



Social Impact Assessment

Bulk Liquid Storage Facility, Port Kembla, NSW

May 2022

Disclaimer

This document has been prepared for the sole use of the authorised recipient and this document may not be used, copied or reproduced in whole or part for any purpose other than that for which it was supplied by AAP Consulting. No other party should rely on this document without the prior written consent of AAP Consulting.

AAP Consulting undertakes no duty, nor accepts any responsibility, to any third party who may rely upon or use this document. AAP Consulting assumes no liability to a third party for any inaccuracies in or omissions to that information. Where this document indicates that information has been provided by third parties, AAP Consulting has made no independent verification of this information except as expressly stated.

©AAP Consulting

Table of Contents

1	Introduction	6
1.1	Proposal overview	6
1.2	Objectives of the social impact assessment	7
1.3	Secretary's Environmental Assessment Requirements	8
1.4	Structure of this report	8
2	Legislation and Social Policy Context	9
2.1	Legislative context	9
2.2	Strategic and social context	9
3	Social Locality	11
3.1	The Proposal site	11
3.2	Defining the social locality	11
4	Social Impact Assessment Approach	14
4.1	Approach to SIA	14
4.2	Social baseline	15
4.3	Stakeholder identification and analysis	16
4.4	Identification of social impacts and assessment methodology	17
4.5	Risk assessment	20
4.6	Assumptions	20
5	Social Baseline	22
5.1	The social baseline at a glance	22
5.2	Regional context	22
5.3	Local context	24
5.4	Cumulative projects	25
5.5	Social baseline summary	25
6	Assessment and Prediction of Social Impacts	28
6.1	Employment opportunities and community contributions	28

6.2	Safety, health and wellbeing	30
6.3	Social amenity	34
6.4	Traffic and transport	38
6.5	Summary of mitigation and enhancement measures in response to social impacts	41
6.6	Summary of mitigation impacts	42
7	Monitoring of social impacts	47
8	Conclusion	49
9	References	50
	Appendices	51
	Appendix 1 – Certification Page	52
	Appendix 2 – Proposal Stakeholders	53
	Appendix 3 – SIA Scoping Worksheet	58
	Appendix 4 – SIA Risk Assessment	59
	Appendix 5 – Community profiles	61
	Table 1.1 SEARs relevant to SIA requirements.....	8
	Table 1.2 Structure of this report.....	8
	Table 2.1 Relationship of the Proposal to CSP	10
	Table 4.1 Approach to SIA	14
	Table 4.2 Social impact categories (2021 Guidelines)	14
	Table 4.3 Statistical area of analysis.....	15
	Table 4.4 SIA engagement approach and timing	16
	Table 4.5 Scoped level of assessment	18
	Table 4.6 Research methodologies	19
	Table 5.1 Social baseline summary.....	26
	Table 6.1 Summary of recommended mitigation and enhancement measures	41

Table 6.2 Summary of mitigated impacts	43
Table 7.1 Monitoring framework	48
Figure 1.1 Proposal site	7
Figure 3.1 Construction route and Proposal site	12
Figure 3.2 Operational route	13
Figure 6.1 Pipeline and publicly accessible areas	34

1 Introduction

This Social Impact Assessment (SIA) has been prepared to support the State Significant Development (SSD) application by Manildra Group to build and operate a bulk liquid storage facility at Port Kembla in the Wollongong Local Government Area (the Proposal).

The SIA adopts the framework set out in the Social Impact Assessment Guideline published by the NSW Department of Planning and Environment (DPE) in November 2021 (herein referred to as 2021 Guideline). It also considers the International Association for Impact Assessment's (IAIA) Social Impact Assessment: Guidance for assessing and managing the social impacts of projects (IAIA, 2015) as well as leading practice approaches to social impact management and community benefit planning for wind developments worldwide.

It has been prepared by a suitably qualified and experienced lead author. A signed declaration certifying that the SIA does not contain false or misleading information is provided in Appendix 1.

1.1 Proposal overview

The Proposal includes:

- Six stainless steel storage tanks in the terminal.
- Two 300mm stainless steel pipes to the harbour berth (berth 206). One pipe will deliver the ethanol product, while the second pipe will be used to return any unused product to the Terminal.

During operation, it is proposed that there will be approximately 65 tanker truck movements per week for in-loading and approximately 20 B-double truck movements per week for out-loading product in ISO tanks (tanks mounted in shipping container sized frames) to Port Botany. The larger A-double trucks will have a 74,000-litre capacity, facilitating a 30 per cent reduction in truck movement that would otherwise be required to be transported between Bomaderry and the proposed site at Port Kembla.

To minimise the impact of construction traffic on local streets, proposed dedicated construction routes will be developed to provide the shortest distances to and from the arterial road network. It is proposed that trucks will enter and exit the site via Five Islands Road, Old Port Road and Flinders Street. Vehicles will exit south to Nowra via King Street.

During operations, it is proposed that the A-Double truck route will include transport along Bolong Road in Bomaderry and onto the Princes Highway. The route will then include the Albion Park Bypass, Five Islands Road, Flinders Street and Foreshore Road. Trucks will return by the same route. The proposed route has in-principal support from the National Heavy Vehicle regulator.

During construction, it is proposed that construction activities will be undertaken Monday to Friday 7am to 6pm and Saturday 8am to 1pm.

During operation, the facility will operate 24 hours per day and will be largely unstaffed, with monitoring of the facility being undertaken remotely from the proponent's facility in Nowra.

Trained crew will attend while ships are being loaded to monitor safety of operations and the tanker in-load and out-loading has been designed to be automated.

The Proposal has been designed to have an operational design life of 40-50 years subject to usage/demand, and to conform to Australian and International Standards to ensure that the terminal is structurally sound, safe to operate and friendly to the environment and the local community.

Figure 1.1 Proposal site



1.2 Objectives of the social impact assessment

This SIA is one of several technical assessments that form part of the Environmental Impact Statement for the Proposal. It responds directly to the Secretary's Environmental Assessment Requirements outlined in section 1.3.

SIA is the process of understanding and managing the social impact of projects and programs on people. This social impact assessment will provide a framework to identify, predict and evaluate likely social impacts to people and proposed responses. The objectives adopted for this social impact assessment include:

- Providing a clear, consistent, and rigorous framework for identifying, predicting, evaluating, and responding to the social impacts of state significant infrastructure, as part of the overall Environmental Impact Statement process
- Facilitating improved project planning and design through earlier identification of potential social impacts

- Promoting better development outcomes through a focus on enhancing positive social impacts and minimising negative social impacts
- Supporting informed decision-making by strengthening the quality and relevance of information and analysis provided to the consent authority
- Facilitating meaningful, respectful, and effective community and stakeholder engagement on social impacts across each Environmental Impact Statement phase, from scoping to post-approval
- Ensuring that the potential social impacts of approved projects are managed in a transparent and accountable way over the project life cycle through conditions of consent and monitoring and reporting requirements.

1.3 Secretary's Environmental Assessment Requirements

Secretary's Environmental Assessment Requirements (SEARs) were issued for the Proposal by the Department of Planning, Industry and Environment (DPIE) on 23 December 2021. The relevant requirements are summarised in Table 1.1.

Table 1.1 SEARs relevant to SIA requirements

SEARS	Where addressed in this SIA
Social & Economic: an analysis of any potential social and economic impacts of the development, including a discussion of any potential economic benefits to the local and broader community.	Chapter 7 of this SIA. Section 7.17 of the EIS

1.4 Structure of this report

The structure of this report is influenced by the 2021 Guideline requirements and is outlined Table 1.2 and observes the review questions contained in Appendix C of the 2021 Guideline. The review questions are essentially a checklist for the author to confirm that the 2021 Guideline has been complied with, in undertaking the SIA and preparing this report.

Table 1.2 Structure of this report

Chapter	Description
Chapter 1	Introduces the Proposal and structure of this report.
Chapter 2	Establishes the relevant legislative and policy context of the assessment.
Chapter 3	Describes the social locality.
Chapter 4	Describes the methodology for this assessment.
Chapter 5	Establishes the social baseline.
Chapter 6	Describes and assesses the expected and perceived potential social impacts of this Proposal, including enhancement and mitigation measures and outline of residual impacts.
Chapter 7	Provides a framework for monitoring and managing the impacts.
Chapter 8	Concludes the assessment

2 Legislation and Social Policy Context

2.1 Legislative context

The Environmental Protection and Assessment Act 1979 (EP&A Act) sets the legislative context for this assessment. The SEARs are issued under the provisions of the EP&A Act, and therefore set legislative requirements that this assessment must accommodate. The NSW DPE is the state planning authority for the Proposal.

Social Impact Assessment Guidelines

In July 2021, the Department of Planning and Environment introduced the Social Impact Assessment Guideline 2021. The 2021 Guideline was reissued in November 2021 and requires all State Significant Projects to have a clear and consistent approach to assessing social impacts and builds on the previous 2017 Guideline that applied to State significant resource projects.

This assessment has been carried out in accordance with the 2021 Guideline and aims to identify and manage social impacts by:

- Predicting impacts
- Refining the Proposal to avoid negative impacts and enhance benefits
- Minimising then mitigating negative impacts and maximising benefits
- Managing impacts.

The strategic policy and planning setting of the Proposal is described in brief, below, to demonstrate how the Proposal ties into broader public policy in Australia.

2.2 Strategic and social context

The Proposal is located within the Wollongong City Council Local Government Area (LGA). The existing Shoalhaven Starches is located within the Shoalhaven LGA, and the heavy vehicle route crosses through Shoalhaven, Kiama, Shellharbour and Wollongong LGAs.

Regional plans which reflect the aspirations of the community have been developed by the State Government and local authorities. These plans are outlined below.

Illawarra Shoalhaven Regional Plan 2041

The Illawarra Shoalhaven Regional Plan 2041 is a 20-year blueprint for the future of the Illawarra Shoalhaven region and the overarching strategic planning framework.

The vision outlined in the plan is: to create a reputation for innovation, sustainability, and resilience, in 2041 the Illawarra Shoalhaven is diverse, creative and globally connected region.

It outlines the delivery of the vision through four goals:

- A productive and innovative region

- A sustainable and resilient region
- A region that values its people and places
- A smart and connected region.

The Proposal directly contributes to the goal of a productive and innovative region, specifically:

Objective 3: To Grow the Port of Port Kembla as an international trade hub

Our Wollongong Our Future 2032

Our Wollongong Our Future 2032 Community Strategic Plan (CSP) is based on broad community consultation across the LGA. The plan identifies the main priorities and aspirations for the LGA and establishes objectives and strategies to achieve those the main priorities.

The vision outlined in the plan is:

“From the mountains to the sea, we value and protect our natural environment and we will be leaders in building an educated, creative, sustainable and connected community”

The CSP outlines the delivery of this vision through six interconnected goals related to the environment, sustainable economy, a vibrant city, engaged community, liveable city and accessible transport. Table 2.1 outlines the relevance of the Proposal in relation to the CSP.

Table 2.1 Relationship of the Proposal to CSP

Plan Reference	CSP Element	Relevance of the Proposal to element
Goal 2 We have an innovative and sustainable economy	Objective 2.1 Support educations and employment opportunities that retain young people and local talent, attract new workers and provide opportunities for the unemployed.	The Proposal will contribute to achievement of this goal by creating employment opportunities.
Goal 4 We are a connected and engaged community	Objective 4.1 Provide our community with equitable access to information and opportunities to inform decision-making.	The Proposal will be available for public submission and comment, and engagement through planning has been ongoing.

3 Social Locality

3.1 The Proposal site

The subject site is located at Foreshore Road, Port Kembla NSW 2505, described as Lot 6 DP1236743 and Lot 2 DP1182823. The subject site will form part of a lease area agreed to by the NSW Ports and will comprise a total area of approximately 17,690m² (or 1.769ha).

The site is predominately vacant, with the primary purpose of the site being associated with the storage of fill and other port related equipment. The site is predominately free of vegetation, with some existing mature trees located adjacent to the foreshore road frontage of the premises (refer to section 1.2 and section 1.3 for Proposal description and overview).

3.2 Defining the social locality

There is no prescribed meaning or fixed, predefined geographic boundary to a social locality; rather, the social locality should be construed depending on its nature and its impacts. Defining the social locality begins with understanding the nature of the Proposal, the characteristics of affected communities and how positive and negative impacts may be reasonably perceived or experienced by different people. Social impacts in and beyond the Proposal's site boundary, both positive and negative, may also be considered during approval processes in terms of public interest and the suitability of the site for the Proposal.

The following factors have been considered in determining the social locality for the Proposal:

- The nature and scale of the Proposal and its associated activities
- The characteristics of surrounding communities and how positive and negative impacts may be reasonably perceived or experienced by different people, including those that may be vulnerable or marginalised
- The potentially affected built or natural features located near the Proposal that have social value or importance
- Cumulative impacts that may impact affected communities as a result of other projects or operations near the Proposal site
- Any relevant social, cultural, demographic trends or social change processes occurring now or in the past near the Proposal site
- The history of the proposed Proposal site and the area, and any similar experiences people near the Proposal have had
- The broader (indirect) area of social influence of communities that will be impacted by future incoming workforces, business opportunities, construction access and supply chain routes.

The following features of the Proposal's social context have been considered in understanding the Proposal's social locality:

- The Proposal site (the facility on Foreshore Road at Port Kembla) including the operating Port and the surrounding community of Port Kembla
- The operational road transport route from the existing Shoalhaven Starches facility at Bomaderry to Port Kembla
- The construction road transport route

Figure 3.1 Construction route and Proposal site

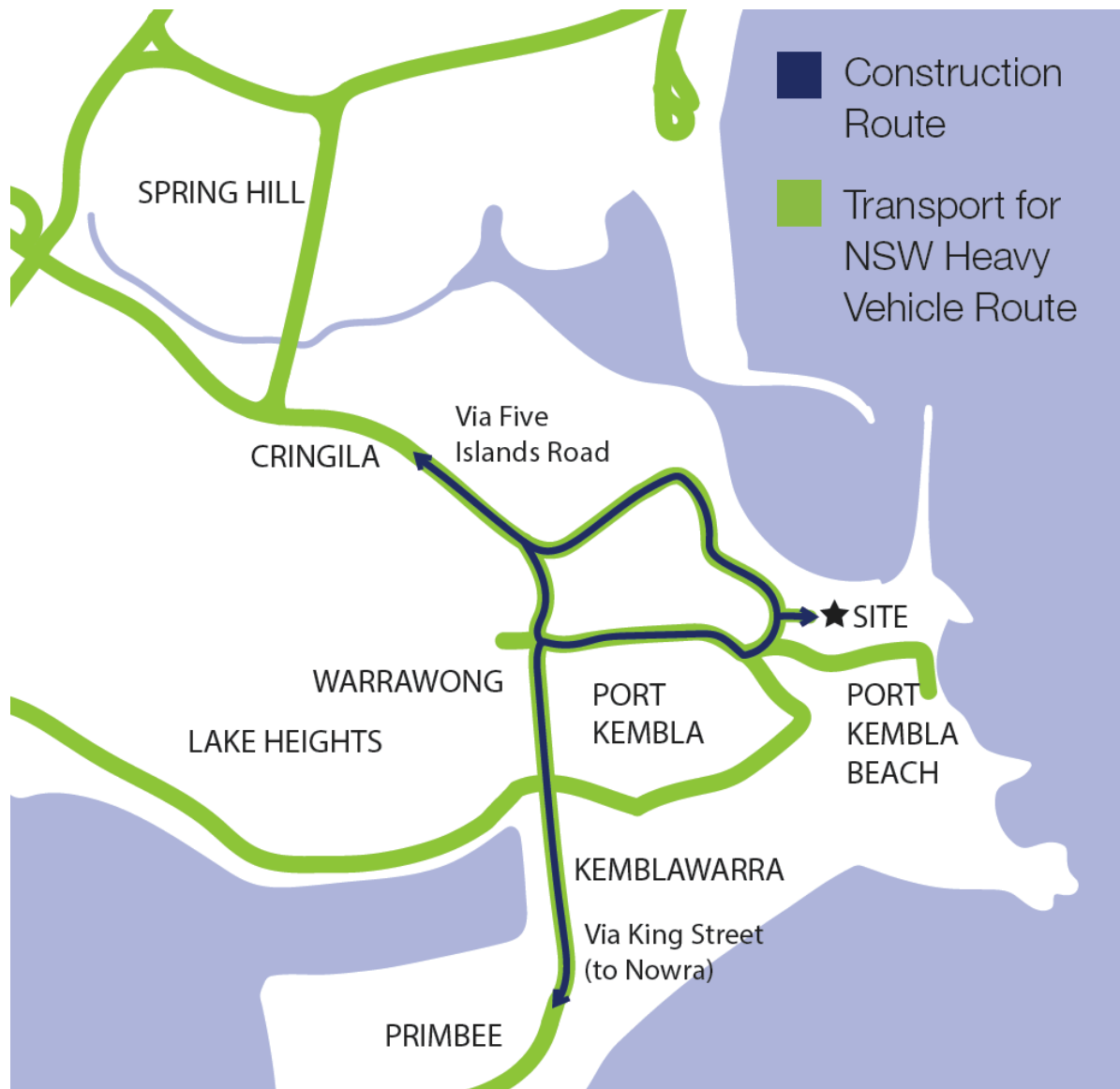
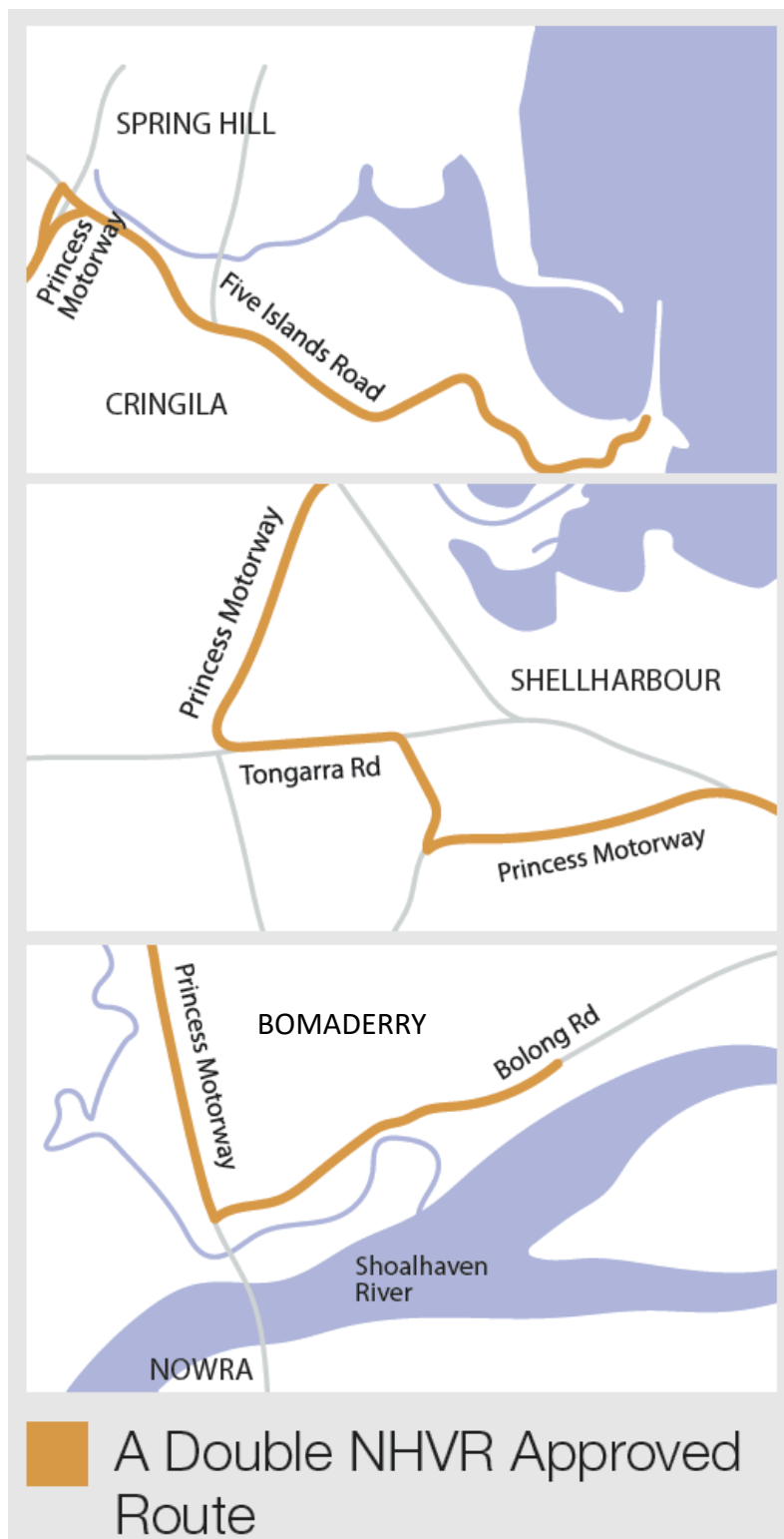


Figure 3.2 Operational route



4 Social Impact Assessment Approach

SIA is an approach to predicting and assessing the likely consequences of a proposed action in social terms and developing options and opportunities to improve social outcomes. Best practice SIA is participatory and involves understanding impacts from the perspectives of those involved in a personal, community, social or cultural sense, to provide a complete picture of potential impacts, their context and meaning. The SIA engagement approach adopted for the current assessment builds on existing relationships and activities and incorporates both qualitative and quantitative research assessment methodology.

4.1 Approach to SIA

The SIA approach is outlined in Table 4.1 and enabled the collection of data to address the social impact categories defined in the 2021 Guideline (Table 4.2). The ethics of research involving humans and the principles identified in section 1.2 of the 2021 Guideline are a focus of this SIA.

Table 4.1 Approach to SIA

Approach	Description
Identifying and scoping impacts	Gaining an understanding of the Proposal's social locality.
	Considering the characteristic of the communities within the social locality. This is described as the social baseline.
	Identifying likely social impacts for different groups in the social locality.
Identifying, assessing and monitoring social impacts	Analysis of unmitigated and mitigated social impacts.
	Proposing arrangements to monitor and manage residual social impacts.

Table 4.2 Social impact categories (2021 Guidelines)

Chapter	Description
Way of life	How people live, how they get around, how they work, how they play, and how they interact each day.
Community	Community composition, cohesion, character, how the community functions, and people's sense of place.
Accessibility	How people access and use infrastructure, services and facilities, whether provided by a public, private or not-for-profit organisation.
Culture	Aboriginal and non-Aboriginal, including shared beliefs, customs, values and stories, and connections to Country, land, waterways, places and buildings.
Health and wellbeing	Physical and mental health especially for people vulnerable to social exclusion or substantial change, psychological stress resulting from financial or other pressures, access to open space and effects on public health.

Chapter	Description
Surroundings	Ecosystem services such as shade, pollution control, and erosion control, public safety and security, access to and use of the natural and built environment, and aesthetic value and amenity.
Livelihoods	People's capacity to sustain themselves through employment or business.

4.2 Social baseline

A key component in the development of the social baseline was the collation and interpretation of relevant demographic data. To provide statistical analysis, the primary areas of interest for the purpose of this assessment and as defined by the ABS (2016) are shown in Table 4.3. The study also uses the State of NSW for comparative purposes.

Table 4.3 Statistical area of analysis

Analysis Area	Graphical boundaries including ABS code
Neighbours / Community	The State suburbs of: Port Kembla (13245) Warrawong (14167) Bomaderry (SA1)
Region	Wollongong LGA (18450) Southern Highlands and Shoalhaven (114)

A wide range of social indicators were considered prior to conducting this statistical analysis as well as in the development of the existing social baseline. The selection of social indicators was primarily informed by the key themes contained in the NSW DPE Illawarra Shoalhaven Regional Plan 2041.

The baseline also uses the Socio-Economic Indexes for Areas (SEIFA). This is an ABS measure that ranks areas in Australia according to relative socio-economic advantage and disadvantage. There are four different SEIFA measures, however, this report utilises the Index of Relative Socio-Economic Disadvantage (IRSD) as it considers vulnerability. Higher IRSD scores reflect lower levels of disadvantage. The IRSD scores included in this report are for geographical areas at the LGA level. The score is standardised against a mean of 1,000, with a standard deviation of 100.

Finally, the baseline also considers existing social infrastructure. Social infrastructure refers to facilities and services that enhance the social capacity of communities and may include infrastructure related to health, housing, youth, aged care, leisure, community safety facilities and road safety (Franks, 2012). A detailed inventory of social infrastructure has not been provided for this report. Potential impacts emanating from population growth associated with the Proposal, such as those related to housing and pressure on social infrastructure, were considered immaterial due to the number of additional employees during both construction and operations being relatively minor in the context of the total Wollongong LGA population and housing markets. Instead, references to nearby social infrastructure relevant to this Proposal are included in text throughout the baseline study.

Please note: This assessment includes the most current data sources at the time of writing. It is important to note that while the ABS Census 2021 was undertaken in August 2021, the results are

released from June 2022 and therefore not available for this assessment. The most up to date data sources at the time of writing have been used where available.

4.3 Stakeholder identification and analysis

Stakeholders can be defined as ‘any individual, group of individuals, organisation or political entity with an interest or stake in the outcome of a decision’ (International Association for Public Participation, 2015). For this Proposal, a stakeholder analysis has been undertaken to identify communities and stakeholders who have an interest in the Proposal and/or be impacted by the construction, operations or decommissioning of the Proposal. This includes people and groups:

- That are impacted by possible construction, maintenance, operation or decommissioning activities
- With an interest in policy or operational decisions
- With an interest in major project development proposals.

A comprehensive list of stakeholders identified for the purposes the EIS is provided in Appendix 2. A detailed overview of engagement specific to the Proposal is provided in Chapter 5 of the EIS.

Participatory engagement activities to further inform the SIA are included in Table 4.4 below, with key outcomes following.

Table 4.4 SIA engagement approach and timing

Approach	Targeted participants
Face to face meetings	Wollongong City Council Executive Team and Paul Scully, Member for Wollongong
Online community workshop	Nearby neighbours and wider community
Online survey	Nearby neighbours of the facility in Port Kembla and Shoalhaven Starches

Key themes emerging from engagement include:

- Construction and operational impacts
 - Utilisation of the freight line instead of road network
 - Traffic increases
 - Impact on local roads
 - Safety – Storage, transportation, and management of hazardous materials
 - Retained access to public amenities (foreshore)
 - Employment
- Environmental impacts
 - Air quality

- Water quality

4.4 Identification of social impacts and assessment methodology

4.4.1 Scoping of impacts

The scoping tool contained in the 2021 Guideline was used to help inform this scoping process and was informed by a series of technical assessments, review of strategic context and comparative projects, early engagement outcomes and social commentary (see appendix 3).

The process of applying the scoping tool involved:

- Identifying the Proposal's activities
- Using technical assessments and review of comparative projects as inputs to the scoping tool and considering each of the categories of social impact
- Considering and assessing the material characteristics of any likely impact
- Considering stakeholder/community opinions and sentiment towards the Proposal's activities through desktop research and review of other comparative projects
- Determining whether a social impact may potentially arise from the Proposal's activities, and then developing a rationale for the decision
- Determining the level of assessment (and engagement) required in the EIS preparation phase.

The scoped impacts were further refined through the impact assessment phase to reflect ongoing engagement outcomes, assessment progression and to align with the 2021 Guidelines. The scoping phase determined a number of social impacts that required further investigation.

Considering the nature of the Proposal and that the proposed facility is in an appropriately zoned land, surrounded by other industrial developments, it is not considered necessary to undertake a comprehensive detailed assessment of current community services/facilities, housing availability or social cohesion. The key impact themes requiring further investigation include:

- Employment opportunities and community investment
- Safety, health, and wellbeing
- Social amenity
- Traffic and transport.

The scoped social impact issues for this proposal are outlined in Table 4.5 and assessed in Chapter 7 of this SIA. The scoped impacts cover a range of social impact categories and Table 4.5 demonstrates the interrelationships that exist. The scoped impacts were further refined through the impact assessment phase to reflect ongoing engagement outcomes, assessment progression and to align with the 2021 Guidelines.

Table 4.5 Scoped level of assessment

Impact on people (unmitigated)	Proposal aspect	Social impact category (Guideline)	Level of assessment
Employment opportunities and community contributions			
Employment opportunities for the wider community and ongoing community investment	Construction and operation of terminal	Livelihoods	Detailed
Contribution and support to the surrounding communities	Operation	Community	Detailed
Safety, health, and wellbeing			
Safety risk of transferring flammable substance and risk of fire / hazards or damage to surroundings.	Operation - transfer of ethanol to the location via trucks and berth via pipeline	Surroundings Health and wellbeing	Detailed
Social Amenity			
Changes to air quality because of emissions from storage facility	Operations of facility	Surroundings	Detailed
Impact on social amenity and how people live because of construction noise and vibration, including piling activities and heavy vehicle movements	Construction	Surroundings Way of life	Minor
Impact on social amenity and how people live because of construction dust	Construction	Surroundings Way of life	Minor
Impact on social amenity and how people live because of operation noise and vibration	Operation	Surroundings Way of life	Minor
Traffic and transport			
Increased heavy vehicles causing increased road safety risks for local users	Operations - Delivery of ethanol from Nowra to Port Kembla, including access to the site.	Access	Minor
Impact on social amenity and how people live because of construction traffic	Construction	Surroundings Way of life	Minor
Potential conflict with pedestrian and cyclists during construction due to transport to and from construction site	Construction	Surroundings	Minor

A range of methods were selected for the assessment to address matters requiring further social impact investigations. Table 4.6 lists the methods selected for the SIA and a brief description of the methodology.

Table 4.6 Research methodologies

Research methodology	Description
Stakeholder consultation including online surveys and workshops, face to face meetings and briefings	<p>The format of the online workshop provides a flexible structure which allowed the independent facilitator to ask questions about situations as they emerged, and the participants express views. The survey was a secondary and alternative methodology used to garner feedback. Conducting surveys was selected to further explore the amenity impacts of the Proposal and to collect data, evidence, and insights for those stakeholders nearest to the Proposal.</p> <p>Face to face meetings with key stakeholder groups including Wollongong City Council, the Local Member for Wollongong and the Port Kembla Environment Group were also data sources used to inform this SIA.</p> <p>The work of Bradshaw and Stratford (2005) regarding qualitative research design and rigour, was helpful in designing the online survey. The authors provide guidance in relation to participant selection and sampling. Their work explains that in qualitative research, the number of people we interview, communities we observe, or texts we read, is less important than the quality of who or what we involve in our research, and how we conduct that research. Their work emphasises that 'purposive' sampling is typical in this type of research, and that the sample is not intended to be representative given the emphasis is usually on the analysis of meanings.</p>
Exploratory research	<p>Exploratory research involves familiarising a researcher with a topic to satisfy curiosity and improve understanding. Exploratory research is often conducted in areas of inquiry, where the goals of the research are "to scope out the magnitude or extent of a particular phenomenon, problem, or behaviours, to generate some initial ideas (or "hunches") about that phenomenon, or to test the feasibility of undertaking a more extensive study regarding that phenomenon (Bhattacharjee, 2012). For instance, if a community is generally dissatisfied with the operations of a business or government body, exploratory research may be directed at measuring the extent of dissatisfaction or frequency of complaints, and the presumed cause of such complaints.</p> <p>For this assessment, research has included comparative analysis of similar operations and review of existing complaints. This research assists with scoping out the nature and extent of the problem and serving as a useful precursor to more in-depth research, if required.</p>
Desktop analysis based on specialist studies	<p>The term desktop analysis refers to a study that is carried out primarily through integration of technical assessments into the SIA, rather than physical investigations, that is, it can be done sitting at a desk. For this assessment, several social impacts, including cumulative impacts have been mostly assessed in other technical studies in the Environmental Impact Statement, and a desktop analysis has been undertaken to cross-reference and integrate those studies into this report. This methodology is then further complemented by methodologies outlined</p>

Research methodology	Description
	previously such as qualitative assessment and research methodology to provide additional supporting evidence.

4.5 Risk assessment

To assess the potential impacts, a risk assessment was carried out to determine the overall significance rating of the potential social impact with and without mitigation. The impacts have been evaluated according to the 2021 Guideline.

As part of this risk assessment, consideration was given to:

- The likely population to be affected, separately for each component of the Proposal
- The timing of the potential social impact
- The potential impact characteristics that were assessed during the scoping phase (extent, duration, scale, sensitivity)
- The potential level of significance of the potential social impact, considering the likelihood and magnitude of the potential social impact
- Any residual negative social impacts and how they would be experienced by affected people.

The tables used to evaluate the likelihood of both positive and negative social impacts and inform the magnitude of each impact before and after mitigation or enhancement are adapted from the 2021 Guideline and provided for reference in provided in Appendix 4.

Prioritising impacts in this integrated manner allows for appropriate assessment and mitigation strategies to be developed that not only address impacts that may require more technical management, but also those impacts that are perceived by stakeholders as of high risk, importance, and/or concern. These perceived concerns are just as important to manage, as they have the potential to result in elevated levels of community concerns, complaints, and grievances if not addressed appropriately.

4.6 Assumptions

Assumptions applied to complete this social impact assessment include:

- The key findings of the background studies and technical reports are accurate.
- Social data available for each study area accurately reflects the community demographic profile.
- This SIA has been developed seeking to follow the approach and methodologies in accordance with the 2021 Guideline and Technical Supplement, as well as consultation undertaken in consideration of the Engagement Guideline, and to support the EIS for the Proposal. Findings and conclusions should be interpreted in that context.
- All findings are based on the information available at the time of writing. It is possible that social, economic, demographic, cultural, environmental or project-related information may change following the publication of this SIA.

- Secondary data sources have been produced using various methodologies, which themselves come with assumptions and limitations. To ensure the data is credible and robust, official (e.g., Government) sources have been prioritised, and where relevant limitations have been noted.
- Secondary social, economic and demographic data about communities are often drawn from the ABS 2016 Census as this provides a comprehensive and robust data source. As data is only available for the 2016 Census, approximately five years ago, this data may not fully represent the current state of the community. Where available, more current data sources have been used.

5 Social Baseline

This chapter presents the social baseline for the Proposal and describes the social context without the Proposal. It documents the existing social environment, conditions, and trends relevant to the Proposal and defines characteristics of the communities within the Proposal's social locality, including any vulnerable groups.

It considers any built or natural features on or near the Proposal that could be affected and the intangible values that people may associate with these features. Examples may include a sense of place or belonging and the relevant social, cultural, demographic trends or social change processes occurring now or in the past near the Proposal and in the broader region.

Relevant to this discussion are changing employment patterns, shifting land uses or population and demographic changes, and how people have felt or experienced these changes.

The social baseline provides a point of comparison – it can be used as reference against which to measure the impacts of the Proposal as it develops, and/or to determine the adequacy or otherwise of existing facilities (Vanclay, 2015).

For this assessment, a summary of the social baseline is provided in this body of this report to provide an overview of the existing environment. Additional supplementary data that supports the assessment such as the community profile dataset is included in Appendix 4.

5.1 The social baseline at a glance

A brief overview the characteristics of the community is provided below, with more context provided in the proceeding sections. Key characteristics include:

- An urban community with a high level of access to amenity, social services and public transportation
- A high level of vulnerability as evidenced through high unemployment and lower than average household income (Port Kembla and Warrawong)
- Strong reliance on the health care and steel making industries
- A high level of cultural diversity, both in terms of the Aboriginal and Torres Strait Islander population and those born overseas

5.2 Regional context

The Illawarra Shoalhaven region is the land of the Wodi Wodi, Wandandian, Yuin and Murramarang Aboriginal people. The region's natural setting is a mix of coastal, urban and rural landscapes and the region's strength comes from its communities and public spaces, seen through people's strong ties to natural and cultural environments (Illawarra Shoalhaven Regional Plan 2021).

In terms of economy, the Illawarra Shoalhaven economy contributes to the NSW economy in sectors such as education, research and innovation, advanced manufacturing, health and aged care, defence,

construction, retail, professional and financial services. The region contributed \$23.9 billion to the State's economy in 2019, an increase of \$7.7 billion (47 per cent) from 2013.

The region is home to the international trade gateway at Port Kembla; key educational facilities including the University of Wollongong; larger urban centres of Wollongong and regional cities such as Nowra and Shellharbour.

The proposed Proposal site is in Port Kembla which is in the Illawarra Region and located in the Wollongong Local Government Area (LGA). Wollongong City is a rural and residential area located 85 kilometres south of central Sydney, with substantial industrial, port and commercial areas and water catchments. Urban development is mainly along the coast, between the Illawarra Escarpment in the west and the Tasman Sea in the east. The city encompasses a total land area of 714 square kilometres, including bushland, dams, cliffs and beaches.

The Wollongong LGA has an Estimated Resident Population (ERP) for 2021 of 220,659 (.idcommunity, 2022), which represents an increase from the 2016 ERP of approximately 5% or 10,308 people. In terms of ethnic diversity, 72.7% of residents were born in Australia, compared to 65% of NSW resident. A fifth of residents spoke a language other than English at home, compared to 26.5% of NSW residents.

The name Wollongong is thought to have originated from the Aboriginal 'woolyungah', meaning five islands. The traditional owners of Wollongong are the Dharawal people. The Dharawal people lived on the coastal areas of Sydney between Broken Bay / Pittwater, Berowra Waters, southwest to Parramatta and Liverpool and extending from there (and along the south-east coastline) into the Illawarra and Shoalhaven districts. The traditional language is also known as Dharawal and was spoken from Sydney in the north to as far south as Bega. Traditional Dharawal clan groups and their people occupied the southern part of the Dharawal area with several camp sites around Lake Illawarra including Berkeley and Hooka Creek. Aboriginal people moved freely throughout the region and shared resources with their near neighbours without fear of trespassing. Other nation groups residing within the Illawarra region include, but are not limited to, the Yuin, Wiradjuri, Kamilaroi, Bundjalung, Dunghutti and Gumbayggir Nations.

The population of the Wollongong LGA is relatively young when compared to the NSW and national averages, with a median age of 34 (compared to 38 for NSW and Australia). In particular, the proportion of people aged 20 to 29 is double that of the NSW average.

Despite the younger age profile, unemployment is higher in the Wollongong LGA than the NSW average at 9.1% (compared to 6.3% for NSW). Of those participating in the labour force, just over half (54.1%) are employed full-time and 32.2% part-time, with the most common industry of employment being hospitals (except psychiatric hospitals). When understanding the implications of the traffic and noise impacts associated with the construction and operation phases of the Proposal, it is worth noting that over half of local residents drove to work (53%) (ABS, 2016). At the time of the 2016 ABS Census 3.5% of residents worked from home, though this figure has likely increased due to impacts from the COVID-19 pandemic.

The economy of the Wollongong LGAs is reflective of its largely urban character with hospitals, cafes and restaurants, supermarkets and aged care residential services being the top industries of

employment. Wollongong City's Gross Regional Product was \$12.49 billion in the year ending June 2021, which has shrunk by -0.8% from the previous year (National Economics 2022).

Crime in the Wollongong LGA has mostly been following a downward trend, for example robbery without a weapon was down 13.5% and theft (from a person) was down 14.1%. The exceptions were drug offences with dealing and trafficking cocaine up 54.3% and other drug offences up by 6.3%. Breaches of Apprehended Violence Orders (AVO) and bail were also up (5.5% respectively). (NSW Bureau of Crime Statistics and Research, 2022).

Volunteer rates are comparable with the NSW average (18.6% compared to 18.1% in NSW). In addition, over half the population (58.3%) had lived in the area for the past five years. (ABS, 2016).

In terms of vulnerability, this assessment has reviewed the Socio-Economic Indexes for Areas (SEIFA). This is a suite of indexes that have been created by the Australian Bureau of Statistics from social and economic Census information. Specifically, this assessment looks at the Index of Relative Socio-economic Disadvantage (IRSD), a general socio-economic index that summarises a range of information about the economic and social conditions of people and households within an area.

The SEIFA score for the Wollongong LGA in 2016 was 989. Across Australia's local government areas SEIFA scores range from 188 (most disadvantaged) to 1186 (least disadvantaged). The Wollongong LGA ranks 326 out of 544 local government areas with SEIFA scores in Australia, meaning that there are 218 local government areas that are less disadvantaged and 325 local government areas that are more disadvantaged (ABS, 2016). This score is reflective of a number of indicators, including the incomes that are comparable with the NSW average (weekly household income in the Wollongong LGA was \$1339, compared to the NSW average of \$1486) and the level of educational attainment (19.9% of the population held a bachelor's degree or higher compared to 23.4% of the NSW population).

5.3 Local context

5.3.1 Port Kembla

Port Kembla is an urban suburb within the Wollongong LGA located 8km south of the CBD. It has a 2021 ERP population of 5,186, and an Aboriginal population of 3.7%. There is a high level of ethnic diversity in Port Kembla with a third of the population born overseas, which is slightly higher than the NSW average (66.6% compared to 65.5% respectively).

The top industries of employment include health care, iron smelting and steel manufacturing. The suburb comprises a seaport, industrial complex, a small harbour foreshore and a small commercial sector. The port, industrial sector and number of residents employed in the steel manufacturing industry are important to consider when understanding the impacts of the Proposal in relation to existing land uses and community values.

Some major features of the area include Blue Scope Steel, Port Kembla Harbour, Fisherman's Beach, BHP Centenary and Coomaditchie Lagoon. (Visit NSW, 2022). Community infrastructure within Port Kembla includes a primary and secondary school, sporting grounds, a swimming pool, railway station, port, a local court, community centre and senior citizen's centre.

Port Kembla has a strong industrial history with the production of copper smelting from 1908 and steel works from 1927. Port Kembla is known for the BlueScope steelworks operations on Springhill Road and throughout North Port Kembla. Other notable industrial operations in the suburb are Port Kembla Coal Terminal, Port Kembla Copper, Incitec, Adstream Services, Port Kembla Gateway and GrainCorp. Port Kembla harbour is a major export location for coal mined in the southern and western regions of New South Wales.

In terms of liveability, Microburbs rates Port Kembla highly in terms of lifestyle (8/10), tranquillity (8/10) and community (9/10) and family (8/10). This is reflective of the local options for popular public social activities, presence of social clubs, community infrastructure and the range of childcare and schooling options within proximity. It is also reflective of the open spaces surrounding the suburb including the abundance of opportunity to explore the natural environment, including beaches and leafy suburbs (Microburbs, 2021). In terms of housing stock, as of 11th March 2022 there were limited rentals available in Port Kembla, with realestate.com having eight listings, six of which were apartments. There were also 12 properties available for sale (realestate.com.au, March 2022).

5.3.2 Warrawong

Warrawong is slightly smaller than Port Kembla with 4,752 residents. The proportion of Aboriginal and/or Torres Strait Islander in Warrawong is almost double the figure for NSW (5.4% compared to 2.9% respectively). Warrawong has an even higher level of ethnic diversity than Port Kembla, with over two-fifths of residents born overseas (43.5%).

Warrawong also has a similar industry profile to Port Kembla, with the top industries of employment being health care, supermarkets and grocery stores and iron smelting and steel manufacturing.

There are greater signs of vulnerability in the population when compared to Port Kembla and Wollongong. This is chiefly demonstrated through higher levels of unemployment (14.2% compared to 7.1% for Wollongong) and lower household weekly incomes (\$762 compared to \$1,339 for Wollongong). In addition, a fifth (20.3%) of the Warrawong resident population were educated at a year 9 level or below (ABS, 2016).

5.4 Cumulative projects

It is important to consider the cumulative impacts of other projects that are likely to be in development at the same time as the Proposal and operational impacts such as ethanol emissions that may combine with various other pollutants in nearby developments. There are no known proposed developments within the direct social locality and cumulative impacts are likely to be refined to air emissions from the Proposal combining with those currently being omitted in the social locality, given the industrialised nature of the surroundings. Cumulative impacts related to the Proposal are considered more fully in the technical assessments contained in the EIS and referred to in this SIA as required.

5.5 Social baseline summary

This baseline presents some of the strengths and challenges facing communities in the locality and it has been used as a basis, where possible, to assess the social impacts of the Proposal. From a review

of the baseline, it is possible to identify a number of key issues and opportunities for the Wollongong LGA area, as listed below:

- Developing more and diverse employment, education and training services/opportunities for local people
- Job growth and economic diversification (including creative economy, small business, tourism, renewable energy, retail, health services)
- Protecting key community values including access to beaches and recreational areas
- Maintaining connectivity including active and public transport, rail and port connections
- Conservation of heritage and environment

Inherent within the SIA process is the need to identify and empower vulnerable groups. “Although vulnerability is context dependent and can include a very wide range of groups, typically the concept includes Indigenous peoples, ethnic minorities, migrants, disabled people, the homeless, the poor, those struggling with substance abuse, and isolated elderly people” (Vanclay, 2015).

From the social profile analysis undertaken for the Proposal, it is possible to assess key areas of community resilience and risk in the Wollongong LGA. The key findings are summarised in Table 5.1 and identifies several population groups as potentially having vulnerability to the social or economic changes that the Proposal, and the cumulative effects of other developments across the region, may bring. These include:

- Low-income earners
- Property owners within the social locality
- Services providers, including those providing short term accommodation options within the social locality for the purpose of tourism
- Local job seekers
- Aboriginal and First Nations people

Table 5.1 Social baseline summary

Strengths	Vulnerabilities	Potential implications for vulnerable groups
Abundant and diverse natural capital, including diversity of natural resources, heritage items, agricultural lands, and national parks and reserves.	Competing land uses in the region and managing community perceptions.	Ongoing potential for conflict between different and similar industries utilising the natural capital of the area, particularly residents and tourists.
Connectivity to the region, Sydney and international markets through road, rail and the port.	Impacts to mobility for residents because of traffic changes during the construction and operations phases of the Proposal.	Potential further restrictions to access to public transportation for vulnerable groups due changed traffic conditions.

Strengths	Vulnerabilities	Potential implications for vulnerable groups
A broad range of cultural, sporting and recreational activities with schools and health services and opportunities for tourism. High levels of cultural diversity.	Increasing costs of services, facilities and maintenance of assets, and longer-term rentals options.	Opportunity to provide additional opportunities to marginalised and vulnerable communities.
Diverse industry and employment base due to access to major city centres including Wollongong and Sydney.	High unemployment rates and lower levels of education, particularly in Port Kembla and Warrawong. Skill shortages.	Potential employment opportunities including traineeships.
Strong housing market for homeowners and investment properties.	Limited housing stock in both the rental and buying markets.	Higher rental and property prices, or limited availability of housing for those most vulnerable.

6 Assessment and Prediction of Social Impacts

State significant projects can impact people in many ways, both positive and negative. The SIA process assesses a proposal from the perspective of people – meaning a development is more likely to be socially sustainable if the expected and perceived impacts on people are understood, managed and/or mitigated.

The aim of this chapter is to provide an overview of the expected and perceived social issues that require additional assessment, including the consideration of the likely duration, extent, sensitivity and severity of potential social impacts. In the context of this assessment, the word perceived has been interpreted as “noticing or becoming aware of something” or “to understand or think of somebody/something in a particular way” (Oxford English Dictionary, 2022).

Therefore, this section discusses how the community understands and interprets the social impacts (potential effects or influences of the Proposal) and their associated risk (exposure to danger, harm or loss). These impacts are then further assessed to predict the residual social impacts following project refinements, mitigation or enhancement.

This section has been informed by the research methodology outlined in section 4 including engagement with the local community and stakeholders, research and analysis of the area surrounding the Proposal, technical assessments and review of comparative projects.

The following sections provide further detail on each of the scoped social impacts by the themes identified in section 4.4.1. For ease of future reference, each social impact has been assigned an identification number (i.e SO1).

6.1 Employment opportunities and community contributions

6.1.1 (S01) Employment opportunities for the wider community and ongoing community investment; (S02) Contribution and support to the surrounding communities

Economic contributions and employment were raised by a small number of respondents during engagement who had varied concerns. One respondent was concerned that the Proposal would bring few jobs, while another commented that it would help with growth in the area.

Driving local employment and procurement policy was also a theme for Manildra Group to provide support to local businesses and suppliers through the building process.

“Will Manildra do everything in its power to use local business during the building process?” (Survey respondent).

In addition, creation of local jobs, support of meaningful employment, and investment in economic growth were identified as key themes raised by community members as part of consultation conducted for Wollongong City Council’s Community Strategic Plan (Wollongong City Council, 2022).

Unemployment is higher within the Port Kembla and Warrawong communities when compared to NSW. According to the latest unemployment statistics for the Wollongong LGA (December 2021 quarter, profile.id), the unemployment rate in Wollongong remains higher than Regional NSW rate (5.3% compared to 4.5% in Regional NSW). It is also higher than both NSW (5%) and Australian (5.1%).

As an Australian owned company, Manildra Group has a track record of local employment with roughly 350 full time employees in the Illawarra region that reside in the Shoalhaven (80%), Kiama (12%), Shellharbour (5%) and Wollongong (2%) Local Government Areas. In addition, Manildra's suppliers tend to be local and/or Australian. For example:

- Manildra's Nowra plant processes flour from company-owned mills in Gunnedah, Manildra, Narrandera and Nowra to produce starch, gluten, syrups, ethanol and stock feeds
- Wheat supply has been sourced from Australia since 1952, with the exception on one year due to drought.

It is likely that the Proposal will provide new employment and training opportunities for workers, contractors and developers. Specifically, it is estimated that the Proposal construction costs will be around \$35M with a total economic benefit of between three and five times the capital expenditure. During the construction phase is likely to contribute to the local community through:

- Employment during construction (direct impact) – it is estimated that the Proposal will employ up to 30 (Full Time Equivalent) people for a period of 12 months. Manildra Group has noted that construction labour is usually sourced from local contractors.
- Business expenditure (direct impact)
- Employee household expenditure (indirect impact).
- Once operational, the Proposal is expected to provide 15.2 (Full Time Equivalent) roles (Manildra Group, 2022).

Manildra Group has noted that construction labour is usually sourced from local contractors. Consequently, potential impacts emanating from population growth associated with the Proposal, such as those related to housing and pressure on social infrastructure were considered immaterial due to the number of additional employees during both construction and operations being relatively minor in the context of the total Wollongong LGA population and housing markets.

In terms of community contributions, Manildra Group has the Manildra Foundation, which was established to support the communities in which they operate and beyond. This foundation strives to make long-term positive differences to communities and supports trusted organisations such as Breast Cancer Network Australia, Foodbank and Farming for Kids. More locally focus initiatives are led by Shoalhaven Starches who actively supports several local community organisations primarily in the Shoalhaven LGA and surrounds.

In the 2021 reporting year, community funding recipients included the PCYC breakfast club for seven primary and high schools in the Bombaderry, Nowra and Shoalhaven areas, sporting clubs including the Nowra Athletics Club, contributions to the Shoalhaven Emergency Service Awards and donation for new school mini vans at Bombaderry High School.

By way of mitigation and community contributions, Manildra Group could enhance its contributions to the community using measures that align to their broader social performance including:

- Continue focus on local procurement, including Aboriginal Participation that commits to procurement and employment targets for Manildra Group and its contracting partners.
- Enhancing the community contribution scheme by exploring initiatives that are linked to outcomes that meet community priorities in the social locality of the Proposal, including the Port Kembla Community and surrounds. Further consultation with community members should be undertaken to understand community need and future opportunities to enhance social sustainability outcomes.
- Update their operational community engagement plan to include the social locality related to this project, i.e., Port Kembla.
- Implementing an adaptive management and monitoring framework that defines how Manildra Group will track, measure, respond and report on social performance commitments and making parts of this accessible to the public to further increase levels of trust and awareness.

This assessment considers that with the implementation of project mitigation measures, it is possible that the Proposal will have an improvement for those employees, contractors and workers involved in the Proposal, which will also have a flow on effect to local business and suppliers. Applying the tools in the 2021 Guideline, this is subsequently assessed as having medium social significance.

6.2 Safety, health and wellbeing

Safety, health and wellbeing was the most frequently raised theme and the preliminary scoped impact relating to the safety risk of transferring flammable substance and risk of fire / hazards or damage to surroundings has been further refined through the impact assessment phase to reflect ongoing engagement outcomes and assessment progression.

- Operations of the facility and safety of nearby businesses and communities.
- Decreased safety on the road network due to the transferring of flammable substances and increased heavy vehicles
- Reduced access for the community to the foreshore as a result of exclusion zones

6.2.1 (S03) Operations of the facility and safety of nearby businesses and communities.

The Proposal will involve the transferal of beverage grade ethanol from the Bomaderry Facility to the Port Kembla facility where it will be stored and handled. Ethanol is listed as a Dangerous Good Class 3, flammable liquid.

Historic concerns related to safety and previous industry fires in the port were raised during engagement by some survey respondents, Wollongong City Council and the Local Member for Wollongong – specifically, the desire from the community to understand that there will be safe management and handling of goods.

Specific to this Proposal, a HAZOP study was completed by Pinnacle Risk Management (October 2021) and identified two significant potential events:

- Tank-to-tank syphoning through the liquid outlet piping system which could lead to tank damage due to excessive vacuum. This will be mitigated by the installation of an additional vacuum relief valve on each tank; and
- The potential for pump fires e.g., from seal failures. To mitigate this risk, leak and flame detection will be included in the pump bunds with automatic foam deluge.

The detailed outcomes of the assessment are outlined in Chapter 7 of the EIS. The HAZOP study concludes that none of the potential events pose high risk provided good industry practice is implemented. The study does note that there may be safety critical instrumented systems in this process, such as the tank high level trips. These will be assessed via a Layer of Protection Study (LOPA) which will include the requirement for routine maintenance.

The study notes that any significant changes to the HAZOP design should be separately assessed for new potential hazardous events and operability problems. This is commonly achieved by utilising a management of change programme within the Proposal and may require further review using the HAZOP technique.

Further mitigation measures outlined in the study include:

- That completed HAZOP actions be tracked through the project HAZOP action register (or equivalent).
- Regular project meetings to include a review of the progress of closing-out all the actions. This is usually the responsibility of the project manager; and
- HAZOP drawings and a record of completed actions to be retained with the plant files.

The assessment considers that given the outcome of the relevant technical assessments and with the implementation of measures identified within, there is a low probability that the Proposal will cause a noticeable deterioration to the safety of nearby businesses and communities. While it is not the role of a social impact assessment to assess the technical risk of the Proposal regarding hazards and safety, it does recommend that this Project considers opportunities to increase awareness and education regarding the safety mechanisms that will be in place to minimise the risk of harm to nearby communities, including nearby business. Better education will potentially increase support for, and appreciation of the risk management processes associated with the facility and further mitigate the perceived social risks and fears concerning safety.

6.2.2 (S04) Decreased safety on the road network due to the transferring of flammable substances and increased heavy vehicles

The concern about the transference of a flammable substance was also raised during engagement.

“Increased freight traffic on Princes Highway with trucks carrying highly flammable cargo. Transporting ethanol using B-doubles on Kiama bends is not safe” (survey respondent)

The Transport Study completed by Pinnacle Risk Management found that the route that will be taken when transporting ethanol (via the A1) is an approved route. No further recommendations were made in this report. The transport route and increase in heavy vehicles is assessed further in section 6.4.

6.2.3 (S05) Public access to the foreshore Reduced access for the community to the foreshore as a result of exclusion zones

Related to safety and exclusion zones, one survey respondent raised concern that the Proposal would lead to reduced public access to the foreshore as a result of exclusion safety zones needing to be established.

“Very concerned that public access to the foreshore will be reduced like what happened on the other side of the harbour along Seawall Road when Twiggy Forrest’s company took over. Result will be loss of access to foreshore when 500 metre exclusion safety zone needs to be established” (survey respondent).

The public access to the foreshore is something that the community values about living in the area. Consultation conducted by Wollongong City Council as part of the development of the 2032 Community Strategic Plan notes that the community identified ‘the love of our beaches and the unique relationship between the escarpment and the coast’ as key community values (Wollongong City Council, 2022).

In terms of access to the foreshore, there is no requirement outlined in the EIS for an exclusion zone. All areas which require controlled access are confined to the terminal boundaries, which are not presently accessible to the public, and will be fenced.

Figure 6.1 shows the pipeline and the area which is accessible to the public. During the construction period there will be fenced off areas in the area accessible to the public, however, pedestrian access will be maintained to the foreshore area. Once construction is complete the pipelines will be underground through the entire area which is accessible to the public, ensuring that public access remains unaffected.

Given that pedestrian access will be maintained to the foreshore area during construction and that no impacts are predicted during operation, the assessment has assessed this social risk as low (*Unlikely* to occur with minimal noticeable change experienced by people accessing the foreshore).

Figure 6.1 Pipeline and publicly accessible areas



6.3 Social amenity

6.3.1 (S06) Changes to air quality because of emissions from storage facility

Due to the proximity of the Proposal to residential areas, emissions may affect the air quality surrounding the site. Typical operations of the Proposal will involve air emissions of ethanol vapours, from the use of ethanol storage tanks and transfer operations.

Air quality was raised as an issue by a community member in the community survey regarding pollution. In addition, four out of five complaints received from community members in Bombaderry and North Nowra by Manildra Group in 2021 related to odour (Shoalhaven Starches Annual Environmental Management Report, 2021). In addition, the Wollongong City Council CSP identified protection and investment in the environment as key themes from consultation with the community, including specific reference to net zero carbon emissions (Wollongong City Council, 2022). This demonstrates a level of community concern around this impact.

An Air Quality Assessment was undertaken by GHD as part of the EIS. Air quality dispersion modelling was undertaken based on two scenarios including typical operations and worst-case scenario operations. The assessment predicted compliance with the assessment criteria at all sensitive receptor locations for both operating scenarios. Based on assumptions outlined GHD's assessment, the proposal is predicted to comply with the relevant air quality assessment criteria when assessed in accordance with the Approved Methods.

The air quality assessment outlines the following management and mitigation measures designed to improve the air quality performance of the Proposal:

- Regular maintenance of the vapour recovery unit scrubber to ensure to meets the standards of concentration outlined in the POEO Clean Air Regulation.
- Regular inspection and maintenance of all plant/equipment.
- Air quality management measures will be included in the construction environmental management plan for the project. The construction environmental management plan will outline the management measures to control and minimise dust generation from the project. Water and/or dust suppressants will be applied to exposed areas, stockpiles and unsealed roads using a water cart and water sprays.

In terms of cumulative impacts, the Air Quality Assessment (GHD, 2022) acknowledges that ethanol emissions may combine with various other pollutants in the atmosphere emitted by nearby developments to contribute to odour impacts caused by the accumulation of individual odorous air pollutants which result in the formation of a complex mixture of odorous air pollutants. Following a review of potential impacts, the assessment concluded that there would be a low risk of cumulative odour impacts and therefore no further consideration to cumulative impacts was considered necessary.

Considering the outcomes of the technical assessment, the assessment has assessed this social risk as low (*Unlikely* to occur with minimal noticeable change experienced by nearby neighbours). A grievance process for the community to raise comments, questions and complaints should be established prior to construction commencing and made publicly available, with clear contact channels.

6.3.2 (S07) Impact on social amenity and how people live because of construction noise and vibration, including piling activities and heavy vehicle movements

The locality is positioned within the residential and industrial areas of Port Kembla, Warrawong and Bomaderry. The noise and vibration associated with construction activities, including piling and heavy vehicle movements, may temporarily impact social amenity and way of life in these communities.

The construction period is expected to last for 10 months and according to The Transport Planning Partnership (2021) will involve civil works, tank installation, piping, mechanical and electrical installation.

A piling test noise and vibration measurements report was undertaken by Acoustic Logic. Test impact piling was carried out on the future site with sensors installed to capture noise and vibration levels. Based on the findings, noise emission from impact piling activities can generally meet the relevant noise emission levels at the nearest and most affected receivers. Vibration emissions from the site have been found to meet the nominated guidelines and standards.

Construction noise and vibration impacts were not raised by community or stakeholders during the engagement, however, are a key consideration when looking at potential social impacts during construction. The construction works will be carried out in accordance with the approved work hours specified in the conditions of consent for the development.

As noted in the acoustic assessment report, the predicted noise and vibration emissions are within the nominated guidelines, so mitigation measures have not been proposed. However, the report also states that if construction processes or equipment are significantly different to those modelled in the assessment, a detailed noise and vibration assessment and management plan will need to be completed.

Regarding heavy vehicles, dedicated truck vehicle routes have been developed to provide the shortest distances to/from the arterial road network, whilst minimising the impact of traffic on local streets within the vicinity of the site. All truck drivers will be advised of the designated truck routes to/from the site and be required to adhere to the nominated routes. In addition, the nominated truck routes are consistent with the approved B-Double routes set out by Transport for NSW (TfNSW) in accordance with the NSW Combined Higher Mass Limits.

A site-specific Traffic Guidance Scheme (TGS) has been prepared in accordance with TfNSW's Traffic Control at Work Sites Manual. The proposed construction vehicle movements to/from the site shall be accompanied by advisory traffic control signage to minimise the traffic impact on the surrounding road network.

Construction vehicles will be required to radio / call the site office on approach to the site to ensure access to the works site is available. All loading and unloading shall be undertaken within the site during the approved work hours.

In addition, protocols will be in place to ensure:

- site induction shall include procedures for accessing the site
- drivers shall adhere to the nominated truck routes
- drivers shall be aware of pedestrians and cyclists in the immediate vicinity of the site
- drivers shall be aware of existing sign posted speed limits.

Considering the outcomes of the technical assessment, the assessment has assessed this social risk as medium (*possible* to occur with some minor noticeable change experienced by nearby neighbours during construction only). Like the above, a grievance process for the community to raise comments, questions and complaints should be established prior to construction commencing to ensure this impact can be monitored and adaptive mitigation measures put in place in the event of unexpected impacts arising.

6.3.3 (S08) Impact on social amenity and how people live because of construction dust

The construction phase is likely to result in dust generation that may impact social amenity and way of life to residential areas immediately surrounding the construction site. While concern about construction dust was not raised by community members or stakeholders, it is important to understand the level of impact of dust associated with construction, as well as proposed mitigation measures.

According to the air quality assessment (GHD, 2021), low levels of dust emissions are expected during the early construction period, primarily during site establishment earthworks. Specifically, dust

emissions are expected over a two week period via use of the earthmoving plant during grading and levelling.

A risk-based approach was adopted to assess potential particulate matter impacts during the construction phase of the Proposal, with the finding that the risk identified for earthwork activities was low.

The air quality assessment report has recommended the use of standard dust mitigation measures during construction activities, particularly during any earth-working activities, including:

- Inform construction staff of activities likely to cause high dust emissions (as part of site inductions) and adopt appropriate methods to mitigate dust emissions
- Use dust suppression watering during high dust generating activities
- Reducing or stopping construction works if dust plumes are observed travelling off site beyond the site boundary
- Covering of loads during transport to prevent loss of material

Considering the outcomes of the technical assessment, the assessment has assessed this social risk as low (*Unlikely* to occur with minimal noticeable change experienced by nearby neighbours).

6.3.4 (S09) Impact on social amenity and how people live because of operation noise and vibration

As there are residential properties within 700 metres of the Proposal site, it is important to understand how noise and vibration associated with operations is likely to affect residents. One community member noted concern about operation noise associated with the Proposal in the community survey.

“Pollution, noise and traffic build up due to project getting built up and running” (survey respondent).

According to the noise impact assessment (Acoustic Logic, 2021), the main noise sources associated with the operational Proposal are mechanical plant noise associated with:

- Transfer pumps (slops loading pumps and truck loading pumps)
- Trucks manoeuvring within the site
- Road traffic noise from the additional trucks on Military Road/Five Islands Road.

The assessment found that operational noise from the site will fully comply with the noise emission requirements at the nearest residential, commercial and industrial receivers for all time periods. The Acoustic Assessment notes the following management controls and pump noise limit assumptions for the site:

- A maximum of two trucks to visit the site during any 15 minute period.
- The pump noise sound power levels and number of units should not exceed the assumed levels used in the noise modelling, i.e.:
 - Shipping Pump: one pump, 108dB(A).

- Slop Pump: two pumps, each 90dB(A).
- Truck Loading Pump: two pumps, each 100dB(A).

The assessment recommends that if pumps with greater sound power levels are installed that they should be acoustically treated to meet the assumed levels. Otherwise, subsequent noise modelling will be required.

Considering the outcomes of the technical assessment and assuming the implementation of recommended mitigation measures, the assessment has assessed this social risk as low (*Unlikely* to occur with minor noticeable change experienced by nearby neighbours).

6.4 Traffic and transport

6.4.1 (S10) Increased heavy vehicles causing increased road safety risks for local users

Once operational, there will be an increase in the number of vehicles, including heavy vehicles, using the local road network, particularly regarding the route between the Bomaderry plant and Port Kembla. Increased traffic has implications for the social locality, particularly regarding potential safety risks because of heavy vehicles.

Road safety was raised as a concern by community members in the community survey, although one concern was primarily regarding hazardous materials.

“Transporting ethanol using B-Doubles on Kiama bends is not safe” (survey respondent)

“Traffic congestion and noise due to more trucks on the road” (survey respondent)

Truck numbers, truck routes and cumulative traffic impacts were also noted in the meeting minutes from the Port Kembla Harbour Environment Group.

The Transport Impact Assessment undertaken by The Transport Planning Partnership estimates that once operational, there will be a total movement of three trucks per hour. This could equate to up to six truck movements per hour on a typical day, which is considered low. Therefore, the finding is that this level of development traffic is not expected to generate any discernible traffic impact on the surrounding road network.

The Transport Impact Assessment notes that dedicated truck vehicle routes have been developed to provide the shortest distances to/from the arterial road network, whilst minimising the impact of traffic on local streets. The report also notes that the nominated truck routes are consistent with the approved B-double routes set out by TfNSW in accordance with the NSW Combined Higher Mass Limits (KML) and Restricted Access Vehicle (RAV) Map.

In addition, two community members noted concern about the use of the road network instead of the rail network. These comments were recorded in the Port Kembla Enquiries Register.

“Just one tiny disappointment you plan to use the road and not the railway. Is it the cost?”
(Community member)

“I was disappointed to read in the [project] proposal that road transport was chosen as the preferred freight option from Bomaderry to Port Kembla. With the current high fuel prices likely to continue in the foreseeable future, culminating in the phase-out of fossil fuels, one must ask why Manildra is pursuing what surely must be an economically questionable transport choice. This poses the question - why choose increasingly uneconomic road freight when the Bomaderry facility already has its own rail sidings?” (Community member)

Due to limiting rail pathing capacity on the South Coast rail corridor, which is shared with passenger services, the Proposal requires movement of particular volumes by road transfer. Manildra Group will work with key stakeholder bodies such as Wollongong City Council to advocate for increased rail capacity on the South Coast line to improve industry capability and utilisation of the rail network, potentially leading to reduced heavy vehicle traffic on the road network.

Considering the outcomes of the technical assessment, and the ongoing advocacy of Manildra Group to increase rail capacity, the assessment has assessed this social risk as medium (possible with some noticeable change experienced by the community).

6.4.2 (\$11) Impact on social amenity and how people live because of construction traffic

Increased traffic associated with the construction phase may impact the social locality in terms of amenity and changed to way of life. Traffic congestion due to a greater number of trucks on the road was raised as a concern in the community survey.

“Traffic build up due to getting the project up and running” (survey respondent).

Cumulative traffic impacts and use of certain roads and routes were also raised as concerns by members of the Port Kembla Harbour Environment Group during early engagement.

Regarding heavy vehicle movements associated with construction, the Construction Traffic Management Plan (CTMP) prepared by The Transport Planning Partnership (2021) identifies that most vehicles will have origins and destinations throughout Sydney, however there will be several major deliveries to the site from Nowra (tank deliveries). The designated truck routes to/from the site will be provided off Foreshore Road to travel to/from the wider arterial road network via Old Port Road and Five Islands Road.

The works are expected to generate in the order of 30 inbound and 30 outbound light vehicle trips each working day (i.e., employee vehicles). Typically, staff would travel to the site between 6am and 7am and leave the site between 3pm and 5pm.

In terms of truck movements, at this stage, it is expected that there would be the following daily truck movements:

- Semi-trailers – an average of 1 to 3 trucks per day
- Concrete trucks – a total of 3 to 20 trucks from 6am to 3pm
- Smaller trucks – an average of 5 trucks per day
- Mobile cranes – 1 to 3 per day

The CTMP, concludes that based on the above, there could be in the order of 30 light vehicles and 11 trucks per day (i.e. 60 light vehicle movements and 22 truck movements per day). This equates to 30 light vehicle movements per hour between 6am and 7am and 15 vehicle movements per hour between 4pm and 6pm. Assuming an average 11-hour workday, there could be up to 2 truck movements per hour. These volumes are considered low with staff arriving before the morning road network peak and departing with only one vehicle every four minutes during the afternoon road network peak. (The Transport Planning Partnership, 2022).

A site-specific traffic control plan would be prepared by and submitted to Council / NSW Ports to appropriately manage the use of the designated construction routes. This would outline how potential construction vehicle manoeuvres could be accommodated in and out of the construction site and detailed location of temporary roadside signage.

Construction vehicles will be required to radio / call the site office on approach to the site to ensure access to the works site is available. All loading and unloading shall be undertaken within the site during the approved work hours. In addition, protocols will be in place to ensure:

- site induction shall include procedures for accessing the site
- drivers shall adhere to the nominated truck routes
- drivers shall be aware of pedestrians and cyclists in the immediate vicinity of the site
- drivers shall be aware of existing sign posted speed limits.

Considering the outcomes of the technical assessment, the assessment has assessed this social risk as medium (possible with some noticeable change experienced by the community during the 10 month construction period. Clear signage and communication materials would be required to ensure road users and the wider community are sufficiently educated in terms to the changes associated with the additional traffic movements.

6.4.3 (S12) Potential conflict with pedestrian and cyclists during construction due to transport to and from construction site

The construction phase may temporarily impact the current patterns of use of footpaths and cycling paths. There are sealed pedestrian footpaths along Foreshore Road and Old Port Road. There is also a separated off-road shared path along the northern side of Foreshore Road.

While pedestrian and cycling accessibility was not raised as an issue by community members during the engagement phase, it was raised during consultation with the community as part of the development of the Wollongong City Council CSP. Specifically, community feedback indicated a desire for an increased active transport network (including promotion) to foster increased pedestrian and cycling use (Wollongong City Council, 2022).

The Construction Traffic Management Plan (The Transport Planning Partnership, 2021) notes that Pedestrian and cycle access will be maintained at all times during the Proposal. In addition, appropriate site fencing will be installed to separate construction activities from surrounding pedestrian and cycle movements accordingly. Finally, the assessment notes that all relevant permit approvals will be obtained from Council / NSW Ports, prior to the commencement of any work.

Given that pedestrian access will be maintained to the foreshore area during construction and that no impacts are predicted during operation, the assessment has assessed this social risk as low (*Unlikely* to occur with minimal noticeable change experienced by people accessing the foreshore). Similar to the above, clear signage and communication materials would be required to ensure pedestrian and cyclists are sufficiently educated in terms to the changes associated with the additional traffic movements.

6.5 Summary of mitigation and enhancement measures in response to social impacts

There are a range of mitigation and management measures of other predicted environmental impacts that interrelate with social impacts (such as noise and traffic). Mitigation and management measures identified in other technical papers and chapters of the Environmental Impact Statement of relevance to the mitigation of social impacts include

- Noise Impact Assessment (Appendix T of the EIS)
- Safety and Hazards (Appendix Z, AA, AB, AC, AD and AE of the EIS)
- Air Quality Assessment (Appendix P of the EIS)
- Greenhouse Gas (Appendix Q of the EIS)
- Piling Test Noise and Vibration (Appendix U)
- Traffic Impacts (Appendix X of the EIS)

For ease of reference, the mitigation measures identified as a response to the identified social impacts in this assessment are summarised in Table 6.1. Each mitigation measure in the table has been assigned to the social impact theme as identified in the preceding section.

Table 6.1 Summary of recommended mitigation and enhancement measures

Recommended mitigation measures	Impact to people by theme
Community contributions and investment Enhancing the community contribution scheme by exploring initiatives that are linked to outcomes that meet community priorities in the social locality of the Proposal, including the Port Kembla Community and surrounds. Further consultation with community members should be undertaken to understand community need and future opportunities to enhance social sustainability outcomes.	Community
Community engagement and involvement <ul style="list-style-type: none"> • Develop Shoalhaven and Surrounds Community Engagement Plan (CEP) to: <ul style="list-style-type: none"> ○ Include the social locality related to this project, i.e., Port Kembla. ○ Outline a process that ensures communication materials are accessible to all community members, including culturally and linguistically diverse communities and those people with disabilities, including visual, auditory, physical, speech, cognitive, language, learning, and neurological disabilities 	Community Surroundings Health and Wellbeing Access

Recommended mitigation measures	Impact to people by theme
<ul style="list-style-type: none"> ○ Have measurable targets, performance indicators and means by which performance can be measured and monitored ○ Have clearly defined roles and responsibilities for the delivery of activities ○ Include a timetable of actions and events ○ Identifies the resourced needed to implement the plan. ● The CEP will include tools such as: <ul style="list-style-type: none"> ○ Shoalhaven Starches Community Report, which is produced and mailed out twice yearly. The distribution will be increased to reach the Port Kembla district. ○ Participation with NSW Ports and the Port Kembla Community in the Port Kembla Harbour Environment Group. This Group has representatives from Community Groups and local Institutions and Business Groups. ○ Distribution of contact channels to the social locality and Port Kembla area so community members can make enquiries via the Manildra Group toll free phone number and contact email. ○ Fact sheets to be produced regarding safety and management of risks at the facility. This will help to educate the nearby community and concerned stakeholders of the strict processes that Manildra Group will follow to minimise safety and hazard risks. 	
Industry advocacy – increased capability of rail network Collaborating with key stakeholder bodies such as Wollongong City Council to advocate for increased rail capacity on the South Coast line to improve industry capability and utilisation of the rail network, potentially leading to reduced heavy vehicle traffic on the road network.	Accessibility Decision making systems Livelihoods
Complaints Management Procedure Existing procedure be made known to the social locality, including the feedback process through which the complainant is provided with information relating to how their concern has been assessed, considered, and where feasible, addressed. This can be captured in the CEP.	All
Local procurement Continue focus on local procurement, including Aboriginal Participation that commits to procurement and employment targets for Manildra Group and its contracting partners.	Livelihoods Culture

6.6 Summary of mitigation impacts

The following table provides a summary of the predicted socioeconomic impacts in relation to the Proposal. It considers the outcomes of the assessment including enhancement, mitigation, and residual impacts at a holistic level.

Table 6.2 Summary of mitigated impacts

ID	Impact on people (unmitigated)	Proposal aspect	Extent of impact	Unmitigated impact (Perceived)	Proposal responses and mitigation	Residual impact significance (likelihood/magnitude)
Employment opportunities and community contributions						
S01	Employment opportunities for the wider community and ongoing community investment	Construction and operation of terminal	Contractors/ employees, wider community	Low	<ul style="list-style-type: none">Continued focus on local procurement, including Aboriginal Participation that commits to procurement and employment targets for Manildra Group and its contracting partners.Community contributions and investmentDevelopment of a CEP and continued community engagement and involvement as outlined in Chapter 5 of the EIS.	Medium (positive) C2 (possible/minor)
S02	Contribution and support to the surrounding communities	Operation	Wider community	Low		Medium (positive) C2 (possible/minor)
Safety, health, and wellbeing						
S03	Operations of the facility and safety of nearby businesses and communities.	Operations	Near-neighbours and businesses, visitors to the foreshore in the vicinity of the facility	Medium	<ul style="list-style-type: none">As per the HAZOP study recommendationsInformation will be available on the Manildra website to inform the community of the safety measures incorporated in the project. During construction an email address and phone number will be displayed at the front of the site to direct the Community if contact is required.A complaints and enquiry management and response process will be initiated, complaints and enquiries will be answered within 7 working days.	Medium (negative) D3 (unlikely/moderate)
S04	Decreased safety on the road network due to the transferring of flammable substances and increased heavy vehicles	Operation - transfer of ethanol to the location via trucks and berth via pipeline	Near-neighbours, wider community	Medium		Medium (negative) C3 (possible/moderate)

ID	Impact on people (unmitigated)	Proposal aspect	Extent of impact	Unmitigated impact (Perceived)	Proposal responses and mitigation	Residual impact significance (likelihood/magnitude)
S05	Public access to the foreshore Reduced access for the community to the foreshore as a result of exclusion zones	Construction and operation	Pedestrians and cyclist who access foreshore	Low		Low (negative) D1 (unlikely/minimal)
Social Amenity						
S06	Changes to air quality because of emissions from storage facility	Operations of facility	Near neighbours, wider community, global community	Medium	<ul style="list-style-type: none"> Mitigation measures as outlined in the relevant technical assessments and detailed in the EIS. A complaints and enquiry management and response process will be initiated, complaints and enquiries will be answered within 7 working days. Development of a CEP and continued community engagement and involvement as outlined in Chapter 5 of the EIS. Adaptive management and monitoring measures, including measurable targets by which performance can be measured and monitored. 	Low (negative) D2 (unlikely/minor)
S07	Impact on social amenity and how people live because of construction noise and vibration, including piling activities and heavy vehicle movements	Construction	Near neighbours, wider community	Medium		Medium (negative) C2 (possible/minor)
S08	Impact on social amenity and how people live because of construction dust	Construction	Near neighbours	Medium		Low (negative) D2 (unlikely/minor)
S09	Impact on social amenity and how people live because of operation noise and vibration	Operation	Near neighbours	Medium		Low (negative) D2 (unlikely/minor)

Traffic and transport						
S10	Increased heavy vehicles causing increased road safety risks for local users	Operations - Delivery of ethanol from Nowra to Port Kembla, including access to the site.	Near neighbours, wider community including local road users	Medium	<ul style="list-style-type: none"> • Mitigation measures as outlined in the relevant traffic technical assessments and detailed in the EIS. • Dedicated truck vehicle routes to provide shortest distances to/from the arterial road network, whilst minimising the impact of traffic on local streets. • A complaints and enquiry management and response process will be initiated, complaints and enquiries will be answered within 7 working days. • Adaptive management and monitoring measures, including measurable targets by which performance can be measured and monitored. • Clear and dedicated signage to ensure awareness of increased vehicle movement 	Medium (negative) C3 (possible/moderate)
S11	Impact on social amenity and how people live because of construction traffic	Construction	Near neighbours, wider community including local road users	Medium	<ul style="list-style-type: none"> • A site-specific traffic control plan. Drivers will adhere to the nominated truck routes and speed limits • Drivers to be aware of pedestrians and cyclists in the immediate vicinity of the site • Development of a CEP and continued community engagement and involvement as outlined in Chapter 5 of the EIS. 	Medium (negative) C3 (possible/moderate)

Traffic and transport						
					<ul style="list-style-type: none"> • A complaints and enquiry management and response process will be initiated, complaints and enquiries will be answered within 7 working days. • Clear and dedicated signage to ensure awareness of increased vehicle movement 	
S12	Potential conflict with pedestrian and cyclists during construction due to transport to and from construction site	Construction	Near neighbours, pedestrians and cyclists	Low	<ul style="list-style-type: none"> • Pedestrian and cycle access to be maintained at all times during constructing. • Appropriate site fencing to be installed to separate construction activities from surrounding pedestrian and cycle movements accordingly. • Clear and dedicated signage to ensure awareness of increased vehicle movement, including pedestrian and cyclist detours and changes to site access. • A complaints and enquiry management and response process will be initiated, complaints and enquiries will be answered within 7 working days. • Development of a CEP and continued community engagement and involvement as outlined in Chapter 5 of the EIS. 	Low (negative) D1 (unlikely/minimal)

7 Monitoring of social impacts

A key aspect of any SIA is the development of a framework to monitor a project's impact over time - often referred to as a social impact management plan. This section provides a high-level overview of a framework for monitoring social change in relation to the Proposal, and how this relates to project-related activities. In doing so, the framework will gather data that can be used to assess the effectiveness of mitigation measures and initiatives.

Table 7.1 below outlines the proposed monitoring framework for the Project. It has been developed to align with the proposed framework outlined in the Technical Supplement (DPE, 2021) and describes a desired outcome, a target, the methodology or data source, frequency of monitoring and responsibility.

The monitoring framework would form one part of Manildra Groups program for adaptive management of impacts, which would also include ongoing implementation of the community engagement program and community complaints and enquiries mechanisms.

Implementation of the management and monitoring program, as well as the extent and degree to which social impacts eventuate would also be subject to regular internal reviews.

Table 7.1 Monitoring framework

Desired outcome	Descriptive	Target	Methodology / Data Source	Reporting frequency	Monitoring responsibility
Enhanced wellbeing from job opportunities and training, contributing to financial stability within the region	Minimum % of the project's workforce is sourced from local region	Majority of construction and operational workers reside in Illawarra and Shoalhaven Region	Construction supplier reports, request with invoices.	Annually and at completion of construction	Project manager
	% spend of project value within local community	Increasing spend within the Illawarra	Manildra Procurement Register	Monthly	Project manager
Contribution and support to the surrounding communities within the social localities	Project supports initiatives which contribute to the community sustainability and resilience	Financial or in-kind support provided to relevant initiatives within the social locality	Manildra Group Shoalhaven Region Sponsorship Register (excel spreadsheet) Manildra Group Management group.	Annually	Community Team
High levels of trust and respect between Manildra Group and the community	Effective capture and management of community and stakeholder interactions	0 complaints 100% complaints responded to within 7 working days	Complaints reporting and database (Fastrack system)	Quarterly	Project manager
	Educate and inform communities within the social locality in regards to both construction and operations.	Informed community All enquiries responded to within 21 days	Complaints reporting and database (Fastrack system)	Quarterly	Project Manager

8 Conclusion

Social impact assessment is the process of understanding and managing the social impact of projects on people. This social impact assessment adopts the framework set out in the NSW Department of Planning and Environment's Social Impact Assessment Guideline published in November 2021 to identify, predict, and evaluate likely social impacts on people and propose responses to them.

This assessment considers that the Proposal is in an appropriately zoned land, surrounded by other industrial developments. It provides an opportunity for the Manildra Group to provide improved access to employment, community contributions and economic stimulus to the Port Kembla community and surrounds. It is noted that Manildra Group has a strong history of prioritising local jobs and supporting the communities in which they operate and beyond. They have many existing partnerships with trusted organisations aligned on values and the betterment of communities. To enhance the positive social outcomes related to community contribution and investment, Manildra Group should ensure that the economic stimulus is distributed equitably and directly to the localities that will experience the greatest change because of this Proposal, including Port Kembla and Warrawong.

In terms of negative impacts, safety and traffic were the primary perceived impacts. While several mitigation measures are identified in both this assessment and the EIS, it is still likely that a small number of residences would still experience some social impacts during the life of the Proposal, primarily due to the location of the haulage route. It is also noted that there are some perceived social risks and fears concerning safety. Therefore, if approved, Manildra Group should consider opportunities to increase awareness and education regarding the safety mechanisms that will be in place to minimise the risk of harm to nearby communities, including nearby businesses. Better education will potentially increase support for, and appreciation of, the risk management processes associated with the facility and further mitigate the perceived social risks and fears concerning safety.

Manildra Group should also continue to engage with the community in a transparent and timely way and continue to build relationships, look at case by case mitigation measures, and increase levels of trust.

9 References

- Acoustic Logic, Piling Test Noise and Vibration Measurements, November (2021)
- Acoustic Logic, Noise Impact Assessment, August (2021)
- Aurecon, Port Kembla Bitumen Import and Dispatch Facility Scoping Report (2022)
- Australian Bureau of Statistics, Regional population by age and sex
- Australian Bureau of Statistics 2016, QuickStats
- GHD, Air Quality Assessment (Air and odour) (April 2022)
- Illawarra Escarpment Strategic Management Plan (2015)
- Microburbs 2022
- NSW Bureau of Crime Statistics and Research, Recorded Crime Reports, accessed in March 2022 via https://www.bocsar.nsw.gov.au/Pages/bocsar_crime_stats/bocsar_latest_quarterly_and_annual_reports.aspx
- NSW Department of Planning and Environment (DPE), Illawarra Shoalhaven Regional Plan 2041 (2021)
- Pinnacle Risk Management, HAZOP Study Report, (2021)
- Port Kembla Harbour Environment Group, Meeting minutes from 4th August 2021
- Shoalhaven Starches, Annual Environmental Management Report (2021)
- Sydney Morning Herald, media article, <https://www.smh.com.au/national/workers-flee-ethanol-explosion-20040129-gdi8zx.html>
- TfA Project Group, Scoping Report Manildra Bulk Liquid Storage Facility, Port Kembla, (2021)
- The Transport Planning Partnership, Construction Traffic Management Plan (2021)
- The Transport Planning Partnership, Transport Impact Assessment (2021)
- VisitNSW, accessed via <https://www.visitnsw.com/destinations/south-coast/wollongong-and-surrounds/wollongong/attractions/port-kembla-beach> on 21 March 2022
- Wollongong City Council, Our Wollongong Our Future 2032, Community Strategic Plan (2022)
- Wollongong City Council Website, <https://www.wollongong.nsw.gov.au/>, accessed March 2022

Appendices

THIS PAGE IS INTENTIONALLY LEFT BLANK

Appendix 1 – Certification Page

Angela Peace

I, Angela Peace, certify that this SIA contains all information relevant to the SIA for the Proposal, and that the information is not false or misleading. My qualifications and experiences are listed below.

Qualifications and Professional Memberships:

- Bachelor of Arts (Communications)
- Social Impact Assessment Certificate, University of Strathclyde and Community Insights Group (2020)
- Member, International Association of Impact Assessment (membership no. 10499330)
- Member, International Association of Public Participation
- Member, Social Impact Measurement Network Australia
- Member, Environmental Institute of Australian and New Zealand Inc.

Experience: The author is experienced in social science methodologies and has demonstrated SIA skills in government, private and education settings. She is a Social Impact and Community Engagement Specialist and has managed SIAs for extractive industries, waste recovery, transport infrastructure, recreational facilities and energy projects in NSW and the ACT, including State Significant Projects.

A Peace

Date: 20 May 2022

Kristine Bencke

I, Kristine Bencke, certify that this SIA contains all information relevant to the SIA for the Proposal, and that the information is not false or misleading. My qualifications and experiences are listed below.

Qualifications and Professional Memberships:

- Bachelor of Social Science
- PhD Candidate (Anthropology and Sociology)

Experience: The author is an experienced social researcher with over 15 years working in dedicated research roles. This includes experience as a SIA practitioner and the delivery of Social Impact Assessments for government and private organisations.


Kristine Bencke (May 20, 2022 14:52 GMT+10)

Date: 20 May 2022

Appendix 2 – Proposal Stakeholders

The following table lists key stakeholders and their expected interests in the Proposal. This table was adopted from the Community Engagement Management Plan, prepared for Manildra Group by Spectrum Comms.

Stakeholder group	Stakeholder	Issue/Interest/Concern
Landowner /operator	NSW Ports	Land manager and leases Development within the Port
Community	Landowners near the Proposal site	Roads and Traffic Environmental impacts Impacts to dwelling Impacts to land use Pollution and contamination Property values Safety and emergency management Noise and vibration Visual amenity
	Neighbours to the Proposal site	Environmental impacts Visual amenity Noise and vibration Roads and traffic Land use Safety and emergency management Pollution and contamination
	Recreation users of Port (land and water) and adjacent park	Noise and vibration Safety and emergency management Noise and vibration Environmental impacts Visual amenity Roads and traffic Pollution and contamination
	Port Kembla Harbour Environment Group	Environmental impacts
	Illawarra Neighbourhood Forums (5 and 7)	Noise and vibration Safety and emergency management Noise and vibration Environmental impacts Visual amenity Roads and traffic Pollution and contamination
	Wider community of Wollongong LGAs	Environmental impacts Property values Safety and emergency management Visual amenity

Stakeholder group	Stakeholder	Issue/Interest/Concern
		Economic benefits Employment opportunities
Aboriginal communities	Illawarra Local Aboriginal Land Council	Sites of significance or items of Aboriginal cultural heritage Grants and funding opportunities Environmental impacts Employment opportunities Recognition of Country
	Illawarra Aboriginal Corporation	Grants and funding opportunities Employment opportunities Consultation with Traditional Owners
	Coomaditchie United Aboriginal Corporation	Consultation with Traditional Owners Employment opportunities Environmental impacts Recognition of Country
	Warrigal Employment	Employment opportunities Grants and funding opportunities
	Wadi Wadi Coomaditchie Aboriginal Corporation	Recognition of Country Grants and funding opportunities Consultation with Traditional Owners
Industry	Port Manager	Safety and emergency management Economic benefits Navigation Port access
	Port users	Safety and emergency management Economic benefits Navigation Port access
	Adjacent industry	Safety and emergency management Economic benefits Navigation Port access Roads and traffic
	Ethanol users	Safety and emergency management Economic benefits
Business	Port Kembla Chamber of Commerce	Employment opportunities Local supply and procurement Traffic and roads Safety and emergency management Grants and sponsorship opportunities
	Regional Development Australia – Illawarra	Employment opportunities Local supply and procurement

Stakeholder group	Stakeholder	Issue/Interest/Concern
	Illawarra Business Chamber	Employment opportunities Local supply and procurement Grants and sponsorship opportunities
Federal government	Member for Cunningham - The Hon Sharon Bird	Community impacts and benefits Environmental impacts Employment opportunities
	Minister for Infrastructure, Transport and Regional Development - The Hon Barnaby Joyce	Investment in port infrastructure Investment in regional industry
	Minister for Trade Tourism and Investment - The Hon Dan Tehan	Trade and export regulator Media opportunities
	Department of Foreign Affairs and Trade	Trade and export regulator Employment opportunities
	National Heavy Vehicle regulator	Roads and traffic
NSW government	Member for Wollongong - Paul Scully	Community impacts and benefits Environmental impacts Employment opportunities Local supply and procurement Media opportunities
	Minister for Planning - Anthony Roberts	Planning and assessment process Consent authority
	Minister for Transport - David Elliot	Investment in port infrastructure Regulation of Port Environmental impacts Media opportunities
	Minister for Enterprise, Investment and Trade - Stuart Ayres	Trade and export regulator Employment opportunities Economic benefits Media opportunities
	Port Authority of NSW	Navigation, safety and security in Port Dangerous goods regulation Berthing and ship movement Harbour Master
	NSW Environmental Protection Authority (EPA)	Environmental impacts Pollution and contamination
	NSW Department of Planning and Environment (DPE)	Planning and assessment process Environmental Impacts Aboriginal and non-Aboriginal heritage

Stakeholder group	Stakeholder	Issue/Interest/Concern
	Heritage NSW	Aboriginal and non-Aboriginal heritage
	NSW Department of Industry (Referral Agency)	Employment opportunities Economic benefits
	Transport for NSW (Referral Agency)	Port regulation and management Traffic and roads Railway network and station
	Fire and Rescue NSW (Referral Agency)	Emergency and safety
	SafeWork NSW (Referral Agency)	Construction and operations workforce safety
	Independent Planning Commission	Planning and assessment process Alternate consent authority
	NSW Health – Illawarra Shoalhaven Local Health District	Human health impacts
Local government	Wollongong City Council	Planning and assessment process Community impacts and benefits Environmental impacts Employment opportunities Local supply and procurement Voluntary Planning Agreement or similar
	Shoalhaven City Council	Business development Employment opportunities Local supply and procurement
	Illawarra Shoalhaven Joint Organisation	Business development Employment opportunities Local supply and procurement Regional development
Utilities	TransGrid	Network provider
	Essential Energy	Network distributor
	Telstra	Telecommunications services
	NBN	Broadband services
	Sydney Water	Water and sewer provider
Emergency services	NSW Fire and Rescue (Warrawong Station)	Hazards and risks Emergency management
	NSW Police	Traffic and roads Safety and security Emergency management
	NSW Ambulance	Emergency management Safety

Stakeholder group	Stakeholder	Issue/Interest/Concern
	South East SES	Emergency management
	Port Authority of NSW	Hazards and risks Port safety and security
	Marine Rescue NSW	Emergency management Safety
Education	TAFE -Wollongong and Wollongong West	Employment opportunities Scholarships and training
	University of Wollongong	Employment opportunities Scholarships and training
	Port Kembla Public School	Grants and sponsorship opportunities Safety
	Five Islands Secondary Collage	Employment opportunities Scholarships and training Safety
	Port Kembla Community Preschool	Grants and sponsorship opportunities Safety
	St Patricks Catholic Parish Primary School	Grants and sponsorship opportunities Safety
	Kemblawarra Public School	Grants and sponsorship opportunities Safety
Media	Illawarra Mercury	Project updates Community impacts and benefits
	Illawarra Star / Daily Telegraph	Project updates Community impacts and benefits
	ABC Radio Illawarra (97.3)	Project updates Community impacts and benefits
	The Australian	Project updates
	Australian Financial Review	Project updates Investment and trade

Appendix 3 – SIA Scoping Worksheet

Social Impact Assessment (SIA) Worksheet															Project name: Manildra Group		Date: February 2022	
PROJECT ACTIVITIES	CATEGORIES OF SOCIAL IMPACTS	POTENTIAL IMPACTS ON PEOPLE	PREVIOUS INVESTIGATION OF IMPACT	CUMULATIVE IMPACTS	Update Assessment Level Impact	ELEMENTS OF IMPACTS - Based on preliminary investigation					ASSESSMENT LEVEL FOR EACH IMPACT	Clear Assessment Level Impact						
Which project activity / activities could produce social impacts?	What social impact categories could be affected by the project activities?	What impacts are likely, and what concerns/expectations have people expressed about the impact? Summarise how each relevant stakeholder group might experience the impact. <i>Note: Where there are multiple stakeholder groups affected differently by an impact, or more than one impact from the activity, please add an additional row.</i>	Has this impact previously been investigated (on this or other project/s)?	If "yes - this project," briefly describe the previous investigation. If "yes - other project," identify the other project and investigation.	Will this impact combine with others from this project (think about when and where), and/or with impacts from other projects (cumulative)?	If yes, identify which other impacts and/or projects	Will the project activity (without mitigation or enhancement) cause a material social impact in terms of its: You can also consider the various magnitudes of these characteristics:					Level of assessment for each social impact	What methods and data sources will be used to investigate this impact?					
		Is the impact expected to be positive or negative and/or how?					extent i.e. number of people potentially affected?	duration of expected impacts? (i.e. construction vs. operational phase)	intensity of expected impacts i.e. scale or degree of change?	sensitivity or vulnerability of people potentially affected?	level of concern/interest of people potentially affected?		Secondary data	Primary Data - Consultation	Primary Data - Research			
Operations - Delivery of ethanol from Nowra to Port Kembla, including access to the site.	access	Increased heavy vehicles causing increased road safety risks for local users	Negative	Yes - this project	Traffic Impact Assessment	Yes	Sinos Facility to East of Project Site	No	No	No	No	Yes	Minor assessment of the impact	Required	Limited - if required (e.g. local council)	Not required		
Operation - transfer of ethanol to the location via trucks and berth via pipeline	surroundings	Safety risk of transferring flammable substance and risk of fire / hazards	Negative	Yes - this project	Preliminary Hazard Analysis HAZOP Report Transport Study	No	Not required	yes	yes	Yes	No	Yes	Detailed assessment of the impact	Required	Broad consultation	Targeted research		
Operations of facility	surroundings	Changes to air quality as a result of emissions from storage facility	Negative	Yes - this project	Air Quality Assessment	Yes	Sinos Facility to East of Project Site	Yes	No	Yes	No	Yes	Detailed assessment of the impact	Required	Broad consultation	Targeted research		
Construction	surroundings	Impact on social amenity and how people live as a result of construction noise and vibration, including piling activities and heavy vehicle movements	Negative	Yes - this project	Noise and Vibration assessment	Unknown	Sinos Facility to East of Project Site	Yes	No	No	No	No	Minor assessment of the impact	Required	Limited - if required (e.g. local council)	Not required		
Construction	surroundings	Impact on social amenity and how people live as a result of construction dust	Negative	No		Unknown	Sinos Facility to East of Project Site	Yes	No	No	No	No	Minor assessment of the impact	Required	Limited - if required (e.g. local council)	Not required		
Construction	surroundings	Impact on social amenity and how people live as a result of construction traffic	Negative	Yes - this project	Construction Traffic Management Plan	Unknown	Sinos Facility to East of Project Site	Yes	No	No	No	No	Minor assessment of the impact	Required	Limited - if required (e.g. local council)	Not required		
Construction	surroundings	Potential conflict with pedestrian and cyclists during construction due to transport to and from construction site	Negative	Yes - this project	Construction Traffic Management Plan	Unknown	Sinos Facility to East of Project Site	Yes	No	No	No	No	Minor assessment of the impact	Required	Limited - if required (e.g. local council)	Not required		
Establishment of facility	surroundings	Competing land use	Negative	Yes - this project	Landuse assessment	No	Not required	No	No	No	No	No	Not relevant	Not required	Not required	Not required		
Construction and operation of terminal	Livelihoods	Creation of employment opportunities for the wider community and ongoing community investment	Positive	Yes - this project	Job creation information	yes	Other Manildra jobs	Yes	Yes	No	Yes	Yes	Detailed assessment of the impact	Required	Broad consultation	Targeted research		
Operation	community	Contribution and support to the surrounding communities	Positive	Yes - other project	Milkura company	No	Not required	Yes	Yes	Yes	Yes	Yes	Detailed assessment of the impact	Required	Broad consultation	Targeted research		
Operation	surroundings	New visual landscape on the foreshore	Negative	No		Unknown		No	No	No	No	No	Not relevant	Not required	Not required	Not required		
Operation	surroundings	Impact on social amenity and how people live as a result of operation noise and vibration	Negative	Yes - this project	Noise and Vibration assessment	Yes	Sinos Facility to East of Project Site	Yes	No	No	No	No	Minor assessment of the impact	Required	Limited - if required (e.g. local council)	Not required		

Appendix 4 – SIA Risk Assessment

The following tables have been adapted from the 2021 Guideline.

Defining magnitude levels for social impacts

Magnitude level	Meaning
Transformational	Substantial change experienced in community wellbeing, livelihood, amenity, infrastructure, services, health, and/or heritage values; permanent displacement or addition of at least 20% of a community
Major	Substantial deterioration/improvement to something that people value highly, either lasting for an indefinite time, or affecting many people in a widespread area
Moderate	Noticeable deterioration/improvement to something that people value highly, either lasting for an extensive time, or affecting a group of people
Minor	Mild deterioration/improvement, for a reasonably short time, for a small number of people who are generally adaptable and not vulnerable
Minimal	No noticeable change experienced by people in the locality

Defining likelihood levels of social impacts

Likelihood level	Meaning
Almost certain	Definite or almost definitely expected
Likely	High probability
Possible	Medium probability
Unlikely	Low probability
Very unlikely	Improbable or remote probability

Dimensions of social impact magnitude

Dimensions	Details needed to enable assessment
Magnitude	Extent Who specifically is expected to be affected (directly, indirectly, and/or cumulatively), including any vulnerable people? Which location(s) and people are affected? (e.g., near neighbours, local, regional, future generations).
	Duration When is the social impact expected to occur? Will it be time-limited (e.g., over particular project phases) or permanent?
	Severity or scale What is the likely scale or degree of change? (e.g., mild, moderate, severe)
	Intensity or importance How sensitive/vulnerable (or how adaptable/resilient) are affected people to the impact, or (for positive impacts) how important is it to them? This might depend on the value they attach to the matter; whether it is rare/unique or replaceable; the

Dimensions		Details needed to enable assessment
		extent to which it is tied to their identity; and their capacity to cope with or adapt to change.
	Level of concern/interest	How concerned/interested are people? Sometimes, concerns may be disproportionate to findings from technical assessments of likelihood, duration and/or intensity.

Social impact significance matrix

Likelihood	Magnitude level				
	Minimal	Minor	Moderate	Major	Transformational
Almost certain	Low	Medium	High	Very High	Very High
Likely	Low	Medium	High	High	Very High
Possible	Low	Medium	Medium	High	High
Unlikely	Low	Low	Medium	Medium	High
Very unlikely	Low	Low	Low	Medium	Medium

Appendix 5 – Community profiles

Indicator	Port Kembla SSC 2016	Warrawong SSC 2016	Wollongong LGA 2016	NSW
People – Demographics and education (Source ABS 2016)				
Total population (2016)	5,014	4,752	203,630	7480228
Male	50.9%	48.9%	49.4%	49.3%
Female	49.1%	51.1%	50.6%	50.7%
Aboriginal and/or Torres Strait Islander people	3.7%	5.4%	2.6%	2.9%
Age structure (Source ABS 2016)				
0-4 years	6.1%	7.0%	5.9%	6.2%
5-9 years	5.7%	6.9%	6.2%	6.4%
10-14 years	4.8%	5.6%	5.8%	5.9%
15-19 years	5.2%	5.1%	6.4%	6.0%
20-24 years	6.3%	5.8%	7.6%	6.5%
25-29 years	6.5%	6.1%	6.6%	7.0%
30-34 years	5.7%	5.5%	6.2%	7.2%
35-39 years	5.6%	5.7%	6.1%	6.7%
40-44 years	6.7%	6.0%	6.6%	6.7%
45-49 years	6.0%	6.3%	6.4%	6.6%
50-54 years	7.9%	6.4%	6.6%	6.5%
55-59 years	7.5%	6.4%	6.4%	6.3%
60-64 years	5.7%	4.7%	5.6%	5.6%
Population between 15 and 65	63.2%	57.9%	64.4%	65.1%
65-69 years	5.3%	5.0%	5.1%	2.1%
70-74 years	3.7%	5.1%	4.1%	3.9%
75-79 years	4.1%	4.6%	3.3%	2.9%
80-84 years	3.6%	4.2%	2.6%	2.1%
85 years and over	3.6%	3.7%	2.6%	2.2%
% Population over 65 years.	20.2%	22.6%	17.6%	13.2%
Median Age (years)	43	42	34	38
Social marital status (Source ABS 2016)				
Registered Married	41.7%	36.8%	46.9%	48.3%

Indicator	Port Kembla SSC 2016	Warrawong SSC 2016	Wollongong LGA 2016	NSW
De facto marriage	9.2%	8.6%	9.3%	9.4%
Not married	49.1%	54.5%	43.8%	42.3%
Education (Source ABS 2016)				
Pre-school	7.6%	7.9%	6.3%	5.7%
Infants/Primary	24.3%	28.4%	25.6%	26.2%
Secondary	19.0%	19.1%	19.8%	20.1%
Technical or Further Educational Institution	6.5%	6.3%	6.3%	6.2%
University or other Tertiary Institution	11.5%	7.4%	21.5%	16.2%
Other type of educational institution	2.4%	2.3%	1.9%	2.7%
Not stated	28.6%	28.5%	18.7%	23.0%
Level of highest education attainment (Source ABS 2016)				
Bachelor's degree level and above	10.5%	6.1%	19.9%	23.4%
Advanced Diploma and Diploma level	7.6%	5.3%	9.0%	8.9%
Certificate level IV	3.7%	2.5%	3.3%	2.8%
Certificate level III	15.7%	12.3%	14.9%	12.0%
Year 12	10.4%	12.3%	13.6%	15.3%
Year 11	3.9%	4.3%	3.2%	3.3%
Year 10	15.1%	17.2%	12.8%	11.5%
Certificate level II	0.1%	0.2%	0.1%	0.1%
Certificate level I	0.0%	0.0%	0.0%	0.0%
Year 9 or below	15.6%	20.3%	10.0%	8.4%
No educational attainment	2.4%	3.3%	0.8%	0.9%
Not stated	11.8%	13.7%	9.1%	10.3%
People – cultural and language diversity (Source ABS 2016)				
Australian ancestry	23.3%	19.5%	25.2%	22.9%
English ancestry	19.9%	17.3%	26%	23.3%
Macedonian	13.2%	8.2%	na	0.4%
Italian	7.3%	8.3%	na	2.8%
Irish ancestry	5.9%	na	7.9%	7.5%
Country of birth				
Australia	66.6%	56.5%	72.7%	65.5%
The former Yugoslav Republic of Macedonia	9.0%	5.5%	na	na

Indicator	Port Kembla SSC 2016	Warrawong SSC 2016	Wollongong LGA 2016	NSW
Italy	2.9%	5.4%	na	na
England	2.0%	1.8%	4.0%	3.0%
Languages (Source ABS 2016)				
English only spoken at home	66.3%	56.1%	78.2%	68.5%
Households where a non-English language is spoken at home	33.5%	42.3%	20.0%	26.5%
Employment type (Source ABS 2016)				
Worked Full Time	53.8%	49.7%	55.2%	59.2%
Worked part-time	30.1%	29.8%	32.7%	29.7%
Away from work	5.3%	6.3%	5.0%	4.8%
Unemployed	10.8%	14.2%	7.1%	6.3%
Labour force participation (15-85 years) (including those are unemployed looking)	48.3%	37.7%	56.9%	65.2%
Employment type (Source ABS 2016)				
Technicians and Trades Workers	17.3%	16.5%	14.8%	12.7%
Professionals	16.3%	11.7%	23.2%	23.6%
Clerical and Administrative workers	14.3%	10.6%	13.6%	13.8%
Labourers	14.0%	18.0%	8.8%	8.8%
Community and Personal Service Workers	11.7%	12.5%	12.4%	10.4%
Machinery Operators and Drivers	8.3%	10.0%	6.2%	6.1%
Managers	6.9%	5.9%	10.5%	13.5%
Industry of employment (Source ABS 2016)				
Hospitals (except Psychiatric Hospitals)	5.1%	4.1%	4.4%	3.5%
Iron Smelting and Steel Manufacturing	3.3%	3.8%	na	0.3%
Building and Other industrial Cleaning Services	2.6%	3.4%	na	1.2%
Aged Care Residential Services	2.6%	4.8%	2.6%	2.0%
Takeaway Food Services	2.5%	na	na	1.7%
Income (Source ABS 2016)				
Median individual income	479	412	584	664
Family	1319	963	1710	1780
Households	1016	762	1339	1486
Method of travel to work (Source ABS 2016)				
Car, as driver	70.7%	68.2%	66.3%	57.8%

Indicator	Port Kembla SSC 2016	Warrawong SSC 2016	Wollongong LGA 2016	NSW
Walked only	2.1%	2.7%	3.0%	3.9%
Worked at home	1.9%	2.1%	3.5%	4.8%
By car as driver or passenger	76.2%	75.9%	71.2%	64.6%
Unpaid work (Source ABS 2016)				
Did unpaid domestic work	64.5%	58.6%	70.1%	67.7%
Cared for child/children	25.0%	23.7%	29.0%	27.2%
Provided unpaid assistance to a person with a disability	14.5%	14.9%	13.3%	11.6%
Did voluntary work through an organisation or group	13.2%	9.6%	18.6%	18.1%
Family composition (Source ABS 2016)				
Couple family with no children	34.5%	30.5%	36.3%	36.6%
Couple family with children	39.2%	35.3%	44.6%	45.7%
One parent family	24.5%	32.3%	17.5%	16.0%
Other family	1.8%	2.0%	1.6%	1.7%
Employment status of couple families (Source ABS 2016)				
Both employed, worked full-time	15.8%	8.6%	18.7%	22.6%
Both employed, worked part-time	3.5%	2.5%	3.6%	4.0%
One employed full-time, one part-time	18.7%	12.0%	23.0%	20.6%
One employed full-time, other not working	12.7%	16.1%	13.4%	15.0%
One employed part-time, other not working	6.2%	6.6%	5.8%	6.1%
Both not working	31.6%	46.0%	24.8%	21.0%
Other (includes away from work)	4.9%	4.3%	5.2%	5.1%
Labour force status not stated	6.5%	3.9%	5.2%	5.7%
Dwellings (Source ABS 2016)				
Dwelling internet connection	65.7%	59.2%	79.9%	82.5%
Occupied private dwellings	89.5%	89.9%	92.1%	90.1%
Unoccupied private dwellings	10.5%	10.1%	7.9%	9.9%
Separate house	76.4%	64.3%	69.5%	66.4%
Semi-detached, row or terrace house, townhouse etc.	6.3%	13.8%	12.4%	12.2%
Flat, unit or apartment	16.2%	21.5%	16.8%	19.9%
Other dwelling	0.7%	0.2%	0.7%	0.9%
Average number of bedrooms per dwelling	2.9	2.8	3	3.1
Average number of people per household	2.4	2.4	2.6	2.6

Indicator	Port Kembla SSC 2016	Warrawong SSC 2016	Wollongong LGA 2016	NSW
Owned outright	39.5%	34.2%	34.8%	32.2%
Owned with a mortgage	23.5%	12.6%	31.1%	32.3%
Rented	33.1%	48.2%	30.3%	31.8%
Tenure type not stated	3.6%	4.5%	2.9%	2.8%
Household structure (Source ABS 2016)				
Family	66.2%	63.5%	70.0%	72.0%
Single (or lone)	30.6%	33.4%	25.5%	23.8%
Group households	3.3%	3.1%	4.5%	4.2%
Household income (Source ABS 2016)				
Less than \$650 gross weekly income	29.6%	39.8%	23.1%	19.7%
More than \$3000 gross weekly income	8.8%	3.5%	14.8%	18.7%
Median rent	270	215	320	380
Households where rent payments are less than 30% of household income	85.3%	75.9%	87.0%	87.1%
Households with rent payments greater than or equal to 30% of household income	14.7%	24.1%	13.0%	12.9%
Households where mortgage payments are less than 30% of household income	94.7%	96.2%	93.7%	92.6%
Households with mortgage payments greater than or equal to 30% of household income	5.3%	3.8%	6.3%	7.4%
SEIFA Index of Relative Socio-economic Disadvantage (source PHIDU 2016)	na	na	989	1002
Car ownership per dwelling (Source ABS 2016)				
None	14.6%	21.4%	9.1%	9.2%
One	37.4%	41.0%	35.6%	36.3%
Two	27.3%	21.5%	34.5%	34.1%
Three or more	15.5%	9.1%	16.9%	16.7%
Not stated	5.2%	7.0%	3.9%	3.7%
Population mobility (address) (Source ABS 2016)				
Same address as one year ago	81.4%	79.3%	79.7%	84.3%
Same address as five years ago	62.7%	58.9%	58.3%	58.0%
At risk and vulnerable groups (Source ABS 2016)				
Aboriginal and/or Torres Strait Islander people	3.7%	5.4%	2.6%	2.9%
Provided unpaid assistance to a person with a disability (last two weeks before Census night) (%)	14.5%	14.9%	13.3%	11.6%
Highest Educational attainment: Year 9 or below (%)	15.6%	20.3%	10.0%	8.4%

Indicator	Port Kembla SSC 2016	Warrawong SSC 2016	Wollongong LGA 2016	NSW
Population aged 65+ (%)	20.2%	22.6%	17.6%	13.2%
Estimated number of people aged 18 years and over who had government support as their main source of income, for 13 months or more, within the past 24 months (modelled estimates) (ASR per 100)	na	na	24.7	20.4


Port Kembla SIA_2022 Final (May 2022)


Final Audit Report


2022-05-20


Created:	2022-05-20
By:	Angela Peace (Angela.peace@aapconsulting.com.au)
Status:	Signed
Transaction ID:	CBJCHBCAABAAcMsOkwkivzDpccD0XZ4aa3XQjo3sPViz


"Port Kembla SIA_2022 Final (May 2022)" History

 Document created by Angela Peace (Angela.peace@aapconsulting.com.au)
2022-05-20 - 4:42:58 AM GMT- IP address: 101.174.114.78

 Document emailed to Kristine Bencke (krisbencke@gmail.com) for signature
2022-05-20 - 4:44:36 AM GMT

 Email viewed by Kristine Bencke (krisbencke@gmail.com)
2022-05-20 - 4:47:53 AM GMT- IP address: 104.28.125.5

 Document e-signed by Kristine Bencke (krisbencke@gmail.com)
Signature Date: 2022-05-20 - 4:52:06 AM GMT - Time Source: server- IP address: 27.32.174.2

 Agreement completed.
2022-05-20 - 4:52:06 AM GMT