



23rd October 2008

Department of Planning
GPO Box 39
Sydney NSW 2001

Attention: Dinuka McKenzie, Senior Environmental Planner – Energy and Water

Dear Dinuka

Re: Proposed Queensland Hunter Gas Pipeline EA Comments

Thank you for the opportunity to provide comment on the Environmental Assessment for the Queensland Hunter Gas Pipeline project.

The Namoi CMA is primarily interested in major developments such as the Queensland Hunter Gas Pipeline project from the viewpoint of catchment impacts and benefits especially in terms of the potential impacts and benefits on the people in the catchment, landscapes, surface and groundwater ecosystems and native plants and animals.

The Catchment Action Plan (CAP) for the Namoi was approved by Minister Ian MacDonald, Minister for Natural Resources in January 2007. The Namoi CAP is the strategic framework that guides natural resource management for the Namoi Catchment for the next 10 years. The CAP addresses the four key resources of the catchment, namely, the people in the catchment, landscapes, surface and groundwater ecosystems and native plants and animals.

It is realised that the proponent is seeking approval of a concept plan under section 75C of the EP&A Act for a critical infrastructure development. However, Namoi CMA believes there are a number of issues and discrepancies that need to be brought to the proponents attention so they can be addressed in the proposed fieldwork and production of the Construction Environmental Management Plan (CEMP). Namoi CMA would like representation on the government liaison group to allow input and review of the CEMP, input into specific mitigation measures and onsite advice during construction and rehabilitation.

NCMA considers that the pipeline may have the potential to impact on native vegetation / biodiversity, riparian areas, shallow groundwater, salinity and soils and aboriginal cultural heritage issues.

A team of Namoi CMA technical staff have had input into the comments on the Environmental Assessment Including:

- Mr Tim Watts, Soil Management and Riparian specialist
- Mr Lester Thearle, Soil Management
- Mr Shannon Taylor, Aboriginal Heritage and Culture
- Mr George Truman, Soil and Salinity Management
- Mr Glenn Bailey, Soil and Biodiversity Management
- Mr Nathan Penny, Riparian specialist.

A number of these staff have driven and inspected the 220km of pipeline right of way that is within the Namoi Catchment. The attached spreadsheet outlines the comments made by team members.

Surface and Groundwater Assessment

Chapter 15 and appendix K deal with issues regarding surface and groundwater assessment, existing environment, potential impacts, mitigation measures and fieldwork.

The comments in the attached spreadsheet primarily focus on issues regarding surface and groundwater with respect to sensitivity assessments and crossing methodologies.

Namoi CMA agrees with the assessment methodology, however, we believe that a number of the major creeks and streams have inappropriate sensitivity assessments and crossing methodologies. It is realised that the information on surface and groundwater in this part of the EA has been undertaken as a desk top assessment, however, the assessments inform the need for further fieldwork at riparian crossings.

Section 15.5 outlines those water features that require further fieldwork. According to section 15.5 there are 9 water features within the Namoi Catchment that have a high sensitivity ranking that require further fieldwork. Namoi CMA believes there are 22 water features within the Namoi Catchment that we believe have a high sensitivity ranking and would require further fieldwork. These water features are listed in the attached spreadsheet.

Section 15.2 and 15.4 refers to shallow groundwater and its occurrence within the Namoi catchment. Namoi CMA believes that shallow groundwater (ie <5m) would occur in the following areas:

- 418km to 424km
- 431km to 450km
- 465km to 480km
- 486km to 495km
- 500km to 535km
- 535km to 575km (possibly within 2m of the surface)

- 581km to 584km
- 591km to 607km
- 610km to 621.5km

Namoi CMA believes that further investigation is warranted through these areas to identify the actual presence of shallow groundwater and to develop mitigation measures.

Namoi CMA agrees with the mitigation and management measures as detailed in section 15.4, however, Namoi CMA would also like to review and be consulted on waterway crossing techniques and mitigation measures for shallow groundwater interception when the CEMP is produced.

Native Vegetation and Biodiversity

Chapter 9 of the EA deals with native vegetation and biodiversity issues along the pipeline right of way within the Namoi catchment.

Namoi CMA is satisfied with the assessment methodology considering the proponent is seeking conceptual approval. During inspection of the proposed pipeline right of way, data was collected on the presence native vegetation and EEC's. The attached spreadsheet highlights the sections of the pipeline right of way that has native vegetation and/or EEC's present.

Section 9.2 reports on the existing environment and EEC's. Within the Namoi catchment a number of EEC's are present, the following 2 are the most predominant.

- *'Native Vegetation on cracking clays on the Liverpool Plains EEC'*

It is contended that the 'Native Vegetation on cracking clays on the Liverpool Plains EEC' is not present at KP 460 to 450km or KP465 to 468km as these sites are not within the Liverpool Plains area as defined within the EEC. Namoi CMA believes that the pipeline right of way may dissect at least 30km of 'Native Vegetation on cracking clays on the Liverpool Plains EEC' within the Namoi catchment.

- *'White Box, Yellow Box, Blakely's Gum Grassy Woodland EEC'*

Namoi CMA believes that this EEC is present within the Namoi catchment and that the pipeline right of way may dissect the EEC at KP576 to KP579 and KP620 to KP635.5km. This represents a linear length of at least 18km within the Namoi catchment.

Namoi CMA believes there are a number of other EEC's that are present within the Namoi catchment. The presence of the above 2 EEC's and other EEC's need to be investigated further during the field work. Section 9.3 outlines the potential impacts during construction and operation, however, the EA focuses primarily on weed management within the EEC's. The mitigation measures in section 9.4 focuses on avoidance rather than revegetation. Measures need to be detailed in the CEMP for revegetation and post development management of the pipeline route especially when it dissects the above 2 EEC's.

Soils and Salinity

Section 17.3 of the EA deals with geology and soil issues along the proposed pipeline right of way. There are significant areas of expansive soils within the Namoi catchment that may present construction challenges during construction. The areas of expansive soils are predominantly found within the basaltic floodplain areas and the volcanic slopes of the Liverpool Range of the Namoi catchment.

Namoi CMA believes that expansive soils are found within the following areas:

- 418km to 424km
- 431km to 450km
- 465km to 480km
- 500km to 505km
- 535km to 584km
- 591km to 593km
- 604km to 635.5km

Furthermore, during the pipeline right of way inspection, it was realised that the pipeline right of way would dissect known saline outbreak sites at KP 475 and KP 585.5.

The presence of expansive soils and the saline site needs to be investigated further during the field work and detailed mitigating measures need to be included in the CEMP.

Aboriginal Cultural Heritage

Chapter 10.1 of the EA deals with issues relating to aboriginal cultural heritage including assessment methodology, existing environment, potential impacts and mitigation measures. Namoi CMA believes there are a number of significant aboriginal cultural heritage issues within the Namoi catchment that are in close proximity to the pipeline ROW.

Namoi CMA believes that significant aboriginal cultural heritage areas close to pipeline ROW can be found near the following kilometre marks:

- KP480 Namoi River
- KP 501 and 504 scar trees
- KP512 Campsite
- KP 527.5 scar trees
- KP538 to 565 trading route
- KP584 to 585 scar trees
- KP587 to 591 scar trees
- KP614 cultural sites
- KP621 to 623 cultural site

The presence of aboriginal cultural heritage sites needs to be investigated further during the field work and detailed mitigating measures need to be included in the CEMP.

In conclusion, the Namoi CMA looks forward to implementation of the QHGP project as it is anticipated that it will have significant social and economic benefits to the catchment and its people. We further look forward to be able to participate in the government liaison group and the development of the CEMP.

If you need to discuss this matter further, please do not hesitate to contact Glenn Bailey on (02) 6742 9204.

Yours Sincerely

Bruce Brown, General Manager
Namoi Catchment Management Authority

Pipeline Right of Way Assessment and Comments by Namoi CMA

Distance (Kp)	Feature present	EA Sensitivity	Agree / Disagree	Recommended Sensitivity	Reasons	Physical site assessment	Recommended crossing method	Notes on assessment, site conditions and landscape conditions
418								
419	Bobbiwa Creek	Moderate	Agree			Yes		Gas Pipeline enters the Namoi catchment
420								
421								
422								
423	Spring Creek	Moderate	Agree			Yes		
424								
425								
426								
426.5	Unknown	Moderate	Agree			No		
427								
428								
428	Unknown	Low	Agree			Yes		
430								
431	Unknown	Low	Agree			No		no diversion banks
431.5	Mudgate Creek	Moderate	Agree			No		dryland cropping, native grass
432								dryland cropping, native grass
433						OK		
433	Unknown	Low	Agree			Yes		
434	Unknown	Low	Agree			Yes		
435								
436	Unknown	Low	Agree			Yes		
437								
437.5	Unknown	Low	Agree			Yes		
438								
439								
440								
441								
442								
443	Unknown	Low	Disagree	Moderate	Moderate riparian vegetation, steep banks highly susceptible to erosion	Yes	HDD	
443	Deep Creek	Low	Disagree	Moderate	Moderate riparian vegetation, steep banks highly susceptible to erosion	Yes	HDD	
444								
445								
445.5	Namoi River	High	Agree	High		No		
446								
446 to 450								Not on Liverpool plains therefore not Nat veg on CC of Liverpool Plains (see 8-8)
447	Foodrunner	Low	Disagree	Moderate	Moderate riparian vegetation	No	Open trench	Previous knowledge of area used
448								
449	Unknown	Low	Disagree	High	Good riparian vegetation present	No	HDD	Previous knowledge of area used
450	Unknown	Low	Disagree	High	Good riparian vegetation present	No	HDD	Previous knowledge of area used
451	Native Vegetation				Good quality vegetation	Yes		Avoid clearing of roadside vegetation
451.5	Unknown	Low	Agree			Yes		
452	Native Vegetation				Good quality vegetation			Avoid clearing of roadside vegetation
453	Native Vegetation	Low	Agree		Good quality vegetation	Yes		Avoid clearing of roadside vegetation
454	Unknown	Low	Disagree	High	High erosion hazard, unstable soil	Yes	HDD	Previous knowledge of area used
455	Unknown	Low	Agree			Yes		

Distance (Kp)	Feature present	EA Sensitivity	Agree/Disagree	Recommended Sensitivity	Reasons	Physical site assessment	Recommended crossing method	Notes on assessment, site conditions and landscape conditions
456								
457	Pine Creek	Low	Disagree	High	High erosion hazard, unstable soil	No	HDD	Previous knowledge of area used
458								
458.5	Unknown	Low	Agree			No		
459								
460								
461								
461.5	Kurralong Creek	Low	Disagree	High	High erosion hazard, unstable soil	No	HDD	Previous knowledge of area used
462								
463								
464								
465								
465.5	Tullamullen Creek	Low	Disagree	High	High erosion hazard, unstable soil, subject to high flows	Yes	HDD	high flow, low banks
466								
467								
468								
469								
470								
471								
472								
465 to 468								Not on Liverpool Plains therefore not Nat veg on CC of Liverpool Plains (see 9-8)
472.5	Curraekah Creek	Nil		Moderate	Moderate riparian vegetation	Yes	Open trench	
473								
474								
475								surface salinity discharge area
476								
477								
478								
479								
479.5	Namoi River	High	Agree	High		Yes	HDD	Significant area
480	Namoi River							Aboriginal sites on slope above river (eastern side) between 480km and 481km
481	Coolbubindl Creek	Nil		Moderate	Moderate riparian vegetation	Yes	Open trench	High possibility of erosion, high level of native veg.
482								Annual Species for Revegetation
483	Coolbubindl Creek	Nil		Moderate	Moderate riparian vegetation	No	Open trench	High possibility of erosion, high level of native veg.
484	Unknown	Nil		Low	Low lying drainage depression	No	Open trench	High possibility of erosion, high level of native veg.
485								Annual Species for Revegetation
486								Annual Species for Revegetation
487	Unknown	Nil		Low	Low lying drainage depression	No	Open trench	Drainage depression to be avoided
488								Drainage depression to be avoided
488	Boloi Creek	Low	Disagree	Moderate	Moderate riparian vegetation present	Yes	HDD - major drainage line	Scar trees, riparian vegetation present, remnant vegetation, plains grass, high diversity (grey box, white)
489	Native Vegetation	Nil			Nat Veg on Cracking Clays EEC	No		High possibility of erosion, high level of native veg.
491	Native Vegetation	Nil			Nat Veg on Cracking Clays EEC	No		Annual Species for Revegetation
491.5	Unknown	Low	Agree			No	Open trench	High possibility of erosion, high level of native veg.
492								Annual Species for Revegetation
493								
493.5	Draggle Draggle Creek	Low	Disagree	Moderate	Moderate riparian vegetation	Yes	no diversion banks	site to be rehabilitated to ground level to avoid breakout across the floodplain

Distance (Kyr)	Feature present	EA Sensitivity	Agree/Disagree	Recommended Sensitivity	Reasons	Physical site assessment	Recommended crossing method	Notes on assessment, site conditions and landscape conditions
494								
495	Unknown	Nil		Low	Low lying drainage depression	No	Open trench	High possibility of erosion, high level of native voge. Annual Species for Revegetation
496								
497	Unknown	Nil		Low	Low lying drainage depression	No	Open trench	High possibility of erosion, high level of native voge. Annual Species for Revegetation
498	Unknown	Low	Agree				Open trench	High possibility of erosion, high level of native voge. Annual Species for Revegetation
499	Unknown	Nil		Low	Low lying drainage depression	No	Open trench	High possibility of erosion, high level of native voge. Annual Species for Revegetation
500								
501	Namoi River	High	Agree	High	Significant Area, incised banks, scar trees	Yes	HDD	
502								Irrigation area - stable
503								Irrigation area - stable
504								
504	Namoi River	High	Agree	High	Significant Area, incised banks, scar trees	No	HDD	Previous knowledge of area used
504.5	Unknown	Low	Agree		Low lying drainage depression	No	Open trench	High possibility of erosion, high level of native voge. Annual Species for Revegetation
505								
506	Native Vegetation	Nil		High	Nat Veg on Cracking Clays EEC	No	Open trench	Previous knowledge of area used
507	Native Vegetation	Nil		High	Nat Veg on Cracking Clays EEC	No	Open trench	Previous knowledge of area used
508	Unknown	Low	Disagree	Low	Low lying drainage depression	No	Open trench	High possibility of erosion, high level of native voge. Annual Species for Revegetation
508	Native Vegetation	Nil		High	Nat Veg on Cracking Clays EEC	Yes	Open trench	Previous knowledge of area used
509	Native Vegetation	Nil		High	Nat Veg on Cracking Clays EEC	Yes	Open trench	Previous knowledge of area used
510	Native Vegetation	Nil		High	Nat Veg on Cracking Clays EEC	Yes	Open trench	Previous knowledge of area used
511	Native Vegetation	Nil		High	Nat Veg on Cracking Clays EEC	No	Open trench	Previous knowledge of area used
512	Aboriginal site							Aboriginal Campsite
513	Native Vegetation	Nil		High	Nat Veg on Cracking Clays EEC	No	Open trench	Previous knowledge of area used
514	Native Vegetation	Nil		High	Nat Veg on Cracking Clays EEC	No	Open trench	Previous knowledge of area used
514.5	Unknown	Low	Agree	Low	Low lying drainage depression	No	Open trench	Previous knowledge of area used
515								Irrigated cropping area
516								Irrigated cropping area
517								Irrigated cropping area
518								Irrigated cropping area
519								Irrigated cropping area
520	Native Vegetation	Nil		High	Nat Veg on Cracking Clays EEC	Yes	Open trench	Previous knowledge of area used
521	Unknown	Nil		Low	Low lying drainage depression	No	Open trench	High possibility of erosion, high level of native voge. Annual Species for Revegetation
522	Native Vegetation	Nil		High	Nat Veg on Cracking Clays EEC	Yes	Open trench	
523	Native Vegetation	Nil		High	Nat Veg on Cracking Clays EEC	Yes	Open trench	Plains Grass, scar trees scattered throughout the area
524	Ramraj Creek	Low	Agree	Low	Low lying drainage depression	No	Open trench	Previous knowledge of area used
525	Native Vegetation	Nil		High	Nat Veg on Cracking Clays EEC	Yes	Open trench	Previous knowledge of area used
526								Cropping Area
526.5	Pig Hole Floodrunner	Low	Agree	Low		Yes	Open trench	
527	Native Vegetation	Nil		High	Nat Veg on Cracking Clays EEC	Yes	Open trench	Previous knowledge of area used
527.5	Namoi River	High	Agree	High	Significant Area, incised banks, scar trees	No	HDD	
528	Native Vegetation	Nil		High	Nat Veg on Cracking Clays EEC	Yes	Open trench	Previous knowledge of area used
529	Native Vegetation	Nil		High	Nat Veg on Cracking Clays EEC	Yes	Open trench	Previous knowledge of area used
530	Native Vegetation	Nil		High	Nat Veg on Cracking Clays EEC	Yes	Open trench	Previous knowledge of area used

570								irrigated cropping area
Distance (Kp)	Feature present	EA Sensitivity	Agree/Disagree	Recommended Sensitivity	Reasons	Physical site assessment	Recommended crossing method	Notes on assessment, site conditions and landscape conditions
571								irrigated cropping area
572								irrigated cropping area
573								irrigated cropping area
574	Werris Creek	Low	Agree	Low	Low lying drainage depression	Yes	Open trench	dryland cropping, native plains grass
575								dryland cropping, native plains grass
576								dryland cropping, native plains grass
577								dryland cropping, native plains grass
578	Native Vegetation	Nil		High	Nat Veg on Cracking Clays EEC Box Gum	Yes	Open trench	yellow box, native plains grass on cracking clay
579	Native Vegetation	Nil		High	Nat Veg on Cracking Clays EEC Box Gum	Yes	Open trench	yellow box, native plains grass on cracking clay
580								dryland cropping, native plains grass
581								dryland cropping, native plains grass
582	Werris Creek	Low	Disagree	Moderate	Moderate riparian vegetation	No	HDD	incised gully, unstable banks
583								
584	Aboriginal significance				aboriginal scar trees	No	Open trench	avoid aboriginal scar trees
585	Aboriginal significance				aboriginal scar trees	No	Open trench	avoid aboriginal scar trees
585.5	Salinity					Yes	Open trench	surface salinity outbreak
586	Unnamed	Low	Agree	Low	Low lying drainage depression	No	Open trench	
587	Aboriginal significance				aboriginal scar trees	No	Open trench	avoid aboriginal scar trees
588	Aboriginal significance				aboriginal scar trees	No	Open trench	avoid aboriginal scar trees
588.5	Unnamed	Low	Agree	Low	Low lying drainage depression	Yes	Open trench	
589	Aboriginal significance				aboriginal scar trees	No	Open trench	avoid aboriginal scar trees
590	Aboriginal significance				aboriginal scar trees	No	Open trench	avoid aboriginal scar trees
591	Aboriginal significance				aboriginal scar trees	No	Open trench	avoid aboriginal scar trees
591.5	Quipoly Creek	High	Agree	High	Good riparian vegetation present	Yes	HDD	Steep and unstable banks
592								
592.5	Quirinal Creek	Moderate	Disagree	High	Good riparian vegetation present	Yes	HDD	Steep and unstable banks
593	DWE Bore							monitoring bore.
594								
595								
596								
597								
598								
599								
600								
601								
600 to 604	Unknown	Nil		Low	Low lying drainage depression	No	Open trench	High possibility of erosion, high level of native veg. Annual Species for Revegetation
602								
603								
604								
604.5	Native Vegetation	Nil		High	Nat Veg on Cracking Clays EEC	Yes	Open trench	Previous knowledge of area used
605	Borambl Creek	Low	Disagree	High	Good riparian vegetation present	Yes	HDD	Steep and unstable banks
606								
606.5	Borambl Creek	Low	Agree	Low	Low lying drainage depression	No	Open trench	High possibility of erosion, high level of native veg. Annual Species for Revegetation

[illegible]