


NARRABRI GAS PROJECT

Aboriginal Cultural Heritage Management Plan

0041-150-PLA-0024

Date	Revision	Reason for Issue	Author	Approved
21 February 2022	0	For approval		Santos

Acronyms and abbreviations

Acronym	Description
ACHAG	Aboriginal Cultural Heritage Advisory Group
ACHMP	Aboriginal Cultural Heritage Management Plan (this Plan)
ACHWG	Aboriginal Cultural Heritage Working Group
BC Act	<i>Biodiversity Conservation Act 2016</i> (NSW)
BCD	The former Biodiversity Conservation Division within DPE (now BCS)
BCS	The Biodiversity, Conservation & Science directorate within DPE (formerly BCD)
CHZS	Aboriginal Cultural Heritage Zoning Scheme
CoC	Conditions of consent for the NGP SSD 6456
CSG	coal seam gas
DPE	The NSW Department of Planning and Environment
EMP	environmental management plan
EMS	Environmental Management Strategy
EIS	environmental impact statement
ha	hectare
IEA	Independent Environmental Audit
LALC	Local Aboriginal Land Council
m	metre
m ²	square metre
NGP	Narrabri Gas Project
NPW Act	<i>National Parks and Wildlife Act 1974</i> (NSW)
OEH	The former NSW Office of Environment and Heritage
RAPs	Registered Aboriginal Parties
SEARS	Secretary's Environmental Assessment Requirements
SMS	Santos Management System
SSD	State significant development

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1. Introduction

1.1 Context and development of this ACHMP

Santos NSW (Eastern) Pty Ltd (**Santos**) has approval to develop natural gas from coal seams in the Gunnedah Basin in New South Wales (NSW), southwest of Narrabri.

Santos has developed this Aboriginal Cultural Heritage Management Plan (**ACHMP** or **Plan**) in consultation with the Aboriginal stakeholders e.g. the Gomeroi Native Title Applicant, Local Aboriginal Land Councils and Registered Aboriginal Parties (**RAPs**). A draft of the ACHMP was provided to the Aboriginal community for review and comment in 2014, when the Environmental Impact Statement (**EIS**) went on public exhibition in 2017, and again when the Response to Submissions was published in 2018.

This ACHMP provides the framework for avoiding or minimising impacts from the Project on Aboriginal cultural heritage and to promote the responsible management of Aboriginal cultural heritage values in connection with the undertaking of the Project.

1.2 Narrabri Gas Project background

On 30 September 2020 Santos obtained development consent to develop the Narrabri Gas Project (**NGP**) (**the Project**) about 20 kilometres (**km**) south-west of the town of Narrabri, NSW. This includes the progressive installation of up to 850 new gas wells on up to 425 new well pads over approximately 20 years and the construction and operation of gas processing and water treatment facilities.

The Project has been approved to be developed in four defined stages. The Phase 1 activities comprise generally ongoing exploration and appraisal in the NGP area, including:

- seismic surveys;
- core and chip holes;
- construction and operation of pilot wells (up to 25 wells on up to 25 well pads across the Project area); and
- pilot well ancillary infrastructure, including access tracks, gas and water gathering lines, water balance tanks, flaring infrastructure, utilities and services, and environmental monitoring equipment including groundwater monitoring bores.

Phase 2 generally comprises the construction of gas production wells and related infrastructure, including additional water balance tanks and storages. Phase 3 comprises ongoing operation of gas production wells and related infrastructure and Phase 4 comprises the decommissioning of pilot wells, production wells and other Project-related infrastructure, and rehabilitation of the Project area. A definition of each phase is provided in the definitions of the development consent.

1.3 Scope and purpose of the ACHMP

The Project will be developed over a number of phases. This ACHMP applies to all phases of the Project and has been developed in consultation with the Aboriginal community and in accordance with the requirements of the conditions of consent for State significant development (**SSD**) 6456.

The development consent conditions are summarised below and provided in full in section 3:

- Condition B53 requires avoiding impacts on known Aboriginal cultural heritage items;

- Condition B54 in relation to procedures for discovery of human remains;
- Condition B55 and B56 in relation to procedures for identification of previously unknown Aboriginal cultural heritage items;
- Condition B57 requires maintaining records of Aboriginal cultural heritage objects or places;
- Condition B58 requires establishment and maintaining an Aboriginal Cultural Heritage Advisory Group;
- Condition B59 requires the preparation of this ACHMP; and
- Condition B60 requires implementation of this ACHMP.

This ACHMP describes how the impact of activities required for the Project on Aboriginal cultural heritage will be managed. Project Activities will be designed such that, to the greatest extent possible, there is no impact on Aboriginal cultural heritage. Where the impact cannot be avoided, the Project Activity will minimise impact on any Aboriginal cultural heritage, and other reasonable and feasible management measures, as appropriate, are to be implemented to minimise or mitigate harm.

The ACHMP provides parties undertaking activities for the Project in the future with a clear understanding of the commitment of Santos to manage any impact on Aboriginal cultural heritage. The ACHMP sets out:

- (a) the background to the Project and development of the ACHMP;
- (b) the details of the approval process, the objectives of the ACHMP and the consultation undertaken in the preparation of the ACHMP;
- (c) Aboriginal cultural heritage in the Project area and describes the results of the Aboriginal cultural heritage assessment undertaken over the Project area;
- (d) the management strategies to be implemented for the known Aboriginal cultural heritage sites and any future sites which may be identified during the life of the Project;
- (e) ongoing consultation, management and reporting requirements;
- (f) proposed review processes; and
- (g) dispute resolution procedures.

It is intended that this ACHMP will apply, subject to any amendments or revisions, throughout the life of the Project.

Santos acknowledges that, given the 25-year life of the Project, the ACHMP may require review and amendment. Any modification to the application of this ACHMP or its amendment will involve appropriate consultation with Aboriginal stakeholders in accordance with this ACHMP and compliance with any relevant statutory approval process for amendment.

Santos will implement each revision of the ACHMP once approved by the Planning Secretary.

1.4 Objectives

The objectives of this ACHMP are:

- to address the NSW Office of Environment and Heritage (now Heritage NSW) recommendations appended to the Secretary's environmental assessment requirements (**SEARs**);
- to address the consent conditions within SSD 6456;
- to provide the framework for the management of Aboriginal cultural heritage during the implementation of the Project;

- to set out the processes and procedures to ensure that the Project will be designed such that to the greatest extent possible, there is no impact on Aboriginal cultural heritage. Where impacts cannot be avoided, the Project Activity will be designed to minimise impacts on Aboriginal cultural heritage, and other management measures as appropriate are to be implemented to minimise or mitigate harm;
- to include participation of the local Aboriginal community in management of potential impacts from the Project on Aboriginal cultural heritage;
- minimise the salvage of Aboriginal cultural heritage by avoiding the most sensitive site types and otherwise maximising avoidance of Aboriginal cultural heritage where practicable; and
- to the fullest extent practicable, no salvage of Aboriginal cultural heritage will occur, but if necessary, items may be relocated to a safe location nearby.

1.5 Consultation

This ACHMP has been prepared by a 'suitability qualified and experienced person' in accordance with CoC B59(a).

The Aboriginal Cultural Heritage Advisory Group (**ACHAG**) was established under condition B58 of SSD 6456 on 9 February 2021 and meets at least twice a year. As required, the group's membership includes representatives from:

- Heritage NSW;
- the scientific community;
- Narrabri LALC;
- Wee Waa LALC;
- the Gomeroi Native Title Applicant.

Santos originally developed this Aboriginal Cultural Heritage Management Plan in consultation with the Aboriginal stakeholders e.g. the Gomeroi Native Title Applicant, Local Aboriginal Land Councils and Registered Aboriginal Parties. A draft of the ACHMP was provided to the Aboriginal community for review and comment in 2014, when the EIS went on public exhibition in 2017, and again when the Response to Submissions was published in 2018.

Since development consent for the NGP on 30 September 2020 this ACHMP has been further developed in consultation with Heritage NSW¹, the ACHAG, Aboriginal stakeholders e.g. the Gomeroi Native Title Applicant, RAPs, and Local Aboriginal Land Councils in accordance with CoC B59(b).

It should be noted that, in accordance with CoC B4, the ACHAG has also been consulted during the preparation of the Field Development Plan. This process ensures consistency between the two documents with regard to the development and implementation of the Project-related Aboriginal cultural heritage management processes and procedures. The ACHAG however is an advisory committee only and has no compliance or enforcement functions.

1.6 Structure of this ACHMP

The structure of this Plan is as follows:

¹ Note that on 1 July 2020 the Aboriginal cultural heritage functions were transferred from the BCD to Heritage NSW.

Section 1	Provides an introduction to the Project and the context, scope, purpose and objectives of this ACHMP.
Section 2	Defines the roles and responsibilities of personnel involved with the Project, including staff, consultants, contractors and service providers.
Section 3	Outlines the statutory provisions and regulatory requirements relevant to Aboriginal cultural heritage.
Section 4	Provides a description of the known Aboriginal cultural heritage values.
Section 5	Describes the proposed Aboriginal cultural heritage management measures.
Section 6	Describes the reporting and evaluation of compliance.
Section 7	Describes compliant management and dispute resolution
Section 8	Details incident reporting
Section 9	Describes confidentiality requirements
Section 10	Describes review and improvement of the ACHMP during the Project
Section 11	Glossary
Schedules	Provides additional details referred to in the ACHMP.

1.7 Distribution

This ACHMP is available to all Santos personnel via the Santos intranet. Once approved, the latest copy can be found on the Project's external website in accordance with consent condition D13. The document is uncontrolled when printed. At least one controlled version of this Plan will be kept at Santos' Operations Centre, located at 300 Yarrie Lake Road in Narrabri. This is where all operational and field staff commence and finish work each day.

2. Roles and responsibilities

All Santos employees and contractors involved in the Narrabri Gas Project are responsible for the environmental performance of their activities and for complying with all legal requirements and obligations. Project personnel will be required to comply with approval requirements of the activities they undertake and potential environmental impacts from all activities will be managed in accordance with the Project's relevant management plans and protocols.

In accordance with consent condition D1, the Environmental Management Strategy (**EMS**) sets out the roles, responsibilities, authorities and accountabilities of all key personnel involved in the environmental management of the Project, including the requirements and obligations in this ACHMP. All roles, responsibilities and accountabilities have been assigned in accordance with Santos Management System *SMS-MS_14 People Management Standard*.

Schedule 8 details the role and responsibilities of the Cultural Heritage Coordinator.

3. Regulatory requirements

3.1 Development consent SSD 6456

There are several SSD 6456 consent conditions that are directly relevant to the management of Aboriginal cultural heritage, provided below. Santos is committed to conducting its activities in compliance with all CoC under SSD 6456 and other regulatory requirements and obligations. All Project employees and contractors will be made aware of their statutory obligations to protect Aboriginal cultural heritage objects under the *National Parks and Wildlife Act 1974*.

Table A1 in Appendix A specifies where each of the requirements of the SSD 6456 consent conditions relevant to this ACHMP are addressed in this Plan. The key conditions are listed below:

Consent condition B1: Santos must ensure that petroleum mining operations in the Project area comply with the locational criteria in Table 1 (including in relation to Aboriginal cultural heritage):

- No disturbance of identified Aboriginal cultural heritage items, as identified in Appendix 7.
- No disturbance of other Aboriginal cultural heritage items identified during the development, if assessed in a Field Development Plan to be of high significance.
- No disturbance of other Aboriginal cultural heritage items... identified during the development, unless otherwise approved in a Field Development Plan.

Consent condition B2: Prior to the commencement of Phase 1, Santos must prepare a Field Development Protocol for the development to the satisfaction of the Planning Secretary. This plan must include a framework for siting gas field infrastructure in compliance with the location criteria in Table 1 and describe the process for siting gas field infrastructure based on in-field micro-siting including cultural heritage survey.

Consent condition B53: Santos must ensure that the development does not cause any direct or indirect impact on the heritage items identified in Appendix 7 of the CoC. This condition is consistent with CoC B1, which specifies that there is to be no disturbance of the identified Aboriginal cultural heritage items during the petroleum mining operations in the Project area.

Consent condition B54: If suspected human remains are discovered in the Project area, then all work surrounding the area must cease, and the area must be secured. Santos must immediately notify NSW Police Force and Heritage NSW², and work must not recommence in the area until authorised by NSW Police Force and Heritage NSW.

Consent condition B55: If any previously unknown Aboriginal or non-Aboriginal heritage item is identified during micro-siting investigations for a Field Development Plan, then Santos must:

- (a) consult with the Aboriginal Cultural Heritage Advisory Group;
- (b) avoid all direct and indirect impacts on Aboriginal heritage items assessed as:
 - (i) having high significance (using the procedures established in the Aboriginal Cultural Heritage Management Plan); or
 - (ii) being of the following site types:
 - burials;
 - stone arrangements and earthen circles;

² Note that on 1 July 2020 the Aboriginal cultural heritage functions were transferred from the Biodiversity and Conservation Division (BCD) to Heritage NSW.

- carved trees;
 - rock shelters;
 - grinding grooves; and
 - quarries;
- (c) for other heritage items not identified as having high significance:
- (i) ensure that the final design of the applicable gas field infrastructure considers all reasonable and feasible measures to avoid direct or indirect impacts on other identified heritage items; and
 - (ii) if avoidance of the heritage item is not reasonable or feasible, include detailed measures for minimising and/or managing the heritage item in the Field Development Plan.

CoC B55 is consistent with CoC B1, which specifies that there is to be no disturbance of other Aboriginal cultural heritage items identified during the development, if assessed in a Field Development Plan to be of high significance. Further, there is to be no disturbance of other Aboriginal cultural heritage items identified during the development, unless otherwise approved in a Field Development Plan.

Consent condition B56: If any previously unknown Aboriginal object or Aboriginal place is discovered or suspected in the Project area during operational or construction activities:

- (a) all work in the immediate vicinity of the object or place must cease immediately;
- (b) a 10 metre buffer area around the object or place must be cordoned off; and
- (c) Heritage NSW and the Aboriginal Cultural Heritage Advisory Group must be contacted immediately.

Work in the immediate vicinity may only recommence if:

- (i) the potential Aboriginal object or Aboriginal place is confirmed by the Aboriginal Cultural Heritage Advisory Group not to be an Aboriginal object or Aboriginal Place;
- (ii) the Aboriginal Cultural Heritage Management Plan is revised to include the Aboriginal object or Aboriginal place and appropriate measures in respect of it; or
- (iii) the Planning Secretary is satisfied with the measures to be implemented in respect of the Aboriginal object or Aboriginal place and makes a written direction in that regard.

Consent condition B57: Santos must ensure that all Aboriginal objects or Aboriginal places identified in the Project area are properly recorded, and those records are kept up to date, in the Heritage NSW Aboriginal Heritage Information Management System (AHIMS) Register.

Consent condition B58: Santos must establish and maintain an Aboriginal Cultural Heritage Advisory Group for the development to the satisfaction of the Planning Secretary. The group must:

- (a) be established in consultation with Heritage NSW, Registered Aboriginal Parties and other local knowledge holder groups;
- (b) comprise Aboriginal heritage representatives whose appointments have been approved by the Planning Secretary, including representatives from:
 - (i) Heritage NSW (if available);
 - (ii) the scientific community, comprising suitably qualified archaeologists (at least 1 representative);
 - (iii) the Narrabri LALC (at least 1 representative);
 - (iv) the Wee Waa LALC (at least 1 representative); and
 - (v) the Gomeroi Native Title Applicant (at least 1 representative);
- (c) be established prior to the commencement of Phase 1;

- (d) meet at least twice a year; and
- (e) provide advice on project-related cultural heritage management issues, including preparation and implementation of the:
 - (i) Aboriginal Cultural Heritage Management Plan; and
 - (ii) Field Development Plan, including micro-siting investigations.

Notes: *The Aboriginal Cultural Heritage Advisory Group is an advisory committee and has no compliance or enforcement functions.*

Consent condition B59: Prior to the commencement of Phase 1, Santos must prepare an Aboriginal Cultural Heritage Management Plan for the development to the satisfaction of the Planning Secretary. The plan must:

- (a) be prepared by suitably qualified and experienced persons;
- (b) be prepared in consultation with Heritage NSW, the Aboriginal Cultural Heritage Advisory Group, Registered Aboriginal Parties and other local knowledge holder groups;
- (c) identify all known Aboriginal objects and Aboriginal places in the Project area and include a statement of significance for each item;
- (d) describe the measures to be implemented for:
 - (i) undertaking micro-siting investigations for the Field Development Plan in consultation with the Aboriginal Cultural Heritage Advisory Group, including procedures for:
 - desk top review and ground surveys for all proposed gas field infrastructure;
 - test excavations and subsurface testing where warranted, in accordance with a detailed archaeological research design and in accordance with the *Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW* (2010)³;
 - review and updating of Aboriginal cultural heritage sensitivity mapping;
 - managing any Aboriginal objects or Aboriginal places identified during the investigations, including:
 - significance assessment;
 - avoidance of all objects or places of high significance;
 - avoidance of other objects or places, where reasonable and feasible; and
 - if avoidance is not reasonable or feasible, procedures for:
 - incremental and cumulative impact assessment, in consultation with Aboriginal stakeholders including Registered Aboriginal Parties; and
 - minimising and/or managing the direct and indirect impacts;
 - dispute resolution between Santos and Registered Aboriginal Parties;
 - (ii) ensuring all workers receive suitable Aboriginal cultural heritage inductions prior to carrying out any activities which may cause impacts to Aboriginal objects or Aboriginal places, and that suitable records are kept of these inductions;
 - (iii) protecting Aboriginal objects and Aboriginal places located outside the approved disturbance area from impacts of the development, including identification and management of buffers;
 - (iv) managing the discovery of human remains and any new Aboriginal objects or Aboriginal places, including detailed provisions for burials, over the life of the development;
 - (v) maintaining and managing reasonable access for relevant Aboriginal stakeholders to Aboriginal objects and Aboriginal places in any biodiversity offset areas managed by Santos; and

³ Note that Condition B59(d)(i) erroneously refers to the NSW *Code of Archaeological Practice* (2010) This should be the *Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW* (2010).

- (vi) facilitating ongoing consultation and involvement of Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage in any biodiversity offset areas managed by Santos;
- (e) include a strategy for the care, control, storage and/or relocation of any Aboriginal objects salvaged in the Project area, both during the life of the development and in the long term; and
- (f) include a program to fund and undertake projects in accordance with *Strengthening Aboriginal Community Wellbeing Toolkit* (OEH, 2012) to promote caring for land, bringing people together and cultural awareness/education.

Consent condition B60: Santos must implement the Aboriginal Cultural Heritage Management Plan once approved by the Planning Secretary.

Note that in accordance with CoC B2, Santos has prepared a Field Development Protocol for the development, which provides the framework and process for siting gas infrastructure in the Project area in accordance with the locational criteria identified in CoC B1. This in-field micro-siting includes Aboriginal cultural heritage surveys, which are conducted in accordance with the process described in section 5.8, and its subsections.

3.2 EIS commitments

In the EIS Chapter 31, Santos committed to implement a number of measures pending Project approval and a final investment decision. EIS commitments relevant to Aboriginal cultural heritage have been reproduced below in Table 3.1.

Table 3.1 - EIS commitments relevant to Aboriginal cultural heritage

Number	EIS Commitment relevant to Aboriginal cultural heritage
1.1	Infrastructure will be sited in accordance with the Field Development Protocol to avoid or minimise potential impacts.
1.2	A project wide environmental management strategy, comprising a number of sub-plans to be used throughout the planning and design, construction, operation and decommissioning and rehabilitation stages of the project are described in Chapter 30. The sub-plans are ⁴ : <ul style="list-style-type: none"> • • Cultural Heritage Management Plan •
1.3	A complaints management procedure will be implemented. This procedure will include investigation, reporting and reducing impacts as required
11.1	Complete pre-clearance surveys with the involvement of the Aboriginal community in accordance with the Cultural Heritage Management Plan prior to land disturbance occurring in that area.
11.2	All currently known sites and the most sensitive site types (as detailed in the Cultural Heritage Management Plan) will be completely avoided by the project.
11.3	The Cultural Heritage Management Plan will be reviewed every five years.
11.4	Project employees and contractors will be made aware of their statutory obligations to protect

⁴ Only the plans relevant to historic heritage have been listed. The full list of sub-plans is provided in the EMS section 3.5.

Number	EIS Commitment relevant to Aboriginal cultural heritage
	Aboriginal cultural heritage objects under the NPW Act.
11.5	All currently known Aboriginal cultural sites within the Project area will be validated within 12 months of Project sanction.
11.6	A research program targeting places and values of particular traditional, anthropological, historical and contemporary significance to Aboriginal people will be developed and completed within 12 months of Project sanction.
11.7	Integration of Aboriginal cultural heritage into the Project's offset strategy.

4. Aboriginal cultural heritage in the Project area

4.1 Cultural heritage audit review

As part of the EIS, Santos reviewed a broad range of baseline data and undertook comprehensive field surveys as part of a cultural heritage audit review. The data obtained through the cultural heritage audit review were integrated into a comprehensive data set which has allowed the generation of a sensitivity map and the creation of an Aboriginal Cultural Heritage Zoning Scheme (**CHZS**) for the Project area (Schedule 2). As it currently stands the sensitivity map contains three general sets of zones in the CHZS. The definitions of these and how each has been developed is discussed below.

4.2 Zone 1 – Identified Aboriginal cultural heritage places

Zone 1 represents areas where there is known Aboriginal cultural heritage.

The cultural heritage audit review collated information on 268 individual places containing Aboriginal cultural heritage material and values within the field survey area. Of these places, 90 are located in the Project area. These have been grouped into two sub-zones (Zone 1a and 1b) based around the source of this information.

Buffers for each of these two sub-zones have been generated as follow:

- Zone 1a includes a 100m buffer (radius) of all places currently included on AHIMS – this buffer will be revised down as additional data becomes available from the site verification program (section 5.6):
- Zone 1b includes a graduated buffer based on the place-type and values adhering to it for the remaining identified Aboriginal cultural heritage places. The buffer has been applied to both the point-based data and, where available, the extent of the place where such has been provided or able to have been generated. Five buffer categories have been applied to the items in this particular Zone as follows:
 - 20m around isolated stone artefact/s;
 - 40m around stone artefact scatters;
 - 50m around places including scarred trees, resource places, rock shelters/ caves, hearths and general historic places (such as camps);
 - 75m around grinding grooves; and
 - 100m around places including those associated with Aboriginal ceremony (such as stone arrangements and rings) and burials, as well as the considerably undefined places identified as being an ochre source and that containing shell.

Santos will avoid the identified Aboriginal Cultural Heritage Sites within this Zone.

4.3 Zone 2 – Previously surveyed / developed areas

Zone 2 represents areas where an Aboriginal cultural heritage survey and assessment has been undertaken but within which no Aboriginal cultural heritage has been identified. This zone has been created from an amalgam of various sources relating to portions of the field survey area which have been the subject of Aboriginal cultural heritage survey and assessment and within which areas have subsequently been developed as part of coal seam gas (**CSG**) development programs.

There were two types of data that were provided either as digital data sets or which could be created from information provided within reports, and which represented areas that had been inspected during fieldwork: actual survey areas (polygons) or survey transects (lines). The transect records were buffered using the widths nominated within the associated reporting and added to the existing polygons. These records were then merged together to remove overlap.

4.4 Zone 3 – Aboriginal cultural heritage sensitivity

Zone 3 represents areas where an Aboriginal cultural heritage survey and assessment has identified the potential for Aboriginal cultural heritage to exist, in a sufficient manner to prepare sensitivity mapping.

This has been broken down into six sub-zones (Zones 3a - 3f). The first five identify portions of the field survey area which have been identified as having an Aboriginal cultural heritage sensitivity graduated from very high (Zone 3a) to very low (Zone 3e). The sixth sub zone (3f) relates to four small portions of the study area (approximately 362 ha or <0.2% of the field survey area) for which information was not sufficient to make an adequate assessment of its likely sensitivity with respect to Aboriginal cultural heritage.

It is possible that there may be cultural heritage sites that have not been identified in previous studies within Zone 3. This ACHMP provides for the methodology to deal with any Aboriginal cultural heritage that has not yet been identified.

5. Aboriginal cultural heritage management

5.1 Principles

The Project will be managed in accordance with the following principles:

- (a) the Avoidance Principle, which is defined in the following terms:
 - (i) Project Activities will be designed such that, to the greatest extent possible, there is no impact on Aboriginal Cultural heritage. Where impact cannot be avoided then the Project Activity will be designed to minimise impact on any Aboriginal cultural heritage, and other reasonable and feasible management measures, as appropriate, are to be implemented to minimise or mitigate harm; and
- (b) the Precautionary Principle, which is defined as:
 - (i) the implementation of actions that are reasonable and practicable to minimise causing harm to known Aboriginal objects; and/or
 - (ii) identifying Aboriginal cultural heritage so they can be managed in accordance with the provisions of relevant legislation and regulations; and implementing reasonable and practicable management measures for these Aboriginal cultural heritage items.

5.2 Site protection of known Aboriginal cultural heritage sites

Santos commits to protecting Aboriginal objects and Aboriginal places, according to site type, both within and outside the approved disturbance area. The cultural heritage audit review identified 90 known Aboriginal cultural heritage sites within the Project area. Santos will ensure that the infrastructure required for the Project will not be located in areas where the 90 known Aboriginal cultural heritage sites are located or within specified buffer distances around these areas. The 90 currently known sites and proposed buffer areas for each site are identified in Schedule 7.

The cultural heritage audit review recognised that there was some uncertainty about the specific location of each of the 90 known Aboriginal cultural heritage sites. Santos undertook a pilot site verification audit for a portion of the known Aboriginal sites to verify the precise location of each site and update the details in the sites register.

The audit identified some discrepancies between the AHIMS recorded locations of the sites and the actual on-ground locations. Santos has updated the Aboriginal Cultural Heritage Site Register to reflect the verified locations and is committed to undertake a further audit as part of this ACHMP to verify the ground locations and to update the Aboriginal Cultural Heritage Site Register for the remaining known sites (section 5.6). This will ensure that Santos, as a practical matter, is able to locate its infrastructure for the Project so as not to be in areas where the 90 sites are located. Further, as a precautionary approach, Santos has proposed an additional buffer around the sites in which it will not disturb the ground for the installation of infrastructure.

The cultural heritage audit review also recognised that given the size of, and vegetation cover within the Project area, there may be other Aboriginal cultural heritage sites which have not been identified in the surveys undertaken to date. In order to manage the risk of the installation of infrastructure for the Project impacting on these potential sites, Santos is committed to a process of undertaking pre-clearance surveys prior to disturbing the land for the particular infrastructure to verify whether the proposed site contains any Aboriginal cultural heritage sites. The process for the pre-clearance surveys is set out in section 5.8.

Should the pre-clearance survey identify an Aboriginal cultural heritage site of the type in the table in Schedule 3, then Santos will not locate the infrastructure in that area and will re-site the infrastructure after following the same process again.

Should the pre-clearance survey identify an Aboriginal cultural heritage site of the type in the table in Schedule 4, then Santos will, where practicable, not locate the infrastructure in that area and will re-site the infrastructure after following the same process again. If it is not practicable to re-site the infrastructure, then Santos will adopt the management measures identified in the third column of the table.

A description of each site type is located in Schedule 5.

The cultural heritage audit review specifications identified that Yarrie Lake was a place of Aboriginal cultural heritage significance. Yarrie Lake reserve is a designated surface development exclusion zone (including a buffer of at least 200 m) for the Project.

5.3 Aboriginal Cultural Heritage Working Group

Santos will establish an Aboriginal Cultural Heritage Working Group (ACHWG) to assist in the implementation of this ACHMP.

The process to establish the ACHWG and its purpose, functions and procedures are described in Schedule 6.

On agreement by Santos, Santos will provide all resources reasonably required to enable the ACHWG to perform all required duties and functions. Resourcing will be in accordance with Santos' schedule of rates.

5.4 Cultural Heritage Coordinator

The ACHWG will be requested to appoint a Cultural Heritage Coordinator by majority decision and to notify Santos of the name and contact details of the person appointed as Cultural Heritage Coordinator within 10 business days of each nomination from time to time.

The Cultural Heritage Coordinator will be the first point of contact for Santos in matters relating to the implementation of this ACHMP on which the views of the ACHWG are required. The Cultural Heritage Coordinator's role and essential skills are described in Schedule 8, including that they must have knowledge of Gomeroi cultural heritage.

The Cultural Heritage Coordinator will not be a member of the ACHWG and will not have voting or any other procedural rights under this ACHMP.

The Cultural Heritage Coordinator's performance will be reviewed annually by their employer or head contractor in consultation with the ACHWG and Santos with a view to confirm whether the appointment of the Cultural Heritage Coordinator will continue or if the Cultural Heritage Coordinator will be replaced.

The functions of the Cultural Heritage Coordinator under this ACHMP are:

- (a) Nominating specific Cultural Heritage Officers from the established pool that are able to observe and comply with Santos policies and procedures, to be members of a Survey Team to undertake Pre-Clearance Surveys in relation to Work Programs issued by Santos;
- (b) ensuring that all members of the Survey Team will unconditionally observe and comply with any health, safety, environmental and other reasonable procedures and policies implemented by Santos;
- (c) receipt and issue of notices under provisions of this ACHMP; and
- (d) responsibility for the timely implementation of any Pre-Clearance Surveys relating to Work Programs prepared or issued under provisions of this ACHMP.

The Cultural Heritage Coordinator may also perform any other duties as requested by the ACHWG where such duties and functions are consistent with the provisions and intent of this ACHMP.

On agreement by Santos, Santos will provide all resources reasonably required to enable the Cultural Heritage Coordinator to perform all required duties and functions.

5.5 Santos Aboriginal Cultural Heritage Site Register

Santos will maintain a comprehensive Aboriginal Cultural Heritage Site Register for the Project area.

Santos will maintain the Aboriginal Cultural Heritage Site Register for the life of the Project and will ensure that all confidentiality requirements of information obtained during the life of the Project are complied with and maintained.

The Site Register will be amended from time to time as information becomes available through the site verification program, Additional Research Program, Pre-Clearance Survey Program as described in sections 5.6 to 5.8 and if new finds are confirmed section 5.9.

The Site Register, in collaboration with GIS and other mapping tools, will be used by Santos to implement management measures provided for in this ACHMP.

The Aboriginal Cultural Heritage Site Register for the Project area will be made available to the ACHWG, subject to any confidentiality requirements.

5.6 Site verification, reporting and reconciliation

Santos has undertaken a pilot study to confirm the ground location of each of the recorded known Aboriginal cultural heritage sites mentioned in section 5.2.

Santos will implement a Site Verification Program for all other sites identified from the cultural heritage audit review within the Project area.

The program will be completed within 12 months of commencement of Phase 2.

The site verification program will use the same methodology as used in the pilot site verification program described in the Project EIS.

Where Santos identifies inconsistencies between any information included on the Santos Aboriginal Cultural Heritage Site Register and the AHIMS, Santos may liaise with Heritage NSW to have the AHIMS revised so that it is consistent with the Aboriginal Cultural Heritage Site Register.

Where Heritage NSW agrees to revise any information on the AHIMS database, the Cultural Heritage Coordinator will advise the members of the ACHWG and note such amendments in the Santos Aboriginal Cultural Heritage Site Register.

Santos may amend the Sensitivity Mapping as necessary to reflect any amendments to the Aboriginal Cultural Heritage Site Register that results from the site verification program.

5.7 Additional Research Program

To further Santos' commitment to adopt the Precautionary Principle as it relates to the management of impacts on Aboriginal cultural heritage, supplementary research will be undertaken in consultation with the Aboriginal community to confirm existing data sets for places of Aboriginal cultural heritage and, where it proves necessary, augment data.

This will be done by the conduct of an Additional Research Program. The aim will be to collate a body of data on places and values that can be integrated into general Project planning such that the locations where these places and values are identified can be managed by the Avoidance Principle.

A research program targeting places and values of particular traditional, anthropological, historical and contemporary significance to Aboriginal people will be developed and completed within 12 months of commencement of Phase 2.

5.8 Disturbance activities and pre-clearance surveys

As detailed in the Field Development Protocol and as required for the Field Development Plan, the Pre-Clearance survey identifies if there is any Aboriginal cultural heritage present, well ahead of any proposed impacts.

The Field Development Protocol provides the framework for siting gas field infrastructure in accordance with locational criteria under CoC B1 (Table 1 of the consent). It describes the constraints planning process including desktop review, in-field micro-siting, detailed design and implementation.

The key steps in field development planning process are summarised below:

- Desktop review – this involves preparing an initial infrastructure conceptual design and refining it using existing constraints planning layers in Santos' Geographic Information Systems (GIS) database. During this stage, Santos will ensure that the known Aboriginal heritage sites, as identified in the ACHMP, are avoided.
- In-field micro-siting – this involves on-ground field scouting to identify constraints at the site scale and further refine the design to maximise avoidance of constraints and ensure compliance with location criteria. Ecological micro-siting surveys will be carried out first to recommend refined infrastructure locations. Following ecological micro-siting surveys, a constructability scout will occur to confirm the preferred refined infrastructure locations and alignments. Following completion of ecological micro-siting and constructability scouts, cultural heritage pre-clearance surveys of the preferred locations/alignment will be carried out in accordance with the ACHMP (sections below). If Aboriginal cultural heritage sites are encountered in the survey area, the survey will expand to the original ecological survey area

in the vicinity of the find. The infrastructure will then be realigned to ensure avoidance by Aboriginal site type while minimising impacts on ecological features.

- Detailed design – detailed designs and management practices for the proposed development will be finalised. A final check of the proposed infrastructure locations will be carried out to ensure compliance with location criteria, regulatory conditions and management plans. A Field Development Plan will be prepared in consultation with agencies, advisory groups and other stakeholders, and submitted to the Department for approval. The Field Development Plan will detail the final design and layout for that stage of development, document the constraints planning process (including in-field micro-siting) that has been carried out, quantify direct impacts and identify any management measures or monitoring required.
- Implementation – the Field Development Plan will document mitigation measures and monitoring requirements for each stage to be complied with throughout construction, operation, rehabilitation and decommissioning.

5.8.1 Disturbance activities

Santos will not carry out Disturbance Activities in the Project area except in accordance with the process set out below.

5.8.2 Work Programs

If Santos proposes to conduct Disturbance Activities on any part of the Project area, Santos will provide to the Cultural Heritage Coordinator a copy of Santos' intended Work Program for the relevant area and request a planning meeting with the Cultural Heritage Coordinator.

The Cultural Heritage Coordinator, the Santos Senior Cultural Heritage Field Supervisor and, where applicable, a Technical Expert will meet (in person or by telephone to hold a Pre-Clearance Planning meeting) within 2 business days following provision of a copy of Santos' intended Work Program to agree on:

- (a) the number of (and identity of, as nominated by the Cultural Heritage Coordinator) persons required to conduct a Pre-Clearance Survey of the Work Area which will be:
 - (i) for Work Areas in a Zone 3d and 3e of the CHZS (**Low to very low Sensitivity Zone**), a maximum of 2 persons unless otherwise agreed by Santos;
 - (ii) for Work Areas in Zone 3c of the CHZS (**Medium Sensitivity Zone**) or above, a minimum of 2 persons and a maximum of 4 persons unless otherwise agreed by Santos, plus one Technical Expert if requested by the Cultural Heritage Coordinator.
- (b) the methodology and logistics for the Pre-Clearance Survey of the Work Area; and
- (c) a timetable for the Pre-Clearance Survey of the Work Area (which shall commence within a further 10 business days following the planning meeting or any later date as agreed between the Cultural Heritage Coordinator and the Santos Senior Cultural Heritage Field Supervisor).

(Pre-Clearance Planning Meeting)

If, at the Pre-Clearance Planning Meeting, the Santos Senior Cultural Heritage Field Supervisor and the Cultural Heritage Coordinator are unable to reach agreement on either 5.8.2(a), 5.8.2(b) or 5.8.2(c) above Santos may independently determine these items.

5.8.3 Contents of Work Programs

Each Work Program issued by Santos to the Cultural Heritage Coordinator will contain the Program Timeframe and sufficient detail to identify the proposed Disturbance Activities and the Work Area and may include:

- (a) a topographic map at a scale of 1:100 000 or other appropriate scale of the Work Area, and/or aerial/satellite images showing with reasonable accuracy the Work Area; and
- (b) with respect to the Work Area, details of:
 - (i) the nature and extent of the proposed Disturbance Activities;
 - (ii) the estimated duration of the proposed Disturbance Activities;
 - (iii) the means of access to undertake the proposed Disturbance Activities;
 - (iv) the resourcing offered for the conduct of a Pre-Clearance Survey; and
 - (v) any other information considered relevant by Santos.

5.8.4 No pre-clearance surveys or Work Programs required for some Project activities

Santos may undertake Project Activities without undertaking a Pre-Clearance Survey or Work Program:

- (a) when there will be No Additional Surface Disturbance; or
- (b) on areas that have been subject to Significant Ground Disturbance; or
- (c) on areas where a Cultural Heritage Compliance Plan (or equivalent due diligence or other survey conducted under the Due Diligence Code of Practice for the Protection of Aboriginal Objects in New South Wales) has previously been issued, or
- (d) on areas marked Zone 2 on the CHZS.

5.8.5 Pre-clearance survey

As part of the Field Development Protocol, following Santos' provision of a Work Program to the Cultural Heritage Coordinator, it is proposed that the Survey Team, in the relevant Program Timeframe, would undertake the survey of the Work Area with objectives to:

- (a) provide an opportunity for the members of the Survey Team to walk over and inspect the Work Area and to consider the Aboriginal cultural heritage in the Work Area including test excavations in areas associated with water features as directed by the Technical Expert;
- (b) identify, document and determine the geographical coordinates of, and report upon, any Aboriginal cultural heritage within the Work Area;
- (c) peg or flag Aboriginal cultural heritage within the Work Area, if deemed necessary by the Survey Team; and
- (d) recommend any required management measures consistent with the provisions of the ACHMP.

5.8.6 Santos Representative

Santos Senior Cultural Heritage Field Supervisor will accompany each Survey Team while it performs the Pre-Clearance Survey.

The Santos Senior Cultural Heritage Field Supervisor will have authority to undertake their role in accordance with this ACHMP.

5.8.7 Alternative Work Area Clearance

If a Work Area is suspected by the Survey Team to contain Aboriginal cultural heritage, the Survey Team will advise the Santos Senior Cultural Heritage Field Supervisor to that effect and the Santos Senior Cultural Heritage Field Supervisor may propose alternative Work Areas during the course of the Pre-Clearance Survey without the need for Santos to issue a new Work Program.

5.8.8 Cultural Heritage Compliance Report

At the completion of the Pre-Clearance Survey, a Cultural Heritage Compliance Report will be prepared by Santos and presented to the Survey Team for endorsement. The Cultural Heritage Compliance Report will identify:

- (a) the geographic area for which the Pre-Clearance Survey was undertaken;
- (b) any Aboriginal cultural heritage identified by the Survey Team or confirmation that no Aboriginal cultural heritage was identified; and
- (c) arrangements for the management of Aboriginal cultural heritage including the measures required to be implemented in Schedule 3 and Schedule 4 for specific site types (e.g. avoidance for sites where the ACHMP specifies avoidance and management measures for other sites where it is not practicable to re-site the infrastructure).

5.8.9 Cultural Heritage Compliance Plan

The Cultural Heritage Compliance Report will become a Cultural Heritage Compliance Plan through the following process:

- (a) the Survey Team is to consider the Cultural Heritage Compliance Report when presented to it by Santos and endorse it as approved;
- (b) if the Survey Team fails to, or is not able to for any reason, endorse the Cultural Heritage Compliance Report, Santos may present it to the Cultural Heritage Coordinator and request the Cultural Heritage Coordinator endorse it as approved;
- (c) if the Cultural Heritage Compliance Report is not endorsed as approved by the two proceeding methods, Santos may refer the plan to an Expert for consideration and determination.

Any one of these parties may endorse a Cultural Heritage Compliance Report by marking it with their signature.

Santos will be entitled to undertake the Disturbance Activities set out in the relevant Work Program once the Cultural Heritage Compliance Report becomes the Cultural Heritage Compliance Plan.

Once a Cultural Heritage Compliance Report becomes a Cultural Heritage Compliance Plan, no party may raise a dispute under this condition in relation to the arrangements for the management of Aboriginal cultural heritage within the Work Area to which it relates.

A copy of the Cultural Heritage Compliance Plan is included in the Field Development Plan for the Work Area.

5.9 Management of New Finds

5.9.1 Discovery of New Cultural Heritage Sites during construction

If, in the course of undertaking Project Activities, Santos locates a New Find, Santos will continue Project Activities in the relevant New Find Area only if such activities are in accordance with relevant New Find Measures.

5.9.2 New Find Measures

As required by CoC B56, if any previously unknown Aboriginal object or Aboriginal place is discovered or suspected in the Project area during operational or construction activities, the Project Activities in the New Find Area will stop and the New Find Area will be secured to prevent impact or harm. A buffer of minimum 10 m will be cordoned off around the object or place. Heritage NSW, the ACHAG and the ACHWG will be contacted immediately. Santos will install fencing and/or signage, if required, in accordance with the recommendations of the Cultural Heritage Officers.

Santos will use reasonable endeavours to deal with a New Find through agreement between the Cultural Heritage Coordinator (who must provide notice of the new find to the ACHAG and ACHWG in accordance with consent conditions) and the Santos Senior Cultural Heritage Field Supervisor.

If agreement is not reached within 2 business days after the location of a New Cultural Heritage Site, or there are no Survey Teams working in the Project area at the time of discovery of the New Cultural Heritage Site, Santos may arrange for the Santos Senior Cultural Heritage Field Supervisor to provide notice to the Cultural Heritage Coordinator (**New Find Notice**). If a New Find Notice is issued, Santos will endeavour to arrange a meeting between the Santos Senior Cultural Heritage Field Supervisor and the Cultural Heritage Coordinator within 2 business days after Santos' delivery of a New Find Notice to discuss, and document measures to deal with the relevant New Find.

If measures to deal with a New Find are not agreed and documented by the Santos Senior Cultural Heritage Field Supervisor and the Cultural Heritage Coordinator within 2 business days of Santos' delivery of the relevant New Find Notice, Santos may independently determine the New Find Measures. Santos will complete the required Heritage NSW site card and forward to the regulator for inclusion in the AHIMS database. Santos will also include the New Find in the Aboriginal Cultural Heritage Site Register.

The New Find Measures employed by Santos must be consistent with any directions received from DPE.

Work in the immediate vicinity may only recommence if:

- (i) the potential Aboriginal object or Aboriginal place is confirmed by the ACHWG not to be an Aboriginal object or Aboriginal Place;
- (ii) the Aboriginal Cultural Heritage Management Plan is revised to include the Aboriginal object or Aboriginal place and appropriate measures in respect of it; or
- (iii) the Planning Secretary is satisfied with the measures to be implemented in respect of the Aboriginal object or Aboriginal place and makes a written direction in that regard.

5.9.3 Human remains procedure

In accordance with the *Heritage Act 1977* (NSW), the *Coroners Act 2009* (NSW) and *National Parks and Wildlife Act 1974* (NSW) and all other applicable laws, if human remains are discovered during the course of Project Activities, the following procedure will be followed:

- work will immediately cease in the area surrounding the find, and the area secured;
- the person or persons making the find will immediately advise the Construction Field Supervisor, or delegate;
- the Construction Field Supervisor (or delegate) will immediately notify the Narrabri Police Station on (02) 6792 7199 to advise that skeletal remains have been discovered and to provide details of the find. The police will contact the NSW Coroner's Office;
- unless already contacted by the police, the Construction Field Supervisor (or delegate) will immediately notify Heritage NSW on (02) 9873 8500 to advise of the find, indicating that the police have been notified;
- the Construction Field Supervisor (or delegate) will implement any requirements of the police to protect the area of the find;
- the Construction Field Supervisor (or delegate) will notify the Cultural Heritage Coordinator and the Santos Senior Cultural Heritage Field Supervisor within 24 hours to advise them of the find;
- the NSW Coroner's Office will determine whether the remains are of Aboriginal origin;
- if the remains are determined to **not** be of Aboriginal origin, the police will advise the course of action;
- if the remains are determined to be of Aboriginal origin, the Cultural Heritage Coordinator will notify the ACHAG, the ACHWG and the RAPs to collectively determine the appropriate course of action;
- work must not recommence in the area until authorised by the police and Heritage NSW.

Failure to report a discovery and those responsible for the damage or destruction occasioned by unauthorised removal or alteration to a site or to archaeological material may be prosecuted under the NPW Act.

5.9.4 Workforce education

Santos will provide site induction training to employees and contractors working in the Project area, and will ensure that induction training includes information about Aboriginal cultural heritage and the provisions of this ACHMP. Inductions and training will be conducted in accordance with the processes detailed in section 9.1 and 9.3 of the EMS, and suitable records will be kept.

5.10 Care, control, storage and/or relocation of any Aboriginal objects

In accordance with consent condition B59 (e), any salvaged Aboriginal objects will be moved as soon as possible to a 'Temporary Keeping Place'. The Temporary Keeping Place is a secure, locked facility at Santos' Operations Centre, located at 300 Yarrie Lake Road in Narrabri. Access to the Temporary Keeping Place is managed/controlled by the Santos Aboriginal Community Relations Manager (or relevant delegate).

All Aboriginal stone artefacts which are salvaged from the Project area will be managed in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW, 2010b). The Temporary Keeping Place will continue to be used to store recovered Aboriginal

objects until a long-term arrangement is agreed upon. Application to Heritage NSW for a Care Agreement may be required.

The long-term arrangement for the storage of recovered Aboriginal objects will be confirmed prior to Phase 2 of the Project, and the ACHMP updated accordingly.

5.11 Projects to promote caring for land, bringing people together and cultural awareness/education

Santos will develop a program to fund and undertake projects in accordance with *Strengthening Aboriginal Community Wellbeing Toolkit* (OEH, 2012) to promote caring for land, bringing people together and cultural awareness/education.

This program will be developed in consultation with the ACHWG and details provided in future revisions of this ACHMP.

5.12 Biodiversity offset areas

For Phase 1 of the Project, there will be no opportunity to provide access to biodiversity offset areas for Aboriginal stakeholders, or facilitate consultation and involvement of RAPs in the conservation and management of cultural heritage within biodiversity offset areas. A small, privately owned property has been identified as an offset site for Phase 1 of the Project. This site is to remain under the ownership and management of the third-party, private landholder and will not be managed by Santos.

The majority of offsets for the Project are not required to be acquired until prior to Phase 2. Santos is currently searching for suitable offset sites for Phase 2 but is yet to secure any sites. Santos will seek to negotiate Aboriginal stakeholder access and involvement in managing cultural heritage values, as well as biodiversity and land values, for any offset sites secured that are not privately owned. Santos will also facilitate ongoing consultation and involvement of Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage in any biodiversity offset areas not privately owned. This will be discussed with the ACHAG prior to the commencement of Phase 2.

The ACHMP will be revised for Phase 2 once the details of Phase 2 offset sites are available.

6. Reporting and evaluation of compliance

6.1 Annual Review

Consent condition D8 states that by the end of March each year, unless the Planning Secretary agrees otherwise, Santos must submit an Annual Review of the environmental performance of the development to the Department via the Major Projects Portal and that this review must:

- (a) describe the development (including any rehabilitation) that was carried out in the previous calendar year, and the development that is proposed to be carried out over the current calendar year;
- (b)
- (c)
- (d) include a comprehensive review of the monitoring results and complaints records⁵ of the development over the previous calendar year, including a comparison of these results against the:
 - (i) relevant statutory requirements, limits or performance measures/criteria;
 - (i) requirements of any plan or program required under this consent;
 - (ii) monitoring results of previous years; and
 - (iii) relevant predictions in the document/s listed in condition A2(c);
- (e) identify any non-compliance or incident which occurred in the previous calendar year, and describe what actions were (or are being) taken to rectify the non-compliance and avoid reoccurrence;
- (f) evaluate and report on compliance with the performance measures, criteria and operating conditions in this consent;
- (g) identify any trends in the monitoring data over the life of the development;
- (h) identify any discrepancies between the predicted and actual impacts of the development, and analyse the potential cause of any significant discrepancies; and
- (i) describe what measures will be implemented over the next calendar year to improve the environmental performance of the development.

Each Annual Review will consider new and existing information, monitoring data and reports from the previous complete calendar year. The preparation of the Annual Review in accordance with Condition D8 comprises the protocol to report on the measures, monitoring results and performance criteria.

In accordance with CoC D13 and as described in section 6 of the EMS, all monitoring data and associated reports will be made available on the Project website, for the duration of the Project. This information will be kept up to date.

6.2 Record keeping and AHIMS reporting

An Aboriginal Site Impact Recording Form will be completed and submitted to the AHIMS Registrar, in respect of any Aboriginal cultural heritage that is harmed through archaeological investigations required, permitted under this ACHMP, or authorised in any Cultural Heritage Compliance Plan.

New sites identified will be subject to recording as per archaeological best practice, described in the Heritage NSW policy *Code of Practice for Archaeological Investigations of Aboriginal Objects in New*

⁵ Complaints are handled in accordance with the process detailed in section 7.

South Wales (DECCW, 2010b) and the *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (OEH, 2011).

Upon conclusion of the detailed recording:

- all data collected will be submitted to Heritage NSW for inclusion in the relevant AHIMS site record.
- an assessment of the site's significance will be undertaken as per requirements of significance assessments, including an incremental and cumulative impact assessment, in consultation with ACHWG; and
- the Santos Aboriginal Cultural Heritage Sites database will be updated as required.

6.3 Independent environmental audits

Within one year of commencement of Phase 1 and every three years thereafter, Santos will commission an Independent Environmental Audit (**IEA**) of the operation, to be conducted in accordance with CoC D9. The audit team must be led by a suitably qualified auditor and include experts in groundwater, well integrity, hazards, and any other fields specified by the Planning Secretary. The audit will:

- be led and conducted by a suitably qualified, experienced and independent team of experts whose appointment has been endorsed by the Planning Secretary;
- be carried out in consultation with the relevant agencies and the CCC and Advisory Groups;
- assess the environmental performance of the development and whether it is complying with the relevant requirements in this consent, water licences and petroleum mining leases for the development (including any assessment, strategy, plan or program required under these approvals);
- include a hazard audit undertaken in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 5, 'Hazard Audit Guidelines'*, including verification of implementation of engineering or non-engineering control measures in the hazards studies/plans required under this consent;
- review the adequacy of any approved strategy, plan or program required under the abovementioned approvals and this consent;
- recommend appropriate measures or actions to improve the environmental performance of the development and any assessment, strategy, plan or program required under the abovementioned approvals and this consent; and
- be conducted and reported to the satisfaction of the Planning Secretary.

Within three months from the commencement of the IEA, Santos will submit a copy of the audit report to the DPE (and any other NSW agency that requests it) together with its response to any recommendations contained in the audit report, and a timetable for the implementation of the recommendations. This audit report will be made publicly available on the Project website.

7. Complaint management and dispute resolution

7.1 Complaint management

Santos has a documented *Complaint Management Procedure* that is communicated to all relevant staff members. Complaints can be directed to Santos via phone or email 24 hours a day, 7 days a week. Contact details are publicly available on the Project website and are presented in Appendix D of the EMS.

All complaints are logged on a complaint form which includes the following details:

- date and time of the complaint;
- complainant details;
- details of the issue or complaint;
- actions taken to remediate the issue, if any;
- follow up actions required, if any;
- details of further liaison with complainant, if any; and
- closure date and time of the issue.

As per CoC D13, Santos maintains a complaint register which is updated as required and available on the Project website.

7.2 Dispute resolution

7.2.1 Dispute notice

If there is a dispute between Santos and either the Cultural Heritage Coordinator and the ACHWG (by majority resolution) relating to this ACHMP (including agreeing New Find Measures) (**Dispute**), that party must give written notice to the other party, providing details of the Dispute (**Dispute Notice**).

7.2.2 Dispute procedures

On delivery of a Dispute Notice by either party, the following procedures will apply:

- (a) Santos may use reasonable endeavours to convene, within 2 business days from the delivery of the Dispute Notice, a meeting between the parties relevant to the dispute, Santos Senior Cultural Heritage Field Supervisor and the Cultural Heritage Coordinator (**Dispute Parties**) to discuss the Dispute in a manner which ensures minimum disruption to the Project Activities;
- (b) if the Dispute is not resolved at the meeting held pursuant to paragraph (a), Santos must use reasonable endeavours to convene a meeting as soon as possible between the Dispute Parties, an Expert and must request the Expert's decision about the Dispute;
- (c) the Dispute Parties must advise each other if they propose to bring other representatives to the meeting held pursuant to paragraph (b);
- (d) at the meeting held pursuant to paragraph (b), each of the Dispute Parties present may, within a reasonable period of time, present their issues in the Dispute to the Expert;
- (e) the Dispute Parties will be bound by the decision of the Expert in relation to the Dispute;
- (f) the costs of the Expert pursuant to this section will be borne by Santos.

7.3 Engagement of Expert

Santos may from time to time, but is not obliged to, engage an Expert to undertake any one or more of the following:

- (a) be the Cultural Heritage Coordinator if:
 - (i) the ACHWG has not nominated a Cultural Heritage Coordinator;
 - (ii) the Cultural Heritage Coordinator does not respond to a Work Program within 2 business days of it being provided by Santos;
 - (iii) the Cultural Heritage Coordinator does not attend a Pre-Clearance Planning Meeting; or
 - (iv) the Cultural Heritage Coordinator has not otherwise complied with the requirements of a Cultural Heritage Coordinator under this ACHMP.
- (b) perform the role of a Survey Team if:
 - (i) the ACHWG has not nominated sufficient Cultural Heritage Officers to conduct a Work Program within the Program Timetable;
 - (ii) the Cultural Heritage Coordinator:
 - does not respond to a request from the Senior Santos Field Supervisor for a Pre-Clearance Planning Meeting; or
 - does not attend a Pre-Clearance Planning Meeting; or
 - at the Pre-Clearance Planning Meeting does not nominate the number of persons required or nominates unsuitable persons; or
 - (iii) another Cultural Heritage Officer is unable to perform his or her role;
 - (iv) the Survey Team fails to conduct a Pre-Clearance Survey of a Work Area within the Program Timetable;
 - (v) subject to, and in accordance with section 5.9.3 of, this ACHMP, assess human remains located during the course of Project Activities; and
 - (vi) resolve disputes arising from section 7.2 of this ACHMP,
 - (vii) provided in relation to conditions (i), (ii), (iii) and (iv), notice has first been provided by Santos to the ACHWG and the ACHWG have failed to procure the relevant person to undertake the relevant task listed in this section within 2 business days.
- (c) consider and determine the contents of a Cultural Heritage Compliance Plan in circumstances described in section 5.8.9.

8. Incident reporting

Incident reporting and non-compliance notification will be in accordance with CoC D6 and D7 respectively. In the event of an environmental incident or non-compliance with the Project Approval, Santos will initiate an investigation. The incident will be reported immediately after Santos has determined that an incident has met, or threatens to meet, the material environmental harm threshold. The subsequent investigation will be reported to the relevant department(s) within seven days of the initial report. The investigation will seek to determine:

- what occurred at the time of the incident;
- the root cause of the incident;
- any contributing factors which led to the incident;
- whether appropriate controls were implemented to prevent the incident; and
- recommendations for corrective and/or preventative actions that could be implemented to reduce the likelihood of the incident reoccurring.

Incident investigations will be communicated to relevant management through documented briefings and to personnel through toolbox talks, pre-start meetings and similar forums. If required, strategies, plans or programs will be reviewed and amended in consultation with the relevant agencies, in accordance with CoC D4.

Where any exceedance of monitoring criteria and/or performance measures has occurred, Santos will assess and manage this exceedance in accordance with the relevant trigger action response plan. Santos will, at the earliest opportunity:

- take all reasonable and feasible measures to ensure that the exceedance ceases and does not recur;
- consider all reasonable and feasible options for remediation (where relevant) and submit a report to DPE and other required agencies describing those options and any preferred remediation measures or other course of action; and
- implement remediation measures as directed by the Secretary, to the satisfaction of the Secretary.

9. Confidentiality

9.1 Santos

Santos will keep confidential and not disclose any information it receives as a result of this ACHMP relating to cultural heritage or cultural values without the consent of the ACHWG unless:

- (a) required by law;
- (b) required under official listing requirements of an Australian or overseas stock exchange;
- (c) contemplated by the provisions of this ACHMP;
- (d) it is or becomes public knowledge;
- (e) it is disclosed to Santos' accountants, financiers, financial institutions, legal advisors, auditors, consultants or employees;
- (f) it is disclosed to a related body corporate, joint venture party or a bona fide potential assignee; or
- (g) to perform an obligation, or preserve or enforce a right or interest under this ACHMP.

9.2 Other parties

The members of the ACHWG, its Independent Chair, the Cultural Heritage Coordinator, Cultural Heritage Officers and the ACHMP Auditor will all be bound to keep confidential and not disclose any information it receives as a result of this ACHMP or about any activity undertaken pursuant to this ACHMP without Santos' consent unless:

- (a) required by law;
- (b) contemplated by the provisions of this ACHMP;
- (c) it is or becomes public knowledge;
- (d) it is disclosed to that party's accountants, financiers, financial institutions, legal advisors, auditors, consultants or employees.

10. Review and improvement

Consent condition D3(g) requires that this ACHMP includes a program to investigate and implement ways to improve the environmental performance of the Project over time; and CoC D3(i) states that the ACHMP is to include a protocol for the periodic review of the Plan. The protocol for review is set out by consent conditions D8, D4 and D5 as detailed below.

The annual review under consent condition D8 requires a number of items to be reviewed or assessed. In summary these are:

- monitoring results and complaints;
- trends in monitoring data;
- non-compliances and incidents;
- compliance with performance measures;
- discrepancies between predicted and actual impacts; and
- measures to be implemented to improve environmental performance.

The annual review is further addressed in section 6.1.

Consent condition D4 states that Santos must review the suitability of existing strategies, plans and programs required under this consent, within two months of:

- the submission of an incident report;
- the submission of an Annual Review;
- the submission of an Independent Environmental Audit;
- the submission of a Field Development Plan;
- the submission of a Groundwater Model Update; or
- the approval of any modification of the conditions of this consent.

This is to ensure the Plan is updated on a regular basis and to incorporate any recommended measures to improve the environmental performance of the Project.

The review history table in the front of this Plan provides the details of each review, conducted in accordance with condition D4. Consent condition D5 in turn states that if this review determines that any of the strategies, plans and programs required under SSD 6456 require revision - to either improve the environmental performance of the development, cater for a modification or comply with a direction - then Santos must submit the revised document to the Secretary for approval within 6 weeks of the review.

As required by consent condition B60, Santos will implement the ACHMP once it has been approved by the Planning Secretary.

10.1 5 Year review process

Santos will appoint a third party (**ACHMP Auditor**) to undertake a review of this ACHMP within 5 years after the ACHMP is approved, and then every 5 years during the life of the ACHMP.

Santos will provide a notice (**Review Notice**) to the ACHWG (including Local Aboriginal Land Councils), DPE and publish the following on the Project web page:

- (a) the identity of the ACHMP Auditor;
- (b) the date, time and location of the proposed Review Consultation Meeting; and
- (c) the scope of the review process (e.g. sensitivity mapping, dispute resolution clauses, the entire ACHMP etc).

Santos will hold a Review Consultation Meeting within 6 weeks of providing the Review Notice.

Any person who attended the Review Consultation meeting will be able to provide written submissions to the ACHMP Auditor within 6 weeks of the Review Notice being advertised (**Review Submission Date**).

Within four weeks after the Review Submission Date the ACHMP Auditor will provide a report outlining any issues identified in the ACHMP Review Process and propose any recommendations for consideration (**ACHMP Auditor's Report**) to each of the Review Participants.

Within 8 weeks of receiving the ACHMP Auditor's Report, Santos will provide DPE with a proposed revised ACHMP along with a copy of the ACHMP Auditor's Report and any comments or responses Santos may have to the report.

DPE may review Santos' proposal and responses and either:

- (a) approve the proposed revised ACHMP;
- (b) reject the proposed revised ACHMP; or
- (c) otherwise provide comments on the revised ACHMP.

Santos will take into consideration DPE's comments and provide DPE with a proposed revised ACHMP along with any comments or responses to the recommendations.

The Review Process will not impact on the ongoing operation of the ACHMP.

10.2 Review consultation meeting

The purpose of this meeting is to give each attendee an opportunity to discuss issues with the ACHMP in its current form and to propose amendments.

The meeting is to be held within 6 weeks of Santos issuing the Review Notice at a time, date and location determined by Santos.

The attendees at this meeting will be the ACHMP Auditor, a representative from DPE, representatives from Santos and any Aboriginal person who has an interest in the Project area and the implementation of this ACHMP.

The agenda for this meeting will be determined by the ACHMP Auditor 1 week prior to the meeting and will be circulated at the meeting.

If any person does not attend the Review Consultation Meeting the meeting will proceed without that person.

10.3 Sensitivity mapping must be reviewed

The Sensitivity Mapping must be reviewed and amended where necessary annually based on pre-clearance survey work undertaken and findings identified.

10.4 Legislative change review process

If there is a legislative change which affects the operation of this ACHMP or management of Aboriginal cultural heritage, Santos may appoint a ACHMP Auditor to undertake a review of the ACHMP in the same manner as set out in section 10.1.

11. Glossary

Term	Definition ⁶
Aboriginal cultural heritage	Includes all places of archaeological and anthropological significance (including places of traditional, historical and contemporary significance to Aboriginal people) that are in the Project area. It includes, but is not limited to, archaeological sites (such as artefact scatters, stone arrangements, scarred trees and the like), Aboriginal Objects associated with sites, any places that have traditional stories associated with them, places which are historically important (such as old camps) and places which are important today (such as good food-gathering places or places used for recreational purposes). It also includes, but is not limited to, Aboriginal cultural values as identified and described in the Project EIS.
Aboriginal Cultural Heritage Advisory Group (ACHAG)	The Aboriginal Cultural Heritage Advisory Group established under Condition B58 of the Development Consent. The ACHAG is to provide advice on project-related cultural heritage management issues, including preparation and implementation of the ACHMP.
Aboriginal Cultural Heritage Management Plan (or ACHMP)	This document and its associated schedules. This ACHMP constitutes the Heritage Management Plan established in fulfilment of the Secretary's Requirements, OEH recommendations and any consent conditions specified by the SSD 6456.
Aboriginal Cultural Heritage Site Register	A register including the location of Aboriginal Cultural Heritage sites in and near the Project area, but does not necessarily include information about the objects or values at a site.
Aboriginal Cultural Heritage Working Group (ACHWG)	The Aboriginal Cultural Heritage Working Group established under this ACHMP. The ACHWG is the primary entity with whom Santos proposes to engage with during the life of the Project regarding the management of Aboriginal Cultural Heritage associated with the Project.
Aboriginal objects	Defined under the <i>National Parks and Wildlife Act 1974</i> as "any deposit, object or material evidence (not being a handicraft made for sale) relating to the Aboriginal habitation of the area that comprises New South Wales, being habitation before or concurrent with (or both) the occupation of that area by persons of non-Aboriginal extraction, and includes Aboriginal remains".
Access track	Cleared and graded track constructed where existing tracks are not available
ACHAG members	The persons who are members of the ACHAG as appointed by the Planning Secretary.
ACHWG members	The persons who are members of the ACHWG appointed in accordance with clause 3 of Schedule 6.
Additional research program	The research program described in section 5.7 and commissioned by Santos.
Alignment	The line or lines that describe a linear-infrastructure route; it defines how linear infrastructure (such as a road, access track or pipeline) will be located in relation to the features encountered along the route
Applicable laws	Every law and regulation of any Government agency from time to time in operation and applicable to the Project area.
Approved disturbance area	The disturbance areas shown in the EIS as modified by any approved Field Development Plan
Avoidance commitments	The commitments to avoid or mitigate impact to Aboriginal cultural heritage as detailed in this ACHMP.
Avoidance principle	Project activities will be designed such that, to the greatest extent possible,

⁶ The majority of the definitions are as provided in the Development Consent for SSD 6456.

Term	Definition ⁶
	there is no impact on Aboriginal cultural heritage. Where impact cannot be avoided then the Project Activity will be designed to minimise impact on any Aboriginal cultural heritage, and other management measures as appropriate are to be implemented to minimise or mitigate harm.
Complete avoidance	Avoidance to ensure Project Activities do not: <ul style="list-style-type: none"> • have a physical impact on; or • cause harm to Aboriginal cultural heritage.
Council	Narrabri Shire Council
Cultural Heritage Field Supervisor (CHFS)	those persons appointed by Santos to implement elements of the ACHMP relating to the management of Aboriginal cultural heritage associated with the Project area.
Cultural Heritage Officer	an Aboriginal person nominated by the ACHWG in accordance with the processes in this ACHMP in response to a request for cultural heritage assessment and who meets all Santos OHS requirements. The Cultural Heritage Officer is not an employee of Santos.
Cultural Heritage Compliance Report	a report prepared after the Pre-Clearance Survey for an area is complete.
Cultural Heritage Compliance Plan	a Cultural Heritage Compliance Report which has been endorsed by either: <ul style="list-style-type: none"> • a Survey Team; • the Cultural Heritage Coordinator; or • an Expert.
Cultural Heritage Coordinator	the person appointed by the ACHWG to carry out the duties specified in this ACHMP [note that the Cultural Heritage Coordinator is not a Santos employee].
Cultural Heritage Zoning Scheme	Zones based on the cultural heritage sensitivity of an area.
Department	NSW Department of Planning and Environment (DPE)
Dispute notice	A notice issued in writing by any member of the ACHWG under this ACHMP.
Disturbance activity	Project activities that involve surface disturbance other than those which involve No Additional Surface Disturbance.
EIS	The Environmental Impact Statement titled Narrabri Gas Project Environmental Impact Statement, dated 31 January 2017, submitted with the development application, including Santos' response to submissions and supplementary response to submissions, and the additional information provided by Santos to the Department in support of the application
Expert	A suitably qualified archaeologist or anthropologist appointed by Santos pursuant to section 7.3 of the ACHMP.
Exploration well	A petroleum well that is drilled to: <ol style="list-style-type: none"> explore for the presence of petroleum or natural underground reservoirs suitable for storing petroleum, or obtain stratigraphic information for the purpose of exploring for petroleum. For clarity, an exploration well is not a production well
Gas compression facility	A facility that houses multiple compressor units, either nodal or hub compressors or a mixture of both used to increase the pressure of gas for the purpose of transmission; may be collocated with a gas treatment facility and/or water management facility
Gas field infrastructure	All Project-related infrastructure, excluding the Leewood facility, Bibblewindi

Term	Definition ⁶
	facility and the road upgrades required under SSD 6456
Gas well	Pilot wells and production wells
Gathering lines	Pipelines used to transfer gas and produced water from wells
Gomeroi Native Title Claim Application	The native title application registered by the Native Title Tribunal and currently allocated Federal Court file number Federal Court NSD2208/1911.
Government agency	Is one of the following: (a) a government or government department or other body; (b) a governmental, semi-governmental or judicial person including a statutory corporation; or (c) a person (whether autonomous or not) who is charged with the administration of a law.
Groundwater	Water contained in the interconnected pore spaces and voids of the saturated zone of sediments and rocks.
Incident	An occurrence or set of circumstances that causes or threatens to cause material harm and which may or may not be or cause a non-compliance
Independent Chair	The independent chair appointed by Santos to the Aboriginal Cultural Heritage Working Group
Linear infrastructure	Project related infrastructure of a linear nature including gas and water gathering lines, gas and water pipelines, access tracks, power lines, communication lines and other service lines
Major facilities	Leewood facility and Bibblewindi facility
Material harm	Is harm that: <ul style="list-style-type: none"> involves actual or potential harm to the health or safety of human beings or to the environment that is not negligible, or results in actual or potential loss or property damage of an amount, or amounts in aggregate, exceeding \$10,000 (such loss includes the reasonable costs and expenses that would be incurred in taking all reasonable and practicable measures to prevent, mitigate or make good harm to the environment) This definition excludes “harm” that is authorised under either SSD 6456 or any other statutory approval
Minimise	Implement all reasonable and feasible mitigation measures to reduce the impacts of the Project
Mitigation	Activities associated with reducing the impacts of the development
Native Title Applicant	Those persons specified in the registered Gomeroi Native Title Claim Application as the named applicants for this native title claim.
New Find	Aboriginal cultural heritage that has not been identified by the Project EIS, the Pre-Clearance Survey and is discovered during Project Activities
New Find Area	Any part of the Project area which is within 20 metres laterally of a New Find.
New Find Measures	means a way for dealing with a New Find: (a) as agreed and documented; or (b) as independently determined by Santos.
New Find Notice	A notice referred to in this ACHMP
No Additional Surface Disturbance	Planned disturbance of an area must be consistent with any previous disturbance including any disturbance within areas previously the subject of: (a) permanent and mobile camps;

Term	Definition ⁶
	(b) plant sites including ancillary infrastructure such as lay down areas: <ul style="list-style-type: none"> (i) compressor stations; (ii) drilling leases; and (iii) pipeline and flowline rights of way (c) works associated with the repair and maintenance of existing roads (including drains); and (d) excavation of existing borrow pits
OEH Recommendations	The Recommendations prepared by OEH and specified in the Secretary's Requirements.
Pilot well	A well for gas and water extraction, for the purpose of exploration, appraisal and assessment of the gas field potential
Planning Secretary	Planning Secretary under the EP&A Act, or nominee
Pre-Clearance Planning Meeting	A meeting between the Santos Senior Field Supervisor and the Cultural Heritage Coordinator prior to a Pre-Clearance Survey.
Pre-Clearance Survey	A survey to identify if there is any Aboriginal cultural heritage present within an identified area.
Production well	A well for gas and water extraction, for the purpose of commercial gas production and/or use
Program Timeframe	The timeframe in which Santos requires a Pre-Clearance Survey of a Work Area to be undertaken.
Project Activities	The physical carrying out of the Project within the Project area.
Project area	The area of approximately 95,000 hectares that encompasses the Project
Project footprint	The area of surface expression being about 1,000 hectares occupied by the infrastructure components of the Narrabri Gas Project
Project-related infrastructure	All infrastructure and other structures associated with the development. This includes linear infrastructure and non-linear infrastructure, surface infrastructure and subsurface infrastructure, major facilities, wells and well pads and other gas field infrastructure
Public infrastructure	Linear and related infrastructure that provides services to the general public, such as roads, railways, water supply, drainage, sewerage, gas supply, electricity, telephone, telecommunications, etc.
Rehabilitation	The restoration of land disturbed by the development to ensure it is safe, stable and non-polluting over the short, medium and long term
Registered Aboriginal Parties (RAPs)	Those Aboriginal people being individuals, Local Aboriginal Land Councils and other groups that are registered in accordance with the DPE Consultation Requirements for consultation in relation to the assessment of this Project.
Registered Native Title Claimants	The registered claimants in the Gomeroi Native Title Claim Application.
Reported Site	Aboriginal cultural heritage recorded in a Cultural Heritage Compliance Plan.
Santos Cultural Heritage GIS	The Santos GIS established in compliance with Santos management systems.
Santos Senior Cultural Heritage Field Supervisor	The Santos employee from time to time responsible for the field coordination of Santos' work priorities and the provision of support for Pre-Clearance Surveys, or the nominee from time to time of such employee.
SEARs	The requirements specified by the Secretary of the Department of Planning and Infrastructure (NSW) for the preparation of the Environmental Impact Statement for the Project.
Sensitivity mapping	Mapping undertaken in compliance with the OEH Recommendations for the

Term	Definition ⁶
	Project EIS, a copy of which is included in Schedule 2 of this ACHMP, which is stored in the Project Aboriginal cultural heritage GIS and which must be amended every five years from the date of commencement of this ACHMP.
Significant ground disturbance	Disturbance by machinery of the topsoil or surface rock layer (excluding consolidated rock or solid sheet rock) of the ground, such as by grading, bulldozing, trenching, drilling or dredging; and the removal of vegetation by disturbance of root systems and exposing underlying soil.
Surface disturbance	Any disturbance of any area which causes lasting impact to the land or waters during the activity or after the activity has ceased.
Study area	The area shown as the Study Area in the Project EIS and depicted as the Study Area on the map in schedule 2 of this ACHMP.
Survey team	The team of Cultural Heritage Officers employed or contracted to conduct a Pre-Clearance Survey.
Technical expert	A suitably qualified archaeologist or person appointed by the Aboriginal Cultural Heritage Working Group with the consent of Santos.
Unacceptable risk	The level of risk at which mitigation actions are deemed to be warranted.
Well	Pilot wells and production wells
Well pad	An area of up to 1 hectare in size upon which the gas wells are to be located, with the area decreasing to no more than 0.25 hectares following rehabilitation ⁷ , or other area as may be approved in the Field Development Plan
Work area	The area which is the subject of a Work Program.
Work program	A program of Project activities.

⁷ Workover activities will be contained within the operational area of the well pad area of around 0.2 ha, with an additional laydown area that could be approximately 0.2 ha in size.

Appendix A - Consent conditions relevant to this Plan

Table A1 - SSD 6456 consent conditions directly relevant to this ACHMP

SSD 6456 consent conditions directly relevant to this ACHMP	Section reference
Consent condition A1, Schedule 2 In meeting the conditions of this consent, the Applicant must implement all reasonable and feasible measures to prevent and, if prevention is not reasonable and feasible, minimise any material harm to the environment that may result from the construction, operation or rehabilitation of the development.	Section 1.3
Consent condition A5, Schedule 2 The Applicant may only undertake the development in the following stages:	
a) Phase 1, comprising ongoing exploration and appraisal activities;	Section 1.2
b) Phase 2, comprising construction activities for production wells and related infrastructure;	Section 1.3
c) Phase 3, comprising gas production operations; and	
d) Phase 4, comprising gas well and infrastructure decommissioning, rehabilitation and mine closure.	
Consent condition A23 Schedule 2 With the approval of the Planning Secretary, the Applicant may:	No staging or combining of ACHMP proposed
a) prepare and submit any strategy, plan or program required by this consent on a staged basis (if a clear description is provided as to the specific stage and scope of the development to which the strategy, plan or program applies, the relationship of the stage to any future stages and the trigger for updating the strategy, plan or program	
b) combine any strategy, plan or program required by this consent (if a clear relationship is demonstrated between the strategies, plans or programs that are proposed to be combined);	
c) update any strategy, plan or program required by this consent (to ensure the strategies, plans and programs required under this consent are updated on a regular basis and incorporate additional measures or amendments to improve the environmental performance of the development); and	
d) combine any strategy, plan or program required by this consent with any similar strategy, plan or program required by a consent	
Consent condition B1 Schedule 2 The Applicant must ensure that petroleum mining operations in the Project area comply with the locational criteria in Table 1.	Section 3.1 Section 5.8
<ul style="list-style-type: none"> No disturbance of identified Aboriginal cultural heritage items, as identified in Appendix 7 	
<ul style="list-style-type: none"> No disturbance of other Aboriginal cultural heritage items identified during the development, if assessed in a Field Development Plan to be of high significance 	
<ul style="list-style-type: none"> No disturbance of other Aboriginal cultural heritage items and historic heritage items identified during the development, unless otherwise approved in a Field Development Plan 	
Consent condition B2 Schedule 2 Prior to the commencement of Phase 1, the Applicant must prepare a Field Development Protocol for the development to the satisfaction of the Planning Secretary.	Section 3.1

SSD 6456 consent conditions directly relevant to this ACHMP	Section reference
<ul style="list-style-type: none"> cultural heritage survey, in accordance with the Aboriginal Cultural Heritage Management Plan; 	
Consent condition B53 Schedule 2 The Applicant must ensure that the development does not cause any direct or indirect impact on the heritage items identified in Appendix 7.	Section 4.2 Section 5.8
Consent condition B54 Schedule 2 If suspected human remains are discovered in the Project area, then all work surrounding the area must cease, and the area must be secured. The Applicant must immediately notify NSW Police Force and Heritage NSW ⁸ , and work must not recommence in the area until authorised by NSW Police Force and Heritage NSW.	Section 5.9.3
Consent condition B55 Schedule 2 If any previously unknown Aboriginal or non-Aboriginal heritage item is identified during micro-siting investigations for a Field Development Plan, then the Applicant must:	Section 3.1 Also refer to the Historic Heritage Management Plan for non-Aboriginal heritage finds
a) consult with the Aboriginal Cultural Heritage Advisory Group;	Section 5.9.2
b) avoid all direct and indirect impacts on Aboriginal heritage items assessed as:	Section 5.2
(i) having high significance (using the procedures established in the Aboriginal Cultural Heritage Management Plan); or	Schedule 3 Schedule 4
(ii) being of the following site types:	
<ul style="list-style-type: none"> burials; 	
<ul style="list-style-type: none"> stone arrangements and earthen circles; 	
<ul style="list-style-type: none"> carved trees; 	
<ul style="list-style-type: none"> rock shelters; 	
<ul style="list-style-type: none"> grinding grooves; and 	
<ul style="list-style-type: none"> quarries; 	
c) for other heritage items not identified as having high significance:	
(i) ensure that the final design of the applicable gas field infrastructure considers all reasonable and feasible measures to avoid direct or indirect impacts on other identified heritage items; and	Section 1.3
(ii) if avoidance of the heritage item is not reasonable or feasible, include detailed measures for minimising and/or managing the heritage item in the Field Development Plan.	Section 5.8.9
Consent condition B56 Schedule 2 If any previously unknown Aboriginal object or Aboriginal place is discovered or suspected in the Project area during operational or construction activities:	
a) all work in the immediate vicinity of the object or place must cease immediately;	

⁸ Note that on 1 July 2020 the Aboriginal cultural heritage functions were transferred from BCD to Heritage NSW.

SSD 6456 consent conditions directly relevant to this ACHMP	Section reference
<p>b) a 10-metre buffer area around the object or place must be cordoned off; and</p>	Section 5.9.2
<p>c) Heritage NSW and the Aboriginal Cultural Heritage Advisory Group must be contacted immediately.</p>	
<p>Work in the immediate vicinity may only recommence if:</p>	
<p>(i) the potential Aboriginal object or Aboriginal place is confirmed by the Aboriginal Cultural Heritage Advisory Group not to be an Aboriginal object or Aboriginal Place;</p>	
<p>(ii) the Aboriginal Cultural Heritage Management Plan is revised to include the Aboriginal object or Aboriginal place and appropriate measures in respect of it; or</p>	
<p>(iii) the Planning Secretary is satisfied with the measures to be implemented in respect of the Aboriginal object or Aboriginal place and makes a written direction in that regard.</p>	
<p>Consent condition B57 Schedule 2</p> <p>The Applicant must ensure that all Aboriginal objects or Aboriginal places identified in the Project area are properly recorded, and those records are kept up to date, in the Heritage NSW Aboriginal Heritage Information Management System (AHIMS) Register</p>	Section 5.6 Section 6.2
<p>Consent condition B58 Schedule 2</p> <p>The Applicant must establish and maintain an Aboriginal Cultural Heritage Advisory Group for the development to the satisfaction of the Planning Secretary. The group must:</p>	Section 1.5
<p>a) be established in consultation with Heritage NSW, Registered Aboriginal Parties and other local knowledge holder groups;</p>	
<p>b) comprise Aboriginal heritage representatives whose appointments have been approved by the Planning Secretary, including representatives from:</p>	
<p>(i) Heritage NSW (if available);</p>	
<p>(ii) the scientific community, comprising suitably qualified archaeologists (at least 1 representative);</p>	
<p>(iii) the Narrabri LALC (at least 1 representative);</p>	
<p>(iv) the Wee Waa LALC (at least 1 representative); and</p>	
<p>(v) the Gomeroi Native Title Applicant (at least 1 representative);</p>	
<p>c) be established prior to the commencement of Phase 1;</p>	
<p>d) meet at least twice a year; and</p>	
<p>e) provide advice on project-related cultural heritage management issues, including preparation and implementation of the:</p>	
<p>(i) Aboriginal Cultural Heritage Management Plan; and</p>	
<p>(ii) Field Development Plan, including micro-siting investigations.</p>	
<p>Notes: The Aboriginal Cultural Heritage Advisory Group is an advisory committee and has no compliance or enforcement functions.</p>	

SSD 6456 consent conditions directly relevant to this ACHMP	Section reference
Consent condition B59 Schedule 2 Prior to the commencement of Phase 1, the Applicant must prepare an Aboriginal Cultural Heritage Management Plan for the development to the satisfaction of the Planning Secretary. The plan must:	This Plan
a) be prepared by suitably qualified and experienced persons;	Section 1.5
b) be prepared in consultation with Heritage NSW, the Aboriginal Cultural Heritage Advisory Group, Registered Aboriginal Parties and other local knowledge holder groups;	Section 1.5
c) identify all known Aboriginal objects and Aboriginal places in the Project area and include a statement of significance for each item;	Schedule 7 Schedules 3, 4 and 5 provide avoidance or mitigation by site types, based on the significance of sites
d) describe the measures to be implemented for:	
(i) undertaking micro-siting investigations for the Field Development Plan, in consultation with the Aboriginal Cultural Heritage Advisory Group, including procedures for:	Section 5.8
<ul style="list-style-type: none"> ▪ desk top review and ground surveys for all proposed gas field infrastructure; 	
<ul style="list-style-type: none"> ▪ test excavations and subsurface testing where warranted, in accordance with a detailed archaeological research design and in accordance with the <i>Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW</i> (2010)⁹; 	
<ul style="list-style-type: none"> ▪ review and updating of Aboriginal cultural heritage sensitivity mapping; 	
<ul style="list-style-type: none"> ▪ managing any Aboriginal objects or Aboriginal places identified during the investigations, including: 	
<ul style="list-style-type: none"> • significance assessment; 	
<ul style="list-style-type: none"> • avoidance of all objects or places of high significance; 	
<ul style="list-style-type: none"> • avoidance of other objects or places, where reasonable and feasible; and 	
<ul style="list-style-type: none"> • if avoidance is not reasonable or feasible, procedures for: 	
<ul style="list-style-type: none"> - incremental and cumulative impact assessment, in consultation with Aboriginal stakeholders including Registered Aboriginal Parties; and 	
<ul style="list-style-type: none"> - minimising and/or managing the direct and indirect impacts; 	
<ul style="list-style-type: none"> ▪ dispute resolution between Santos and Registered Aboriginal Parties; 	
(ii) ensuring all workers receive suitable Aboriginal cultural heritage inductions prior to carrying out any activities which may cause impacts to Aboriginal objects or Aboriginal places, and that suitable records are kept of these inductions;	Section 5.9.4

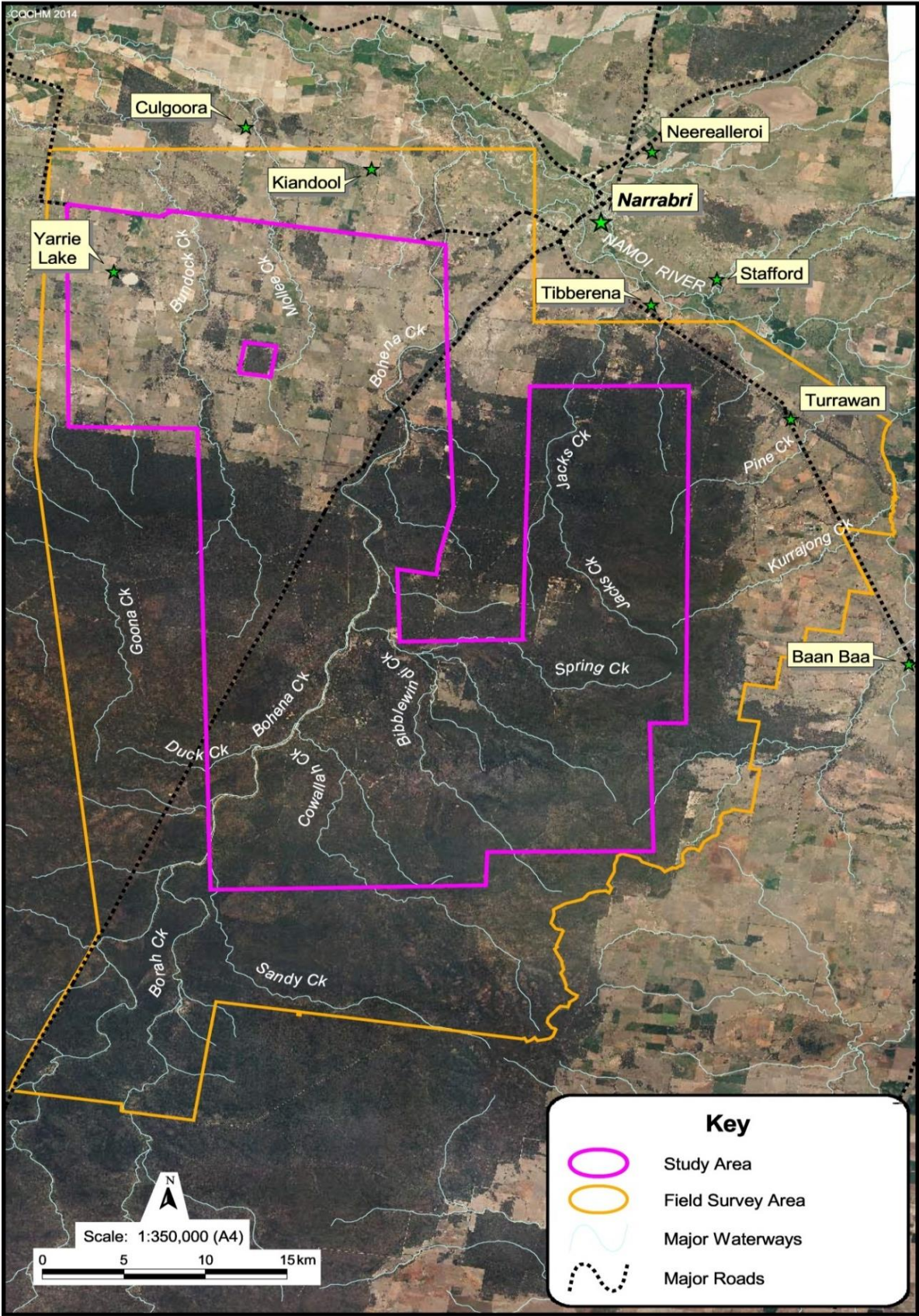
SSD 6456 consent conditions directly relevant to this ACHMP		Section reference
(iii)	protecting Aboriginal objects and Aboriginal Places located outside the approved disturbance area from impacts of the development, including identification and management of buffers;	Section 5.2
(iv)	managing the discovery of human remains and any new Aboriginal objects or Aboriginal places including detailed provisions for burials, over the life of the Project;	Section 5.9.1 Section 5.9.2 Section 5.9.3
(v)	maintaining and managing reasonable access for relevant Aboriginal stakeholders to Aboriginal objects and Aboriginal places in any biodiversity offset areas managed by Santos;	Section 5.12
(vi)	facilitating ongoing consultation and involvement of Registered Aboriginal Parties in the conservation and management of Aboriginal cultural heritage in any biodiversity offset areas managed by Santos;	Section 5.12
e)	include a strategy for the care, control, storage and/or relocation of any Aboriginal objects salvaged in the project area, both during the life of the development and in the long term; and	Section 5.10
f)	include a program to fund and undertake projects in accordance with Strengthening Aboriginal Community Wellbeing Toolkit (OEH, 2012) to promote caring for land, bringing people together and cultural awareness/education.	Section 5.11
Consent condition B60 Schedule 2 The Applicant must implement the Aboriginal Cultural Heritage Management Plan once approved by the Planning Secretary.		Section 10
Consent condition D3 Schedule 2 The Applicant to ensure that (where relevant) the management plans required under SSD 6456 include:		
a)	a summary of relevant background or baseline data;	Section 4 Section 5 Section 7
b)	details of:	
(i)	the relevant statutory requirements (including any relevant approval, licence or lease conditions);	Section 3 Appendix A (this table)
(iii)	any relevant limits or performance measures and criteria; and	Section 3
(iv)	the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;	Section 1.3
c)	any relevant commitments or recommendations identified in the documents that together comprise the NGP EIS;	Section 3.2
d)	a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;	Section 5
e)	a program to monitor and report on the:	Section 6.3
(i)	impacts and environmental performance of the development; and	Section 8
(ii)	effectiveness of the management measures set out pursuant to paragraph (d);	

SSD 6456 consent conditions directly relevant to this ACHMP	Section reference
f) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;	Section 5.6 Section 5.9
g) a program to investigate and implement ways to improve the environmental performance of the development over time;	Section 8
h) a protocol for managing and reporting any:	
(i) incident, non-compliance or exceedance of any impact assessment criterion and performance criterion	Section 8 Section 7
(ii) complaint; or	
(iii) failure to comply with other statutory requirements; and	
i) a protocol for periodic review of the plan.	Section 10
Consent condition D4 Schedule 2 Within 2 months of:	Section 8 Section 10
a) the submission of an incident report;	
b) the submission of an Annual Review;	
c) the submission of an Independent Environmental Audit;	
d) the submission of a Field Development Plan;	
e) the submission of a Groundwater Model Update; or	
f) the approval of any modification of the conditions of this consent,	
the Applicant must review the suitability of existing strategies, plans and programs required under this consent.:	
Consent condition D5 Schedule 2 If the review determines that the strategies, plans and programs required under this consent require revision – to either improve the environmental performance of the development, cater for a modification or comply with a direction - then the Applicant must submit the revised document to the Secretary for approval within 6 weeks of the review. Note: <i>This is to ensure strategies, plans and programs are updated on a regular basis and to incorporate any recommended measures to improve the environmental performance of the development.</i>	Section 10
Consent condition D6 Schedule 2 The Applicant must notify the Department and any other relevant agencies via the Major Projects Portal immediately after it becomes aware of the incident. This notice must describe the location and nature of the incident.	Section 8
Consent condition D7 Schedule 2 Within 7 days of becoming aware of a non-compliance with the conditions of this consent, the Applicant must notify the Department of the non-compliance via the Major Projects Portal. This notice must set out the non-compliance, the reasons for the non-compliance (if known) and what actions have been taken, or will be taken, to address the non-compliance. Note: <i>A non-compliance which has been notified as an incident does not need to also be notified as a non-compliance</i>	Section 8

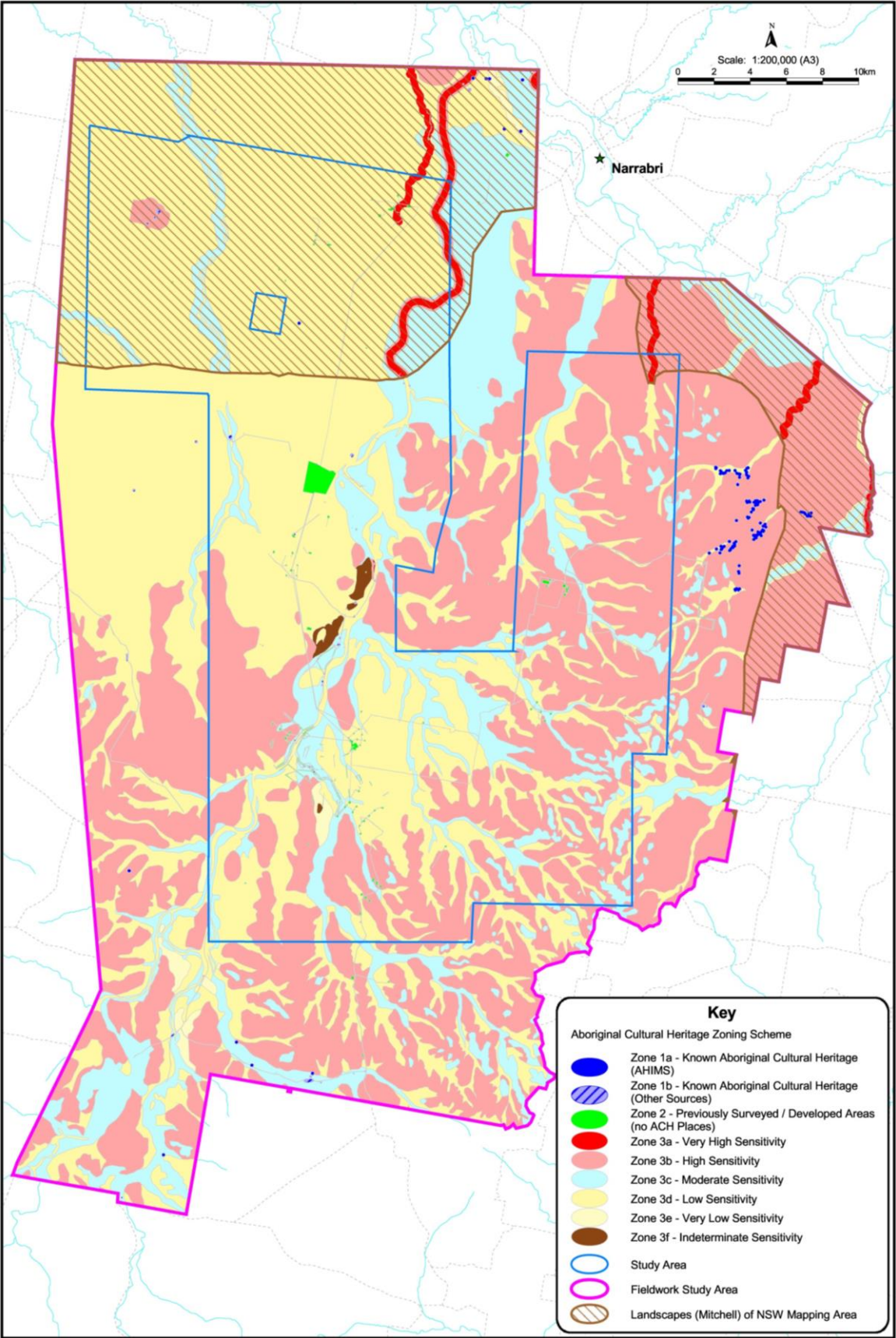
SSD 6456 consent conditions directly relevant to this ACHMP		Section reference
Consent condition D8 Schedule 2 By the end of March each year, unless the Planning Secretary agrees otherwise, the Applicant must submit an Annual Review of the environmental performance of the development to the Department via the Major Projects Portal.		Section 6.1
Consent condition D9 Schedule 2 Within one year of commencement of Phase 1 and every 3 years thereafter, unless the Planning Secretary directs otherwise, the Applicant must commission and pay the full cost of an Independent Environmental Audit of the development.		Section 6.3
Consent condition D13 Schedule 2 From the commencement of Phase 1, until the completion of all rehabilitation required under this consent, the Applicant must:		Section 1.7 Section 6.1
a) make copies of the following information publicly available on its website:		
b) keep such information up to date.		

SCHEDULES

Schedule 1
Project Map



Schedule 2
Sensitivity Mapping



Schedule 3

Complete avoidance of site types

Should the pre-clearance survey identify an Aboriginal cultural heritage site of the type in the table below, then Santos will not locate the infrastructure in that area and will re-site the infrastructure after following the same process again. A full description of each type of site is contained in Schedule 5.

Site Type	Commitment	Detail
Burials	Complete avoidance	
Stone Arrangements and Earthen Circles	Complete avoidance	
Carved trees	Complete avoidance	
Rock shelters	Complete avoidance	
Rock art	Complete avoidance	
Grinding grooves	Complete avoidance	
Quarries	Complete avoidance	
Mounds	Complete avoidance	Subject to confirmation as a cultural feature.
Scarred trees	Complete avoidance	Subject to confirmation as a cultural feature there will be complete avoidance of this site type.
Hearths and ovens	Complete avoidance	Subject to confirmation as a cultural feature. If identified during construction, mitigation will be in line with the New Find Measures under condition 4.9 of this ACHMP.
Places of Traditional and Anthropological Significance identified in the cultural heritage audit review or in a Cultural Heritage Compliance Plan	Complete avoidance	Sites previously identified by Santos as a Place of Traditional and Anthropological Significance or otherwise identified in the Additional Research Program.
Recent historic and contact sites	Complete avoidance	Sites previously identified by Santos as a Recent Historic and Contact Site or otherwise identified in the Additional Research Program.

Schedule 4

Mitigation measures to be applied to site types

Should the pre-clearance survey identify an Aboriginal cultural heritage site of the type in the table below, then Santos will, where practicable, not locate the infrastructure in that area and will re-site the infrastructure after following the same process again. If it is not practicable to re-site the infrastructure, then Santos will adopt the management measures identified in the third column of the table. A full description of each type of site is contained in Schedule 5.

Site Type	Commitment	Detail
Stone artefact concentrations	<p>Maximise avoidance</p> <p>Avoidance efforts will be focussed on complex sites.</p>	Stone artefact concentrations, where any two or more artefacts are within 1 m of each other. May be subject to relocation except where complex sites are encountered, at these sites avoidance efforts must be increased further. Complex sites are defined as places where a specific knapping event can be identified, grinding equipment (or fragments thereof) and/or ground edge tools (or fragments thereof) are present or form an element of the stone artefact concentration, there is any sub-surface material that may be <i>in situ</i> , or the stone artefact concentration is directly associated with any other site type.
Shell middens	<p>Maximise avoidance</p> <p>Avoidance efforts will be focussed on complex sites.</p>	Shell Middens may be subject to mitigation except where complex sites are encountered. Where complex sites are encountered they will be avoided. Complex sites are defined as where the shell midden material has not been subject to any process that has caused any disaggregation of the material, where a defined concentration of more than 10 shells or shell fragments over an area of more than 2m ² , there is a definable lens of shell, there is any sub-surface material that may be <i>in situ</i> or the shell midden is directly associated with any other site type.
Sub-surface cultural material	Maximise avoidance	Potential Archaeological Deposits will be subject of testing in line with DPE specifications for same. Where it is confirmed to exist, all Sub-surface Cultural Material, other than stone artefacts, will be avoided. This will apply irrespective of whether the material is <i>in situ</i> or not.
Isolated stone artefacts	Maximise avoidance	Where they cannot be avoided, Isolated Stone Artefacts may be relocated.

Schedule 5

Description of site types

A description of each site type identified in Schedules 3 and 4 is described below for reference:

1. Burials

Burials are the most sensitive site type that can be encountered: with the remains of ancestors being of immense importance to Aboriginal people. They can also be of considerable scientific significance by virtue of their antiquity, evidence of genetic development of the Aboriginal population, evidence of cultural practices (care for wounded or aged individuals, tooth evulsion, mortuary practices such as cremation or painting of bone) and the goods that may be buried with the individual. In some areas what can only be described as cemeteries have also been identified. Interment can take place as burials in locations such as watercourse-bordering dunes or lunettes, areas where soft sand is available, in rock shelters and within the limbs and trunks of hollow trees. Evidence of complex burial practices including maceration of flesh prior to final interment is also known. The geochemistry and base geology of an area has a major impact on the likelihood of finding burials and the locations in which they will be discovered. Tree burials are susceptible to destruction by bushfires and clearing. The study of burials in the region has provided information on where burials might be expected, how these are related to residential patterning and some interpretations of social patterns (McBryde 1974; Pardoe 1986, 1988; Witter et al. 1993).

RCAD (2002 appendix C: 15) notes oral testimony from Monty Ruttley that burials were found on 'a sandy creek in the Pilliga in the 1920s'. However, it is also noted that portions of the Pilliga have acidic soils. With this biochemistry it is unlikely that bone will survive for long. Therefore, any burials encountered in such areas are not likely to have any great antiquity.

2. Stone arrangements and earthen circles

Stone arrangements have been located in the region, typically at higher elevations, both where stone is available and perhaps so that they are less accessible. These are commonly presumed to be associated with ceremonial activities, including initiations.

3. Carved trees

Examples of this type of site have been reported for Bohena Creek. Carved trees result from the removal of bark and the carving of both figures and geometric patterns on the wood with axes or sharp stone tools. They were associated both with ceremonial sites such as bora grounds and to mark the boundaries of burial sites. In recognising these dual functions, Etheridge (1918) referred to them as teleteglyphs and taphoglyphs. Numbers of carved trees, including apparently the Bohena Creek example, were cut and removed to national and local museums, and to other keeping places, or have otherwise been destroyed by bushfires.

4. Rock shelters

Examples of this site type have been identified in the study area, but none are within the Project area for the proposed Project. Where sediment has been trapped in the rock shelter and the shelter occupied, and the site geochemistry favours it, there can be deep, stratified deposits containing a wide range of cultural materials including: stone artefacts; organic equipment (e.g. dilly bags, boomerangs) and decorative items (e.g. grass necklaces and beads); remains of food stuffs both faunal and vegetable; charcoal from camp fires; and interred human remains. Rock art can sometimes be found rendered on the walls of shelters.

5. Rock art

Rock art can be found as drawings (dry pigment) and paintings (wet pigment) in rock shelters and overhangs. Engravings, both in rock shelters and on large expanses of rock of suitable composition, are known in the region but are unlikely in the Project area due to the nature of the landscape. McBryde (1974) recorded engravings at Bullawa Creek, near Narrabri. RCAD (2002, appendix C: 15) notes that rock art is also found in shelters in the Pilliga Nature Reserve and Wilderness Area.

6. Grinding grooves

Wherever there are suitable large slabs of stone (typically sandstone) axes and other tools such as wooden spear points can be ground. This grinding results in creation of grooves on the large slabs. Grooving may also result from seed grinding. Grooves associated with axe production are typically associated with a source of water to allow creation of suitable grinding paste.

7. Quarries

Quarries [stone sources] are locations where stone used in the manufacture of stone artefacts has been found and there is evidence of manufacture in the form of stone artefacts such as debitage or blanks of the tools themselves. Quarries of various raw material are found and these relate to the tools or equipment that is to be manufactured. Sources where highly siliceous, krypto-crystalline and isotropic material are available are used for flaked tools. Hard volcanic and metamorphic material provides axes. Well-stratified outcrops of sandstone can provide material for grindstones, but materials can also be found as floaters or collected from gravel beds in watercourses and palaeochannels.

Ochre quarries can also be found. These can take two forms: locations where strata of clays with high content of iron compounds are found, and locations where there are large concentrations of stone nodules within which talc-like iron oxide is found – the nodules are cracked open and the iron oxide then ground to a powder. Kaolin (white clay) was used for purposes of painting, as was charcoal.

8. Mounds

Mounds might be encountered but the probability is low and will be limited to the largest watercourses in the study area in the extreme northwest, as they are found in floodplain country. Mounds may contain by-products of occupation including food debris, stone artefacts tools, charcoal and baked clay heat retainers. Burials are occasionally found in mounds. Mounds are raised areas typically measuring 10m to 20m in diameter, although larger examples have been recorded. Earthen mounds have been recorded to the west of the study area at the Macquarie Marshes (Balme and Beck 1996) and to the south and west along major rivers and watercourses. Excavation of mounds demonstrate they are of fairly recent origin, generally the late Holocene.

9. Scarred trees

These are sometimes referred to as culturally modified trees. They result from various types of activities:

- trees that have been scarred as a result of removing bark for the manufacture of various implements (coolamons), for construction of gunyahs and canoes or to mark particular trees associated with important events or places;
- trees where wood has been removed for the manufacture of particular tools such as bowls, spears, shields and clubs;
- trees where the bark has been removed as an ancillary to cutting into a tree to retrieve a resource such as honey or possums from hollow limbs.

Scarred trees should not be confused with carved trees where there has been removal or bark followed by figurative and geometric patterns on the trunk or major branches of a tree.

The size and shape of a scar may provide some indication of the use made of the bark or reason for scarring. It is sometimes possible to identify whether axes made of stone and steel have been used, usually in the form of the presence of cut marks and the definition of those marks. But there can be significant amounts of regrowth as the tree responds to the wound and this can obscure the size and shape of the scar as well as cut marks.

Many scarred trees have been registered. We note that both Roberts (1991) and oral testimony (RCAD 2002) urge caution in attributing all scarred trees to traditional practices of Aboriginal people. Trees will be found in areas where there has not been complete clearing of vegetation. The banks of creeks and watercourses and corridors of remnant vegetation in stock routes and along roads offer opportunity for their discovery.

10. Hearths and ovens

Hearths are surface features while ovens have been excavated. Heat retainers in the form most usually of pieces of baked clay, but less commonly small cobbles of stone along with charcoal, can be found in them. Other organic material may also be found. The charcoal and organic material offers the opportunity to date these features.

11. Places of traditional and anthropological significance

Again, RCAD (2002) contains statements that such places exist. These may be associated with a range of beings and events: important creator beings and culture heroes, places associated with important dreaming stories, dangerous places where the creator beings or dreaming characters may be encountered, places where important ceremonies were performed, birthing locations etc. There may be no material markers of such locations and they will be known only to suitably enculturated individuals who may choose to disclose the location and significance of these places.

12. Recent historic and contact sites

Archaeological evidence of Aboriginal life from the contact period of the 1800s has been documented in the region: RCAD (2002) demonstrates there is plenty of scope for this type of site in the study area.

13. Stone artefact concentrations

Stone artefact concentrations represent areas where there has been discard of artefactual material and are the most common form of open site that will be encountered. This is commonly believed associated with occupation of an area, but this is not necessarily the case. The density of discard and types of stone tools are commonly interpreted as demonstrating different activities in an area and intensity of occupation. However, the level of discard can also be closely related to the amount of raw material available and to the technology used to reduce the raw material and manufacture of specific tool types.

Quartz is a common raw material in this area. Various techniques are used in its reduction: bipolar flaking, lamellate reduction, shatter along natural flaws as well as conchoidal percussion. Identification of quartz artefacts can prove difficult dependent on technique used and the degree of natural flawing present in a block. Other stone materials likely present will include: silcrete, chert, quartzite, basalt and various other volcanic and metamorphosed materials.

14. Shell middens

Shell middens will be found close to rivers, lakes and other watercourses. Composed of mussel shells, they may be in stratified deposits or found as exposures in eroded areas. They vary in size from small dinner time camps to extensive and stratified lens of shell. Stone artefacts, hearths, animal bones, other organic material, and burials can be found in larger examples or associated with them. The high carbonate content of the midden creates an excellent micro-environment for the preservation of organic material.

15. Isolated stone artefacts

Isolated stone artefacts usually are simple stone flakes but can include edge ground axes, grinding equipment, retouched flakes and cores. While individual artefacts can look unprepossessing, they may well be indicators of subsurface materials. RCAD (2002) notes this possibility and it is a point made by Roberts (1991) and Hughes (2002). Grinding equipment including such as slabs or dishes (the bottom stone), top stones, mortars and pestles, pieces of stone used for axe sharpening and preparation of ochre are possible. So, too, are edge ground axes and fragments of such axes. These are important for various reasons. They can provide direct evidence of the activities undertaken in the general area where they have been left. This can come from the type of tool itself and the residues that may adhere to them: the residue and phytoliths of various seeds ground or pounded; particles of ochre. Axes themselves provide a broad date for sites on which they are found, dating from about 4,000 years b.p. Grinding equipment, notably grinding slabs, have been found in deposits at Cuddie Springs dating to the Pleistocene. However, there are ongoing doubts about these dates – not least that such equipment has typically been found in deposits at most sites dating to the mid-Holocene. Sandstone is the most common material used for grinding equipment, but various other materials can be used. Edge-ground axes are manufactured using hard volcanic and metamorphosed material to preserve the edge achieved after great effort grinding the blank with a suitable paste of sandstone and water.

Schedule 6

Aboriginal Cultural Heritage Working Group

1. Purpose of the ACHWG

The ACHWG will assist Santos to ensure the participation of the Aboriginal community in Pre-Clearance Surveys for the development of the Project in accordance with the Avoidance Principle in this ACHMP.

2. Functions of the ACHWG

The functions of the ACHWG are to:

- (a) represent the views and interests of the Aboriginal community in relation to the management of the impact of the Project on Aboriginal cultural heritage;
- (b) nominate persons to be included in a pool of approved Cultural Heritage Officers to participate in the Pre-Clearance Surveys as part of the Survey Teams;
- (c) appoint and empower the Cultural Heritage Coordinator to implement the ACHMP and provide support and direction to the Cultural Heritage Coordinator where requested; and
- (d) participate in the implementation of the ACHMP during the life of the Project, including any review of the operation of the ACHMP.

3. Membership of the ACHWG

Membership of the ACHWG will be a maximum of 10 people and will be constituted as set out below:

- (a) eight people chosen as follows:
 - (i) If there is a Registered Native Title Claim within the Project area and one or more Local Aboriginal Land Councils, four persons nominated by the Registered Native Title Claimants and four persons nominated by the Local Aboriginal Land Councils;
 - (ii) If there is a Registered Native Title Claim, but no Local Aboriginal Land Council, eight persons nominated by the Registered Native Title Claimants;
 - (iii) If there is no Registered Native Title Claim within the Project area but there is one or more Local Aboriginal Land Councils, eight persons nominated by the Local Aboriginal Land Councils; or
 - (iv) If there is no Registered Native Title Claims and no Local Aboriginal Land Council, eight persons from the local Aboriginal community nominated by Santos;
- (b) A Santos representative; and
- (c) an Independent Chair appointed by Santos.

At the date of approval of this ACHMP, if there is a Registered Native Title Claim, then the four representatives from the Local Aboriginal Land Councils will consist of three people nominated by the Narrabri Local Aboriginal Land Council and one being nominated by the Wee Waa Local Aboriginal Land Council.

4. Quorum

A meeting of the ACHWG will have achieved quorum when the Independent Chair and five other ACHWG Members attend. ACHWG Members may attend by phone subject to the prior approval of the Independent Chair. ACHWG Members will use all reasonable endeavours to ensure that ACHWG Members are present at all meetings.

5. Decisions

All decisions, approvals, advice and recommendations of the ACHWG made pursuant to provisions of this ACHMP will be made by majority vote of all members of the ACHWG attending the meeting at which the vote is taken, provided a quorum is present (with the exception of the appointment of the Cultural Heritage Coordinator). All decisions, approvals, advice and recommendations made by the ACHWG must relate to the functions and duties of the ACHWG as described in clause **Error! Reference source not found.**2 of this Schedule.

All decisions, approvals, advice and recommendations of the ACHWG made pursuant to provisions of this ACHMP will be made as follows:

- (a) a resolution is to be tabled specifying the decisions, approvals, advice and recommendations;
- (b) the ACHWG may discuss the resolution and discussion points will be noted;
- (c) the resolution is to be the subject of a formal vote and the results will be recorded; and
- (d) the resolution and the results of the vote are to be included in minutes of the meeting.

Where a vote is tied, the Independent Chair will be responsible for casting the deciding vote.

Where there is no quorum, decisions may not be made by the ACHWG at that meeting, and must be deferred to the next meeting.

Only ACHWG members may vote at any meeting of the ACHWG. The Independent Chair will be responsible for ensuring there are records of the items discussed in the meeting of the ACHWG.

6. Timing of Meetings

Unless otherwise convened by the Independent Chair (with the agreement of Santos) under other provisions of this ACHMP, meetings of the ACHWG will be held at least every six months during the life of this ACHMP.

The time and venue for the meetings will be as agreed by the Independent Chair.

7. Person who may attend ACHWG Meetings

- All ACHWG Members may attend all meetings of the ACHWG.
- The Cultural Heritage Coordinator may attend meetings.
- A person appointed by the Independent Chair to record the proceedings of a meeting of the ACHWG may attend.

8. Additional People Attending

ACHWG members may advise the Independent Chair they wish to invite other persons to attend meetings. Such notice must be provided in writing at least 48 hours before any meeting and must specify the name of the person and the specific agenda item for which attendance is requested.

The Independent Chair must advise all other ACHWG Members of the receipt of the request and the Independent Chair may agree to the request. Where the Independent Chair agrees to the request, it is on the basis that the person who is requested to attend agrees to comply with the following conditions:

- (a) they may attend the meeting only while the specific agenda item is being discussed; and
- (b) they may only address the ACHWG with the majority agreement of the ACHWG; and

- (c) they are not a member of the ACHWG and so have no voting rights or any other procedural rights that fall to an ACHWG member under provisions of this ACHMP.

The Independent Chair will, in considering requests for any person to attend, ensure that no more than 14 persons (including ACHWG Members) attend any one meeting of the ACHWG. It is the responsibility of the ACHWG Member who makes the request to contact the Independent Chair to secure the decision of the Independent Chair in this matter, and to advise the person they requested to attend of the Independent Chair's decision. In meeting their responsibility under this section the ACHWG Member may telephone the Independent Chair for the decision.

9. Register of Decisions

All decisions, approvals, advice and recommendations of the ACHWG made pursuant to provisions of this ACHMP on any matter arising from the implementation of this ACHMP will be entered in a Register of Decisions which will be maintained by the Independent Chair.

The Register of Decisions may be used by the Cultural Heritage Coordinator as part of day to day management planning and implementation of Management Measures.

10. Correspondence

Where correspondence by mail, email, fax or verbally with Santos on any element of the ACHMP or any Management Measure is received, Santos will forward copies of such correspondence to the Independent Chair who will distribute to all ACHWG Members and the ACHWG shall consider such correspondence.

Schedule 7

Previously Recorded Sites

REMOVED FOLLOWING REQUEST MADE
DURING CONSULTATION PROCESS WITH
REGISTERED ABORIGINAL PARTIES

Schedule 8

Cultural Heritage Coordinator Role Summary

Employer

A third party, to be identified.

Purpose and role

The coordinator's role is to support the implementation of the ACHMP through responding to work programs and to work with Santos to give effect to the terms and intent of the ACHMP; and

Ensuring that all members of the Survey Team will unconditionally commit to implementation of this ACHMP, observe and comply with any health, safety, environmental and other reasonable procedures and policies required by Santos; and

Responsibility for the timely implementation of any Pre-Clearance Surveys relating to Work Programs prepared or issued under provisions of this ACHMP.

On agreement by Santos, Santos will provide all resources reasonably required to enable the Cultural Heritage Coordinator to perform all required duties and functions. Resourcing will be in accordance with Santos' schedule of rates.

Responsibilities

- comply with all requirements of this ACHMP
- the first point of contact for Santos in matters relating to the implementation of this ACHMP
- fulfil all requirements of the Cultural Heritage Coordinator role in accordance with the ACHMP
- prepare reports as required including Cultural Heritage Compliance Reports.

Essential qualifications and skills

- knowledge of Gomeroi cultural heritage;
- ability to identify cultural heritage sites and implement appropriate protective measures;
- ability to use GIS and GPS;
- competent use and understanding of basic computer programs e.g. Word, Excel etc.;
- ability to forward plan and prioritise work and project demands;
- proficient report writing skills; and
- experience and ability to work across diversity of backgrounds and experience.

Performance review

The coordinator's employer or head contractor will be required to review the coordinators performance annually, in consultation with the ACHAG and Santos.

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