes, including travel on both private and public roads.
        - peak hours.
    - The study is to provide details of projected transport operations including:
        - traffic volumes
        - materials to be transported and vehicle types used for transport
        - physical constraints on the haulage route
        - access points to and from the Mitchell and Castlereagh Highways.
        - measures to be put in place to ensure a high level of safety for all road users interacting with construction traffic.
    - Any over size and over mass vehicles and loads expected for the construction and operation of the project. The shortest and least trafficked route should be given priority for the movement of construction materials and machinery to minimise the risk and impact to other motorists so far as is reasonably practicable.
    - Temporary and permanent staff numbers (including employees and contractors) and staff parking arrangements during construction and operation of the project.
    - Measures to be employed to ensure traffic efficiency and safety on the public road network during construction and operation of the project.

Roads and Maritime appreciates the opportunity to contribute to the SEARs and requests that a copy of the SEARs be forwarded to Roads and Maritime at the same time they are sent to the applicant.

Should you require further information please contact the undersigned on 02 6861 1453.

Yours faithfully



Andrew McIntyre
Manager Land Use Assessment
Western

NARRABRI SHIRE COUNCIL ABN 95 717 801 656
46-48 Maitland Street
PO Box 261
NARRABRI NSW 2390
P: (02) 6799 6866 F: (02) 6799 6888
E: council@narrabri.nsw.gov.au
W: www.narrabri.nsw.gov.au

Narrabri SHIRE
Heart of the North West

Our Reference: TM:CS:MH: 378419
Your Reference: ID 378419
Contact Name: Cara Stoltenberg
Telephone: (02) 6799 6855

5 April 2017

Mr Stephen Shoesmith - Senior Planning Officer
Resource Assessment and Business Systems
GPO Box 39
SYDNEY NSW 2001

Dear Sir/Madam,

Re: Secretary's Environmental Assessment Requirements for the Western Slopes Pipeline Project

Thank you for your email requesting advice from Agencies and Councils for consideration by the New South Wales (NSW) Department of Planning and Environment (the Department's) in finalising the Secretary's Environmental Assessment Requirements (SEARs) for the Western Slopes Pipeline Project.

Narrabri Shire Council (NSC) have reviewed the Standard SEARs prepared for Critical State Significant Infrastructure projects and also the current information available for the Western Slopes Pipeline Project.

NSC appreciates the Department's interaction with NSC on this project and looks forward to continuing this relationship.

NSC would like to nominate Mr Daniel Boyce, Acting Manager Planning and Development, to be the contact person for this project. Daniel may be contacted on the following details;

Phone: (02) 67996855
Email: danielb@narrabri.nsw.gov.au

As an aside, NSC wishes to advise that it has limited resources to review more technical aspects of such a proposal and relies upon the Department to thoroughly scrutinise the technical aspects and submissions when it completes its detailed assessments of this proposal. NSC expects that the assessment of the Western Slopes Pipeline will be carried out pursuant to all applicable legislative requirements.

I trust this information is to your satisfaction. If you require any further clarification please do not hesitate to contact Mrs Cara Stoltenberg, Town Planner, of Council's Development and Economic Growth Department on (02) 67996855 or caras@narrabri.nsw.gov.au.

Yours faithfully,

Mr Tony Meppem
DIRECTOR DEVELOPMENT AND ECONOMIC GROWTH

Steve O'Donoghue

From: Glenn Wilcox <Glenn.Wilcox@lachlan.nsw.gov.au>
Sent: Wednesday, 29 March 2017 10:04 AM
To: Stephen Shoesmith
Cc: Tekohi Rivera; Eliza Buckland
Subject: RE: Western Slopes Pipeline - Request for Advice

Dear Stephen,

Lachlan Shire council does not have any specific requirements for the SEARs. The proposal only just touches the council area based on the map provided and will at worst impact on roads where crossed.

Council will require that the pipeline is a minimum of 1 metre deep under its roads and that the roads are reinstated to a compaction ratio suitable for the traffic. Further that a retention bond is held to cover any road subsidence that may result within a 12month period following the road opening.

Council has raised with the proponents and at the meeting at Dubbo for consideration of an alternative pipeline route prior to this assessment being undertaken, to ensure that this critical infrastructure is utilised for the future Fifield Nickel Cobalt mine development. This site will utilise a large volume of gas and will require a further pipeline and disturbance of the environment to occur.

Thank you for the opportunity to comment for the SEARs.

Glenn Wilcox | Director Environment & Planning
Lachlan Shire Council | 58-64 Molong Street | **Condobolin**

PO Box 216 | Condobolin NSW 2877
Phone: 02 6895 1951 | Fax: 02 6895 3478
glenn.wilcox@lachlan.nsw.gov.au

From: Stephen Shoesmith [mailto:Stephen.Shoesmith@planning.nsw.gov.au]
Sent: Monday, 20 March 2017 3:54 PM
To: Water Referrals; OEH Planning Matters Mailbox; 'industry.coordination@industry.nsw.gov.au'; Adam Oehlman; EPA RSD Far West Mailbox; OEH ROGHD ROG North West Mailbox; Landuse Enquiries; Stephen.ODonoghue@planning.nsw.gov.au; Rose-Anne.Hawkeswood@planning.nsw.gov.au; Mike.Young@planning.nsw.gov.au; Steven Cox; David Geering; Peter Christie; ingo.steppat@health.nsw.gov.au; bill.williamson@dpi.nsw.gov.au; Jacky Wiblin; John Grey; jbruvel@walgett.nsw.gov.au; 'Kayla Volker'; 'Rick Warren'; 'jdc@warren.nsw.gov.au'; Glenn Wilcox; garry.ryman@cobar.nsw.gov.au; jonathon.mcevoy@rms.nsw.gov.au; Karen Edwards; steven.palmer@industry.nsw.gov.au; 'jarod.dashwood@fcnsw.com.au'; 'council@narrabri.nswgov.au'; 'Cara Stoltenberg'; 'alan.bawden@rfs.nsw.gov.au'; 'dennis.boschma@lls.nsw.gov.au'; Peter Christie; stephenp@cobar.nsw.gov.au; jmcdonald@walgett.nsw.gov.au
Subject: Western Slopes Pipeline - Request for Advice

Hi All

Thank you to those who were able at attend the Western Slopes Pipeline Project Planning Focus Meeting at short notice.

The Department now requests advice from Agencies and Councils for consideration by the Department in finalising the Secretary's Environmental Assessment Requirements (SEARs) for the project.

To assist APA's consideration of Agency/ Council advice, it is requested that a dedicated representative also be nominated by each agency for the project. Could you please nominate the main contact person and contact details in your advice.

All advice received by the Department will be provided to APA for its consideration in the preparation of the Environmental Impact Statement for the project.

I have attached a link to Standard SEARs prepared for Critical State Significant Infrastructure projects for your reference.
http://www.planning.nsw.gov.au/Assess-and-Regulate/Development-Assessment/Systems/~/media/129372A5B29A4BCDA30CF1AADA8D7E1A.ashx

While these are specific to Critical SSI (CSSI) , please note that the Narrabri Gas project is not a CSSI project and that these SEARs will be revised accordingly for the specific project type and geographic location.

However, these generic SEARs should be considered when preparing your response, particularly if your issues and appropriate guidelines/ reference documents are already identified.

The Department requests that Agency/ Council advice be provided by **Friday 31 March 2017**.

If you have any questions or wish to discuss the project further, please contact me as per contact details below.

Regards,

Steve

Stephen Shoesmith
Senior Planning Officer
Resource Assessments and Business Systems
Level 22, 320 Pitt Street | GPO Box 39 | Sydney NSW 2001
T 02 9274 6164

Steve O'Donoghue

From: Jess McDonald <jmcdonald@walgett.nsw.gov.au>
Sent: Wednesday, 5 April 2017 2:01 PM
To: Stephen Shoesmith
Cc: Lyn Douglas
Subject: RE: Western Slopes Pipeline - Request for Advice

Stephen

Please see below my official response to request for advice in relation to the SEARS for the subject pipeline.

I would like to see the following issues addressed in the EIS and other documentation:

- Potential impacts on stock kept on affected properties and the sale of those stock;
- Potential impacts on private and public bore water supplies, what these risks are, historical issues and problems and how these will be avoided on this pipeline;
- Management plan for gas leaks and how gas leaks will impact the environment, stock, crops and water supplies and how these impacts will be managed and dealt with;
- Potential impacts on farming ability and the use of the soil above the affected land;
- How maintenance of the gas pipes in events of leaks or other issues will affect crops, stock, water supplies and land owners;
- The future of the pipeline and a touch on further development of the pipeline;
- Touching on existing issues with the pipeline including historical problems, how they've been dealt with and the outcomes of those issues and problems;
- How on-going relationships with the land owners will be maintained in regards to environmental and maintenance issues.

I appreciate thee matters being taken into consideration.

Regards

Jessica McDonald

Jess McDonald
Director Environmental Services
Walgett Shire Council
PO Box 31
77 Fox Street
Walgett NSW 2832
Ph(02) 6828 1399, Fax (02)6828 1608
jmcdonald@walgett.nsw.gov.au

From: Stephen Shoesmith [mailto:Stephen.Shoesmith@planning.nsw.gov.au]
Sent: Tuesday, 4 April 2017 4:31 PM
To: Water Referrals; OEH Planning Matters Mailbox; 'industry.coordination@industry.nsw.gov.au'; Adam Oehlman; EPA RSD Far West Mailbox; OEH ROGHD ROG North West Mailbox; Landuse Enquiries; Stephen.ODonoghue@planning.nsw.gov.au; Rose-Anne.Hawkeswood@planning.nsw.gov.au; Mike.Young@planning.nsw.gov.au; Steven Cox; David Geering; Peter Christie; ingo.steppat@health.nsw.gov.au; bill.williamson@dpi.nsw.gov.au; Jacky Wiblin; John Grey; Justin Bruvel; 'Kayla Volker'; 'Rick Warren'; 'jdc@warren.nsw.gov.au'; 'Glenn Wilcox'; garry.ryman@cobar.nsw.gov.au; jonathon.mcevoy@rms.nsw.gov.au; Karen Edwards; steven.palmer@industry.nsw.gov.au; 'jarod.dashwood@fcnsw.com.au'; 'council@narrabri.nswgov.au'; 'Cara Stoltenberg'; 'alan.bawden@rfs.nsw.gov.au'; 'dennis.boschma@lls.nsw.gov.au'; Peter Christie; stephenp@cobar.nsw.gov.au; Jess McDonald
Subject: RE: Western Slopes Pipeline - Request for Advice

Hi All

Thank you to those who have already provided advice.

For those Agencies / Councils who have been unable to, please provide a response by 4pm tomorrow the 5 April 2017.

Regards,

Steve

Stephen Shoesmith
Senior Planning Officer
Resource Assessments and Business Systems
Level 22, 320 Pitt Street | GPO Box 39 | Sydney NSW 2001
T 02 9274 6164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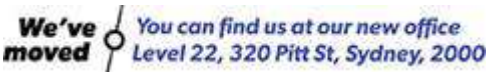

From: Stephen Shoesmith
Sent: Monday, 20 March 2017 3:54 PM
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<rick@coonambleshire.nsw.gov.au>; 'jdc@warren.nsw.gov.au' <jdc@warren.nsw.gov.au>; 'Glenn Wilcox' <Glenn.Wilcox@lachlan.nsw.gov.au>; 'garry.ryman@cobar.nsw.gov.au' <garry.ryman@cobar.nsw.gov.au>; 'jonathon.mcevoy@rms.nsw.gov.au' <jonathon.mcevoy@rms.nsw.gov.au>; Karen Edwards <Karen.Edwards@epa.nsw.gov.au>; 'steven.palmer@industry.nsw.gov.au' <steven.palmer@industry.nsw.gov.au>; 'jarod.dashwood@fcnsw.com.au' <jarod.dashwood@fcnsw.com.au>; 'council@narrabri.nswgov.au' <council@narrabri.nswgov.au>; 'Cara Stoltenberg' <caras@narrabri.nsw.gov.au>; 'alan.bawden@rfs.nsw.gov.au' <alan.bawden@rfs.nsw.gov.au>; 'dennis.boschma@lls.nsw.gov.au' <dennis.boschma@lls.nsw.gov.au>; Peter Christie <Peter.Christie@environment.nsw.gov.au>; 'stephenp@cobar.nsw.gov.au' <stephenp@cobar.nsw.gov.au>; 'jmcdonald@walgett.nsw.gov.au' <jmcdonald@walgett.nsw.gov.au>
Subject: Western Slopes Pipeline - Request for Advice

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Thank you to those who were able at attend the Western Slopes Pipeline Project Planning Focus Meeting at short notice.

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To assist APA's consideration of Agency/ Council advice, it is requested that a dedicated representative also be nominated by each agency for the project. Could you please nominate the main contact person and contact details in your advice.

All advice received by the Department will be provided to APA for its consideration in the preparation of the Environmental Impact Statement for the project.

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However, these generic SEARs should be considered when preparing your response, particularly if your issues and appropriate guidelines/ reference documents are already identified.

The Department requests that Agency/ Council advice be provided by **Friday 31 March 2017**.

If you have any questions or wish to discuss the project further, please contact me as per contact details below.

Regards,

Steve

Stephen Shoesmith
Senior Planning Officer
Resource Assessments and Business Systems
Level 22, 320 Pitt Street | GPO Box 39 | Sydney NSW 2001
T 02 9274 6164

NSW GOVERNMENT Planning & Environment

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We've moved You can find us at our new office
Level 22, 320 Pitt St, Sydney, 2000

All communications to be addressed
to the General Manager
PO Box 223
Cobar NSW 2835

Telephone: (02) 6836 5888
Facsimile: (02) 6836 3964
Email: mail@cobar.nsw.gov.au
Website: www.cobar.nsw.gov.au
In your reply please quote:

"Regional Centre in Western NSW"

Cobar Shire Council Offices:
36 Linsley Street
Cobar NSW 2835
ABN 71 579 717 155

Ref: G1-1
GJR:RFJ

30 March 2017

Stephen Shoesmith
Senior Planning Officer
Resource Assessments and Business Systems
GPO Box 39
SYDNEY NSW 2001

By email to: Stephen.Shoesmith@planning.nsw.gov.au

Dear Stephen

RE: WESTERN SLOPES PIPELINE DEVELOPMENT PROPOSAL BY THE APA GROUP

I confirm that Council at its Ordinary Meeting held on 23 March 2017 considered a report regarding the subject development proposal.

Council resolved that formal advice be provided to the Department of Planning & Environment identifying matters that should be addressed by APA Group in its project application.

The matters identified as above are as follows:

1. Within the Standard SEARs document (referenced in your invitation to submit advice, dated 20 March 2017) the following general standard requirements are considered to be relevant to Cobar Shire Council:

   14. Socio-economic, Land Use and Property
   17. Transport and Traffic
   20. Waste

2. The specific matters that should be addressed either by including relevant information as part of responses to the above standard requirements or separately are;

   a) The impact of the project on mineral resources and the need to consult with the NSW Department of Resources and Energy.

   b) Consultation with holders of mineral exploration licences under the *Mining Act 1992* in the vicinity of the project.

c) Assess the potential for the proposed pipeline to service the energy needs of future mining projects in and around the Cobar Shire local government area.

d) Assess the suitability and conditions of the local road networks to service the development proposal.

e) Identify all traffic routes associated with the development proposal.

f) Detail traffic management procedures to control/minimise the impact of the development proposal on the local road network.

g) Commit to making development contributions at a level of at least the maximum payable under the Cobar Local Infrastructure Contributions Plan 2012 or higher if Council and APA Group are agreeable to entering into a Planning Agreement. The Cobar Local Infrastructure Contributions Plan 2012 can be accessed via the Cobar Shire Council website.

h) Detail proposed waste management measures relative to the project and any need for waste disposal within the Cobar Shire local government area.

i) Ensure that the project does not cause any permanent adverse impact on existing infrastructure assets servicing Cobar. For example; SR21 Tallebung Road, SR20 Grain Road and the Albert Priest Channel.

If you have any questions please give me a call or email mail.cobar@nsw.gov.au.

My mobile number is 0408 695 026.

Yours faithfully

Garry Ryman
DIRECTOR OF PLANNING AND ENVIRONMENTAL SERVICES