

Traffic Management Sub Plan

Rev 03
Reviewed June 2019

Dewhurst Gas Exploration Project Environmental Sub-Plan – Traffic Management Sub Plan

1.1 Background

This Traffic Management Plan (TMP) is one of the Environmental Sub-Plans under the Project Environmental Management Plan (PEMP) for the Dewhurst Gas Exploration Pilot Wells Program and the Exploration Pilot Expansion Project (the Project).

This TMP addresses mitigation measures and monitoring and reporting requirements in relation to traffic.

All Santos NSW (Eastern) Pty Ltd (Santos) employees and their contractors working on the Project must comply with the PEMP and all sub-plans under the PEMP including this TMP.

1.2 Key Statutory Requirements

1.2.1 General

- *Roads Act 1993* (NSW)
- *Managing Urban Stormwater: Soils and Construction, Volume 2C, Unsealed Roads* (DECC, 2007)
- *Erosion and sediment control on unsealed roads – A field guide for erosion and sediment control maintenance practices* (OEH, 2012)
- *Policy and Guidelines for Aquatic Habitat Management and Fish Conservation* (DPI, 1999)
- *Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings* (NSW Fisheries 2003)

1.2.2 Project Specific

- Planning Approvals;
 - Department of Primary Industries (DPI) Project Approval for production pilots covering wells 13 to 18H – 21 July 2009 (DPI-PA).
 - Department of Trade and Investment (DT&I) Development Approval for pilot wells 26-29 under Minister for Resources and Energy – 16/8/2013 (MRE-DA);
 - Department of Planning and Environment (DPE) Approval – 18 July 2014 (SSD-6038);
- Renewal Petroleum Exploration Licence 238 (PEL 238);
- Environment Protection Licence 20350 (EPL 20350);
- Review of Environmental Factors (REF (3/13));
- Review of Environmental Factors - Statement of Commitments (REF – SoC (3/13)); and
- NSW Forests Occupation Permit (OP).

¹ Note the operational conditions of consent and REF statement of commitments under this approval are addressed within the approved Project Environmental Management Plan (PEMP). This PEMP forms part of the SMS process for the Project

Dewhurst Gas Exploration Project Environmental Sub-Plan – Traffic Management Sub Plan

1.2.3 Santos Management System (SMS)

- SMS-MS1-ST12- Land Transportation Procedure
- Additional legal obligations and other requirements are captured in MS4 Compliance Management Standard.

1.3 Objectives

Objectives relating to the TMP are described below:

- Minimise and manage all traffic impacts on the environment and potentially affected receivers throughout construction, drilling and operational phases of the Project.
- Protect human health and safety and impacts to the environment from construction, drilling and operations.
- Ensure compliance with relevant legislative and other requirements including the MRE-DA, SSD-6038, PEL 238, EPL 20350, and OP.

1.4 Performance Indicators

Performance indicators relating to this TMP are outlined below:

- No traffic related issues raised by the community and stakeholders during all phases of the Project.
- No damage to public infrastructure including roads during all phases of the Project.

1.5 Predicted Impacts

Review of Environmental Factors for Dewhurst 26-29 petroleum wells PEL 238, Gunnedah Basin, NSW (March 2013)

Section 6.3 in the REF for Dewhurst 26-29 petroleum wells PEL 238, Gunnedah Basin, NSW (March 2013) describes the potential impacts on the community including effects on traffic. It is anticipated that the works would generate minimal traffic on Beehive Road and the southern part of Garlands Road, particularly during establishment and drilling. It is noted, however, that such impacts are considered negligible, particularly given that these roads are not heavily used by the local community and do not have residential properties.

Environmental Impact Assessment for Dewhurst Gas Exploration Pilot Expansion (October 2013)

Section 15 of the EIS for Dewhurst Gas Exploration Pilot Expansion (October 2013) describes the potential impacts on traffic, based on the Traffic and Transport Assessment (Dewhurst Gas Expansion) by GTA Consultants.

During construction, it is expected that a minor increase in local traffic would occur due to delivery and collection of equipment, materials and plant and vehicle movements by personnel and contractors. Impacts during operations are expected to be minimal, with one vehicle entering and exiting the site each day. It is anticipated that the Project would have a negligible impact on existing traffic on the Newell Highway or roads within the Pilliga East State Forest.

Dewhurst Gas Exploration Project Environmental Sub-Plan – Traffic Management Sub Plan

Through the implementation of the proposed mitigation measures outlined in Section 1.6 of this TMP, the works will not likely generate any significant traffic impacts on the surrounding road network.

Dewhurst Gas Exploration Project
Environmental Sub-Plan – Traffic Management Sub Plan

1.6 Mitigation Measures

Plan Ref	Actions	Timing	Reference
Vehicle Access and Movements			
TMP-1	Santos will prepare a Code of Conduct, in consultation with RMS, for all drivers required to access the site. The Code of Conduct will include: <ul style="list-style-type: none"> • Details of the roads to be followed to access and exit the site. • Management actions that ensure drivers operate their vehicles in a safe, professional and courteous manner. • Measures to minimise or avoid access to the site outside of daylight hours, wherever practicable. 	At all times	SSD-6038 Schedule 3, Condition 21
TMP-2	Vehicles will not travel at speeds greater than 80 kilometres per hour along roads (within the forest) and will not travel in excess of signed limits.	At all times	SSD-6038 SoC 63
TMP-3	Santos will ensure that: <ul style="list-style-type: none"> • Access to the Dewhurst 13-1BH and Dewhurst 26-31 pilots shall primarily be via the intersection of X-Line Road and the Newell Highway. • Heavy vehicle activity associated with lease construction passing through residential areas will be confined to standard construction hours (7.00 am to 6.00 pm Monday to Friday, 8.00 am to 1.00 pm Saturday). • Movement of vehicles will be on designated roads. • The site boundary will be clearly demarcated to ensure that plant and vehicles keep within the approved area of disturbance. 	During Construction	SSD-6038 SoC 64, 67, 68, 70 OP Condition 29 Section 4.21.1
TMP-4	Santos will ensure that all employees and agents will comply with the Forestry of NSW (FNSW) Plan of Management and the reasonable directions of FNSW and its officers in relation to the washing down, operation, movement and parking of vehicles within the Occupation Permit Area.	At all times	OP Condition 12 Section 4.8
TMP-5	Santos will ensure all Project employees and agents will receive the appropriate induction (consistent with Santos policies), which will include driver protocols and identification of any local hazards.	As required	SSD-6038. SoC 65
TMP-6	An in-vehicle monitoring system (IVMS) will be fitted to all Santos vehicles.	As required	SSD-6038 SoC 66
Road Maintenance and Repair			

Dewhurst Gas Exploration Project
Environmental Sub-Plan – Traffic Management Sub Plan

TMP-7	<ul style="list-style-type: none">• Santos may limit the use of any road based on the combination of road and weather conditions.• Any damage to roads caused by construction activities will be repaired at Santos cost in accordance with the OP, land access agreement or the PEL 238 conditions.	During Construction	PEL 238 Condition 30 SSD-6038 SoC 69
-------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------	--------------------------------------------

Dewhurst Gas Exploration Project
Environmental Sub-Plan – Traffic Management Sub Plan

Plan Ref	Actions	Timing	Reference
	<ul style="list-style-type: none"> Santos will maintain roads at least to the condition the roads were in prior to construction. Santos will obtain FNSW written approval prior to maintenance or repairs. As required, Santos will pay to the relevant roads authority, the reasonable costs incurred for fixing damage to public roads caused by Project-related activities. If there is no agreement on reasonable costs between both parties, the matter will be referred to the Director-General for resolution. 		OP Condition 30 PEL 238 Condition 28
TMP-8	<p>Access Tracks will be maintained and managed in accordance with:</p> <ul style="list-style-type: none"> Managing Urban Stormwater – Soils and Construction Volume 2C Unsealed Roads (DECC, 2007) and Erosion and sediment control on unsealed roads – A field guide for erosion and sediment control maintenance practices (OEH, 2012). Requirements of the Policy and Guidelines for Aquatic Habitat Management and Fish Conservation (DPI 1999); and Why do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (NSW Fisheries 2003). 	At all times	SSD-6038 Schedule 3, Condition 18 PEL 238 Condition 29
TMP-9	Santos will seal the first 30 metres of X-Line Road at the intersection of X-Line Road and Newell Highway, to the satisfaction of RMS.	During Construction	SSD-6038 Schedule 3, Condition 19
TMP-10	Santos will install Size B “Turning Traffic” Signs (W5-25) and 300m distance plates at a distance of 300 metres on either side of the X-Line Road intersection with the Newell Highway, before undertaking construction of the Dewhurst 13-18H Extension and Dewhurst 30 and 31 Extension wells, to the satisfaction of the RMS.	Prior to works in this area	SSD-6038 Schedule 3, Condition 20
Signage			
TMP-11	<ul style="list-style-type: none"> Santos will not erect, display, affix, paint or exhibit on or to the Occupation Permit Area any signage, advertisement, notice or hoarding without the prior written approval of FNSW. Santos will not make any permanent marking on any tree, plant or rock in the Occupation Permit Area; Before leaving the Occupation Permit Area or as requested by FNSW, Santos will remove any signage, advertisements, notices, hoarding or markings placed by or on behalf of Santos. Santos will repair/resolve any damage or disfigurement caused by the placement or removal of any signage, advertisement, notice, hoarding or marking. 	At all times	OP Condition 26 Section 4.16
Construction of New Access Tracks/Roads			

Dewhurst Gas Exploration Project

Environmental Sub-Plan – Traffic Management Sub Plan

TMP-12	<ul style="list-style-type: none">Existing roads will be used in preference to constructing new roads and tracks;Santos will ensure that roads are properly constructed, drained and maintained by Santos at its cost to a standard which will at least provide all-weather access for four-wheel drive vehicles or to such other appropriate and reasonable standard that complies with FNSW's operational, environmental and safety standards;The location of any new roads required for Santos' activities will be subject to the Authorised Officer's approval;	At all times	PEL 238 Condition 29 OP Condition 31 Section 4.22
--------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------	---------------------------------------------------------

Dewhurst Gas Exploration Project
Environmental Sub-Plan – Traffic Management Sub Plan

Plan Ref	Actions	Timing	Reference
	<ul style="list-style-type: none"> Any new access road construction or realignment will be marked on the ground and the final route inspected and approved by the FNSW Officers prior to commencement of such work; Any temporary road will be restored or revegetated in accordance with the provisions in the OP, if no longer required. 		
Interference with Access			
TMP-13	Santos will not interfere with the use of any public road or prevent access along any other road or track without written approval of the relevant roads authority (as defined under the <i>Roads Act 1993</i>) or, in the case of any other road or track, the landholders and/or residents relying on that road or track for access.	At all times	PEL 238 Condition 27

1.7 Monitoring Requirements

Aspect	Description	Frequency
Damage to Roads	Damage to roads caused by construction activities will be monitored to satisfy a number of Project specific requirements/conditions including the Condition of Consent (Appendix 4 – SOC 69) and the Occupation Permit, and for confirming damages caused by the Project during construction. Monitoring damage will be via Dilapidation Surveys conducted prior to commencement of construction and following completion of construction.	Before Construction After Construction
Induction	An Induction Records register indicating the induction of all site staff and delivery drivers will be maintained to satisfy the Condition of Consent (Appendix 4 – SOC 65).	During Construction, Drilling and Operations

1.8 Reporting Requirements

Description	Frequency	Reference
Written approval will be obtained from the relevant roads authority (as defined under the <i>Roads Act 1993</i>) prior to any works that may interfere the use of any public road or prevent access on a public road.	At all times	PEL 238 Condition 27