



Shoalhaven Starches Expansion Project Modification 20

Modification to Supagas CO₂ Plant
State Significant Development Modification Assessment
(MP06_0228-Mod-20)

October 2021



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Cover image: *Supagas CO2 Plant (Source: Supagas Pty Ltd)*

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Glossary

Abbreviation	Definition
Council	Shoalhaven City Council
CO₂	Carbon dioxide
Department	Department of Planning, Industry and Environment (DPIE)
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPL	Environment Protection Licence
FRNSW	Fire and Rescue NSW
LEP	Local Environmental Plan
Minister	Minister for Planning and Public Spaces
Planning Secretary	Secretary of the Department
SEARs	Planning Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2011

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1 Introduction

This report provides the NSW Department of Planning, Industry and Environment's (the Department's) assessment of an application to modify the State significant development (SSD) consent for Shoalhaven Starches Expansion Project (MP06_0228). The modification application seeks consent to modify the existing Supagas CO₂ Plant to install additional CO₂ storage vessels and associated plant to improve storage capacity of CO₂.

The application was lodged on 21 September 2021 by Shoalhaven Starches (the Applicant) on behalf of Supagas Pty Ltd pursuant to section 4.55(1A) of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

1.1 Background

The Applicant has operated a factory at Bomaderry in the Shoalhaven local government area (LGA) since 1979 (see **Figure 1**). The factory receives wheat grain from mills in western NSW which is processed to produce flour, gluten, glucose, starch and ethanol for food, beverage, hand sanitiser, paper and fuel products. The factory is a 24/7 operation and has approximately 300 employees.

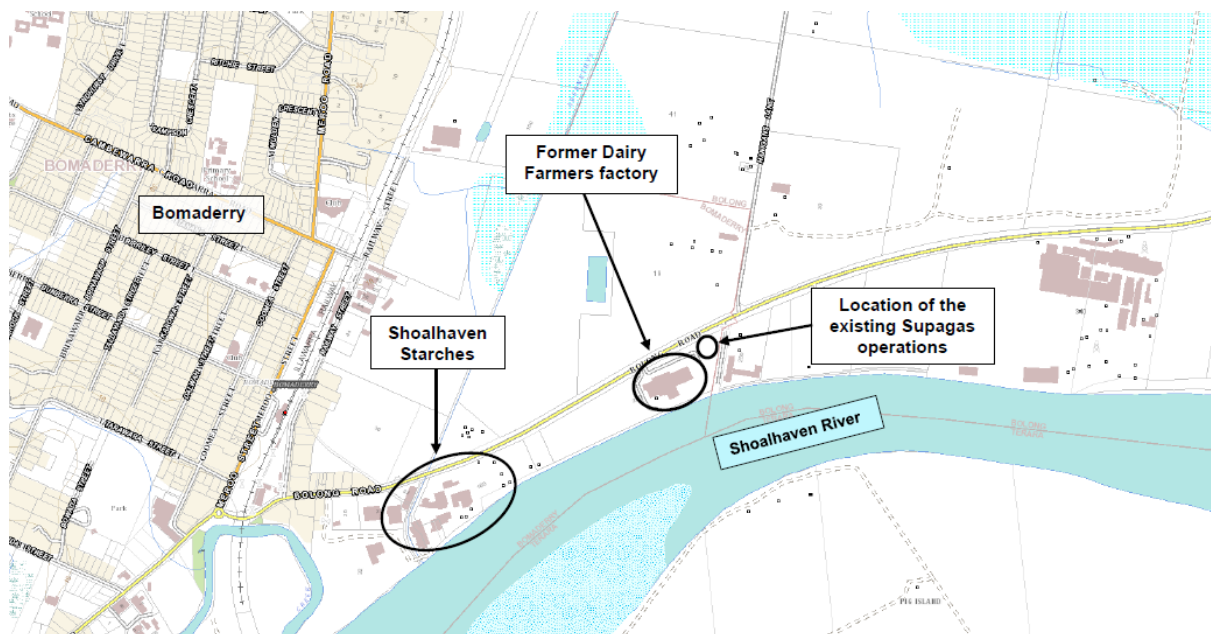


Figure 1 | Local Context Map

The factory is located on the eastern fringe of Bomaderry and 2 kilometres (km) to the north-east of Nowra (see **Figure 2**). The factory is surrounded by other industrial premises, including a metal fabrication factory, meat packaging works and industrial and agricultural suppliers. The nearest residences are in Bomaderry, 300 metres (m) to the west of the approved packing plant and 500 m north-west of the factory.

Shoalhaven City Council's sewage treatment works is located 180 m to the north of the factory and Bomaderry railway station is located 500 m north-west. Shoalhaven Starches has a private rail spur line, which extends from the railway station across Railway Street and Bolong Road into the factory site, extending for approximately 750 m along the northern bank of the Shoalhaven River.

The Shoalhaven Starches factory encompasses the former Dairy Farmers complex and the former Shoalhaven Paper Mill, located east of the main factory on Bolong Road.

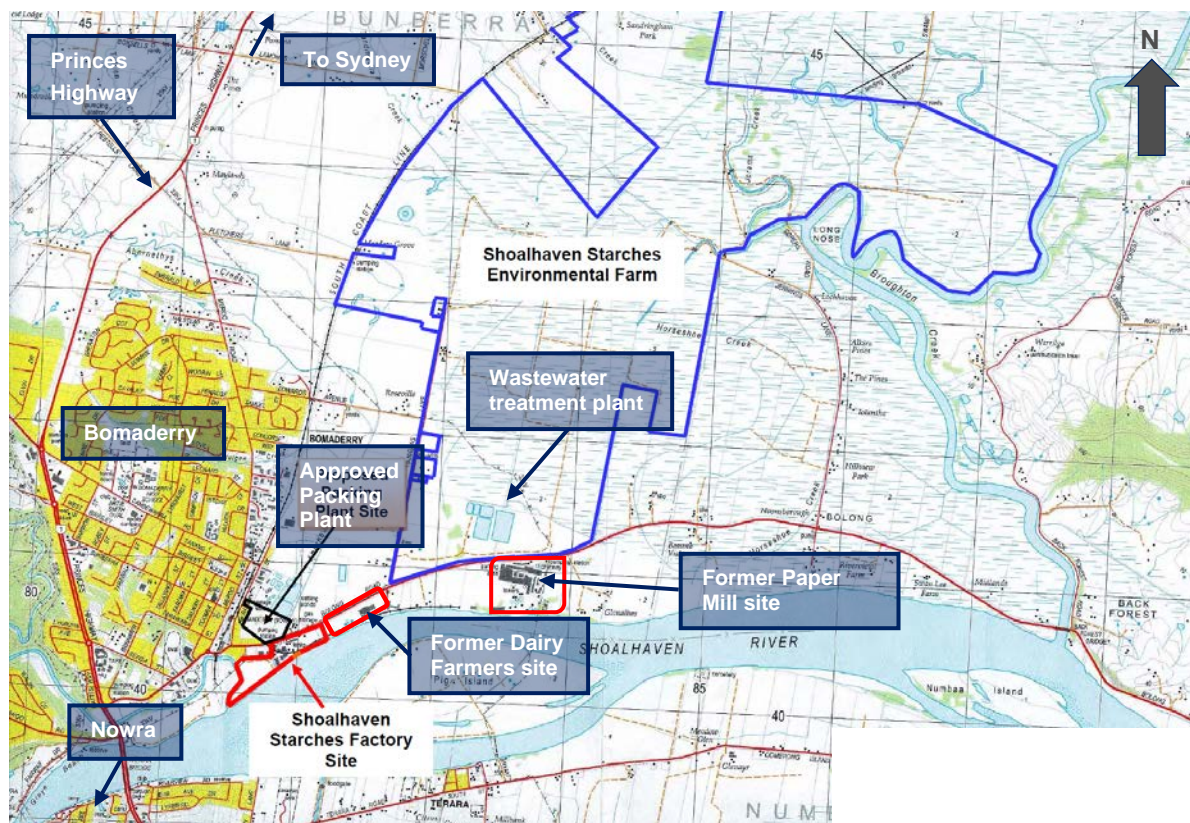


Figure 2 | Regional Context Map



Figure 3 | Site Aerial View

The Existing Supagas CO₂ Plant is located adjoining east of the Dairy Farmers complex (see **Figure 3**). The Supagas CO₂ Plant takes CO₂ from the Shoalhaven Starches operations and processes the gas to food grade quality for use in food and beverage products.

1.2 Approval history

Prior to 2009, the Applicant operated its factory under multiple, separate planning approvals issued by Shoalhaven City Council (Council) and the Minister for Planning.

Shoalhaven Starches Ethanol Expansion Project (06_0228)

In January 2009, the then Minister for Planning approved the Shoalhaven Starches Ethanol Expansion Project (SSEEP) under the now repealed Part 3A of the EP&A Act. The SSEEP approval consolidated all previous planning approvals for the site with the aim of simplifying regulation and compliance.

The SSEEP involved:

- staged increases of ethanol production from 126 megalitres a year (ML/yr) to 200 ML/yr following successful implementation of mandatory odour controls
- implementation of mandatory odour controls including a wastewater treatment plant and biofilter
- installation of additional infrastructure at the dried distillers grain (DDG) plant, ethanol and starch plants, a new packing plant, rail siding and product and wastewater pipelines.

By June 2012, the Applicant had installed the mandatory odour controls and the Department approved the increase in ethanol production (as prescribed in the conditions) to the maximum volume permitted being 300 ML/yr, subject to conditions, including quarterly odour monitoring and annual odour audits. However, demand for ethanol in fuels has not increased as predicted and ethanol production levels at the factory in 2017 were around 237 ML/yr.

Given the reduced market demand for ethanol, the Applicant has progressively installed infrastructure over the last few years, to allow optimisation of flour products and increased production of beverage grade ethanol for alcohol products. This has required several modifications to the SSEEP approval, including a new starch dryer, flour mill and a beverage grade ethanol distillery at the factory.

Modifications to 06_0228

There have been 19 modifications to the SSEEP since 2009. All modifications from Modification 1 to 18 were approved by the former Planning Assessment Commission or Independent Planning Commission (the Commission) under the Minister's delegation as the Applicant was previously a political donator. However, the Applicant has since not made any reportable political donations and Modification 19 was approved by the Department under delegation of the Minister for Planning and Public Spaces. Table 1 summarises the modifications.

Table 1 | Summary of Modifications

Mod No.	Summary of Modifications	Approval Authority	Type	Approval Date
MOD 1	<ul style="list-style-type: none"> removed the requirement for dried distillers grain (DDG) pelletising plant from the list of mandatory odour controls implement alternate odour controls including a new loading chute with dust extractor and extension of the load-out shed to fully enclose truck loading. 	PAC	s75W	30 Sept 2011
MOD 2	<ul style="list-style-type: none"> install additional infrastructure to improve operational and energy efficiency, including two additional fermenter tanks, an evaporator, beer column, heat exchangers, substation and compressors. 	PAC	s75W	14 Sept 2012
MOD 3	<ul style="list-style-type: none"> relocate approved 60 space staff car park to the former Dairy Farmers site and include the site in the project approval, following acquisition by the Applicant. 	PAC	s75W	9 Oct 2012
MOD 4	<ul style="list-style-type: none"> relocate the approved DDG pelletising plant within the factory site, increases its footprint and approved height, from 21 m to 28 m. 	PAC	s75W	24 Mar 2014
MOD 5	<ul style="list-style-type: none"> modify the design, footprint and odour controls on the DDG pelletising plant including a 49 m air discharge stack and eight storage silos. 	PAC	s75W	16 Sept 2015
MOD 6	<ul style="list-style-type: none"> demolish a disused industrial building “Moorehouse” purchased by the Applicant construct a temporary car park on the northern side of Bolong Road. 	PAC	s75W	25 Nov 2015
MOD 7	<ul style="list-style-type: none"> relocate the approved Starch Dryer No. 5 to the former “Moorehouse” site, increase the footprint and construct a substation, pipework and pipe gantry. 	PAC	s75W	18 Jan 2016
MOD 8	<ul style="list-style-type: none"> extend the existing flour mill to increase flour production from 265,000 to 400,000 tonnes per annum (tpa) and offset imports of flour to the factory from mills in western NSW. 	PAC	s75W	1 Mar 2016

MOD 9	<ul style="list-style-type: none"> increase the size of the approved packing plant to increase the type and volume of packaged dried products construct a container storage and truck loading area with noise barriers extend and duplicate the approved rail spur line install product pipes under Bolong Road, a small bag packer at the DDG pellet plant and a new stormwater detention tank. 	PAC	s75W	8 Mar 2017
MOD 10	<ul style="list-style-type: none"> construct a new flour mill B and increase flour production on site from 400,000 tpa to 842,400 tpa. Relocate storage silos and construct a mill feed structure. 	PAC	s75W	18 April 2017
MOD 11	<ul style="list-style-type: none"> reduce the number of approved dryers and relocate approved footprint, relocate cooling towers, construct a forklift maintenance building, install two biofilters, construct hardstand for container storage, store coal and woodchips on the factory site and environmental farm. 	PAC	s75W	1 Sept 2017
MOD 12	<ul style="list-style-type: none"> increase production of beverage grade ethanol and reduce production of fuel grade ethanol install ethanol distillery infrastructure including rectification columns, cooling towers, a substation, storage tanks and pipes extend two rail siding and provide additional car parking. 	PAC	s75W	1 Sept 2017
MOD 13	<ul style="list-style-type: none"> increase steam production from three existing boilers by converting to coal fired boilers and installing baghouses. 	PAC	s75W	18 Jan 2018
MOD 14	<ul style="list-style-type: none"> incorporate the former Shoalhaven Paper mill into the project approval and use the site for buffer storage for products, plant, construction materials and shipping containers. 	PAC	s75W	27 April 2018
MOD 15	<ul style="list-style-type: none"> construct a carbon dioxide plant at the former Dairy Farmers complex to capture and treat waste gas to a food grade 	IPC	s75W	7 Aug 2018

standard for sale to food and hospitality markets.

MOD 16	<ul style="list-style-type: none"> construction of new flour mill and gluten dryer, specialty products building, boiler and coal-fired cogeneration plant conversion of two gluten dryers to starch dryers. 	IPC	s4.55(2)	18 June 2019
MOD 17	<ul style="list-style-type: none"> extension of product dryer building and service conduit relocation of Starch Dryer no.5 baghouse and car parking use of alternative woodchip fuel source for boilers. 	IPC	s4.55(1A)	23 October 2020
MOD 18	<ul style="list-style-type: none"> production of hand sanitiser grade ethanol and hand sanitiser including the relocation of gas fired boiler and repurposing of de-fatting plant. 	IPC	s4.55(1A)	4 September 2020
MOD 19	<ul style="list-style-type: none"> production of an additional 100 ML of beverage grade ethanol per annum within existing 300 ML ethanol limit. installation of three new distillery columns in the Ethanol Distillery Plant and associated infrastructure, 12 new cooling tanks. relocation of site infrastructure. 	Department	s4.55(1A)	8 March 2021
MOD 21	<ul style="list-style-type: none"> additional 16 product storage silos, eight feed bins and reconfiguration of Packing Plant footprint. additional rail slide, train tunnel and amendment to product gantry. additional raw wastewater tank installation of a Nitrogen Generator and Storage Tanks. additional Indirect Cooking Facility. additional two Fermentation Tanks. 	Department	s4.55(1A)	Under Assessment
MOD 22	<ul style="list-style-type: none"> beverage grade ethanol plant stage 3 upgrade involving the increase in ethanol production from 300 ML/year to 450 ML/year. 	Department	s4.55(2)	SEARs Issued

MOD 23	<ul style="list-style-type: none"> gas fired Co-generation Plant consisting of two natural gas turbines with a total power output of 60 Mega Watts. 	Department	s4.55(2)	Under Assessment
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Shoalhaven Starches Gas Pipeline Project (10_0108 & 10_0144)

On 30 October 2012, the Commission under delegation of the then Minister for Planning and Infrastructure approved the Shoalhaven Starches Gas Pipeline Project (10_0108) under the now repealed Section 75J of the EP&A Act and a concept plan approval (10_0144) under the now repealed Section 75O and 75P of the EP&A Act. The approval involved the construction of a 5.5 km long private gas pipeline to connect the Shoalhaven Starches facility directly to the Eastern Gas Pipeline (EGP) as well as ancillary infrastructure to support the connection, including a pressure reduction facility and meter station.

On 26 April 2021 an order made by the Minister's delegate was published in the Gazette declaring the concept plan and project approvals to be a Staged infrastructure approval (10_0144) and State significant infrastructure approval (SSI) (10_0108), respectively under clause 5 of Schedule 2 of the EP&A (Savings, Transitional and Other Provisions) Regulation 2017 (EP&A (ST&OP) Regulation).

The Applicant has lodged modification requests with the Department for these approvals under section 5.25 of the EP&A Act to relocate the approved location of the associated gas pressure reduction station and to increase the diameter of the pipeline. The modification requests are currently under assessment with the Department.

Council Issued Consents

Separate to the SSEEP approval, the Applicant sought and has obtained development consents from Council for works associated with the factory. This has included:

- construction and operation of an interim packing plant at the factory (RA 11/1002)
- demolition of the dimethyl ether plant (DA 13/1713)
- construction of two additional grain silos for buffer storage (DA 14/2161).

Council also granted consent to the Applicant for road and site access upgrades, consistent with the SSEEP approval. These included:

- upgrades to site access points on Bolong Road, including the Dairy Farmers site access (DA 10/1843)
- widening the access point to the interim packing plant (DA 11/1855).

Two other Council-issued consents apply to land adjacent to the factory and owned by the Applicant. These include the Algae Demonstration Facility and the Meat Processing Plant, both located at the former Dairy Farmers site.

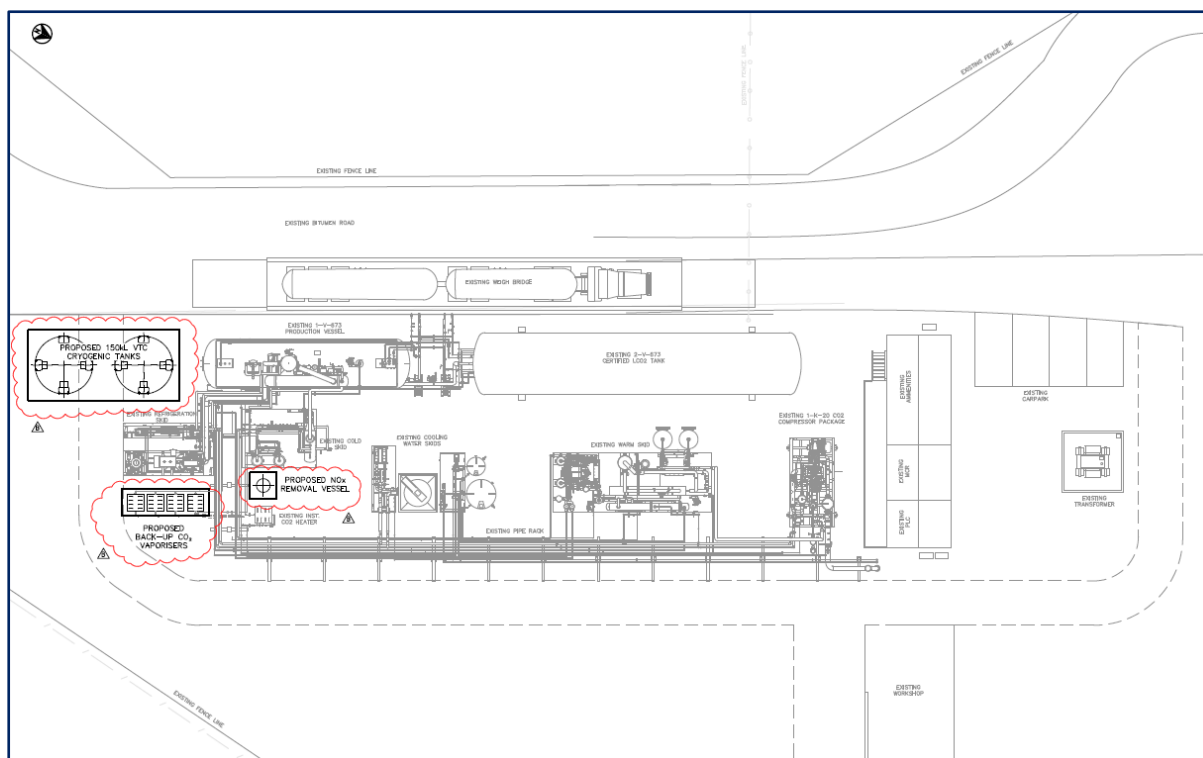


Figure 5 | Supagas CO₂ Plant Site Plan

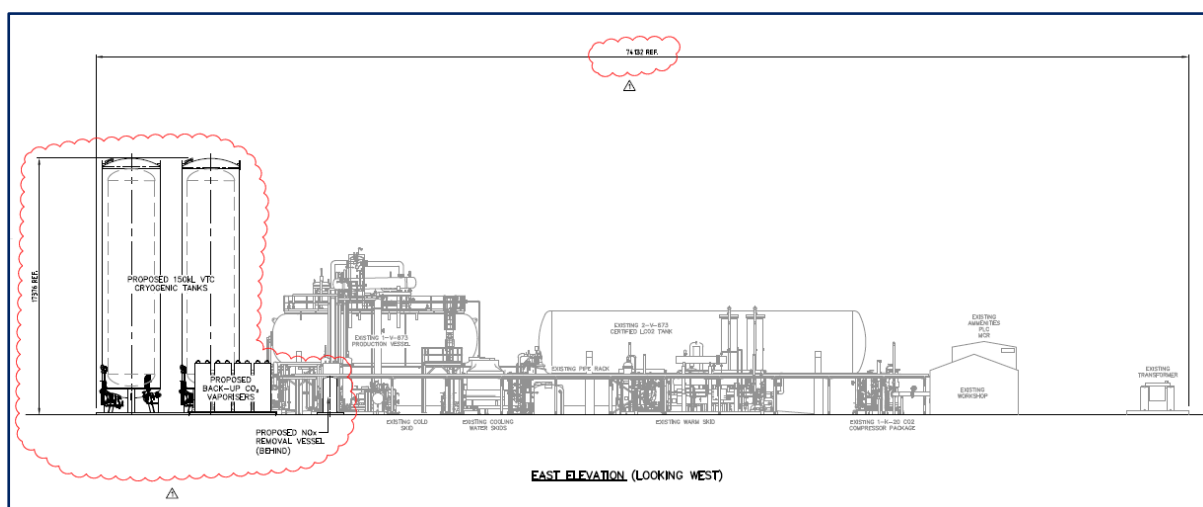


Figure 6 | Additional Storage Vessels Elevation

2.2 Applicant's Justification for the Proposed Modification

The Applicant has outlined four primary objectives of the proposed modification as follows:

Improve Storage Capacity During Outages

Currently, the plant requires scheduled maintenance and inspection of equipment which subsequently causes operations to cease for approximately seven days. Unexpected breakdowns of machinery and equipment can also result in cessation to operations and production. The proposed modification will

provide improved storage of finished product to enable continued supply to customers during instances of both planned and unplanned stoppages to production.

Reduced Plant Fatigue and Damage

Currently the CO₂ storage vessels reach storage capacity approximately every 10 days requiring site operations to cease until storage capacity is available. The Applicant has stated the frequent stop/start of the plant's operations has resulted in pressure on plant and equipment such as the main raw gas blower, CO₂ compressor, refrigeration system and hydrocarbon removal reactor. The continuous strain has the potential for plant and equipment degradation and subsequent site failures. The proposed additional storage capacity will alleviate strain and risk of degradation on plant and equipment by reducing stop/start frequency.

Improved Batching and Quality Control

The additional storage vessels will allow the Applicant to isolate a product in separate storage vessels to improve quarantining and testing of final product to identify any quality issues without impacting product distribution and operations.

Better Availability of Product During Peak Demand

The Supagas CO₂ Plant currently has approval under Mod 15 to produce 100 tonnes per day of liquid CO₂ product however, the plant currently produces approximately 40 tonnes per day of liquid CO₂. The proposed modification will enable the Plant to improve operational efficiencies and enable the Applicant to operate to the existing approved production limits.

3 Strategic context

The Department has considered the strategic context of the site and is satisfied the proposed modification is consistent with relevant strategic planning documents including the *Illawarra Shoalhaven Regional Plan* (ISRP) 2015.

The ISRP sets a vision and goals for the region covering housing, jobs, environment and transport. The modification would also contribute to the on-going employment of over 300 staff at the Shoalhaven Starches factory. The modification would enable Shoalhaven Starches and Supagas to maintain an efficient and competitive manufacturing business that contributes to the local and regional economy.

4 Statutory context

4.1 Scope of modifications

The Department has reviewed the scope of the modification application and considers the application can be characterised as a modification involving minimal environmental impacts as the proposal:

- would not significantly increase the environmental impacts of the development as approved
- the modification would not involve any works outside already approved development areas
- is substantially the same development as last modified under the former section 75W of the EP&A Act, and
- would not involve any further disturbance outside the already approved disturbance areas for the development.

Therefore, the Department is satisfied the proposed modification is within the scope of section 4.55(1A) of the EP&A Act and does not constitute a new development application. Accordingly, the Department considers that the application should be assessed and determined under section 4.55(1A) of the EP&A Act rather than requiring a new development application to be lodged.

4.2 Consent authority

The Minister for Planning and Public Spaces (Minister) is the consent authority for the application under section 4.5(a) of the EP&A Act. Previously, the Commission had determined 18 of the 19 modifications due to reportable political donations having previously been made. Under the Minister's delegation of 26 April 2021, the Team Leader, Industry Assessments, may determine the application under delegation as:

- the application has not been made by a person who has disclosed a reportable political donation within the last two years under section 10.4 of the EP&A Act
- there are no public submissions (other than a council) in the nature of objections, and
- Council has not made a submission by way of objection under the mandatory requirements for community participation listed under Schedule 1 of the EP&A Act.

4.3 Part 3A transition to State significant development

The SSEEP was originally approved under the now repealed Part 3A of the EP&A Act. The project was a transitional Part 3A project under Schedule 2 to the EP&A (ST&OP) Regulation. On 7 September 2018 an order made by the Minister's delegate was published in the Gazette declaring the development that was a Part 3A project to be State significant development under clause 6 to Schedule 2 of the EP&A (ST&OP) Regulation. As a result, the project approval is taken to be a State significant development consent under Part 4 of the EP&A Act and may be modified under section 4.55 of the EP&A Act.

4.4 Biodiversity Conservation Act 2016

The SSD application was lodged prior to the introduction of the BC Act (introduced 25 August 2017). Clause 30A(2)(c) of the Biodiversity Conservation (Savings and Transitional) Regulation 2017 specifies that if the determining authority is satisfied a modification will not increase the impact on biodiversity values, a biodiversity development assessment report (BDAR) is not required.

The proposed modification relates to the construction of additional storage and associated equipment for the Supagas CO₂ plant located on existing hardstand and building plate. The modification is not considered to impact upon any undisturbed land or have impacts on biodiversity values.

For the reasons discussed above, the Department's assessment concludes a BDAR is not necessary for the proposed modification.

5 Engagement

5.1 Department's Engagement

Clause 117(4) of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation) requires a section 4.55(1A) modification application to be notified or advertised if specified by a community participation plan. The Department's Community Participation Plan notes the exhibition requirements for such modifications are discretionary, and based on the urgency, scale and nature of the proposal. Given the proposed changes would result in minimal environmental impacts (see **Section 4**), the application was not notified or advertised.

However, it was made publicly available on the Department's website on 20 September 2021 and was referred to Shoalhaven City Council (Council) and NSW Environment Protection Authority (EPA) and NSW Fire and Rescue for comment.

5.2 Summary of agency advice

The Department received advice from one Government agency and Council. There were no submissions received from the general public or special interest groups. There were no objections to the modification.

EPA provided no comments on the modification application noting the proposed works would not alter the existing facility's Environment Protection Licence (EPL).

Council acknowledged the modification is expected to comply with existing noise limits for the development and there would be no new air emissions sources. However, Council noted the EPA is the appropriate regulatory authority. In addition, Council raised no concerns regarding flood compliance and provided recommended conditions of consent relating to structural adequacy within flood prone land.

5.3 Response to submissions

No issues or concerns were raised in the agency advice provided by EPA and Council. Therefore, a Response to Submissions was not required to be provided by the Applicant.

6 Assessment

The Department has assessed the merits of the proposed modification. During this assessment, the Department has considered the:

- SEE (see **Appendix A**)
- application, supporting documents and assessment report for the original project and subsequent modifications
- submissions from State government agencies and Council (**Appendix A**)
- relevant environmental planning instruments, policies and guidelines
- requirements of the EP&A Act, including the objects of the EP&A Act.

The Department's assessment of key issues is provided in **Table 2**.

Table 2 | Assessment of issues

Findings	Recommendations
Air Quality Impacts	
<ul style="list-style-type: none"> • The SEE included an Air Quality Impact Assessment (AQIA) prepared by GHD Pty Ltd to assess the potential impacts of the modification. • The AQIA identified no new air emissions sources as a result of the modification as there will be no new vents or exhausts associated with the modified plant and existing operations of the Supagas plant would not be altered. • The AQIA reiterated vapour emitted from the cold scrubber would continue to be piped to the purification plant for processing and the elimination of odours. • The AQIA concluded there are no anticipated air quality impacts and no expected increase to cumulative levels in the site area. • The EPA reviewed the SEE and AQIA and advised the modification would not trigger a variation to the existing environment protection licence (EPL 21178) and therefore had no comments on the modification. • The Department notes the new storage vessels do not present any new emissions sources and relocated vaporisers have been considered under the original Mod 15 assessment. • Additionally, the Department notes that cold scrubber vapour emissions will continue be piped to the purification plant for processing. 	<ul style="list-style-type: none"> • N/A

- The Department has reviewed the SEE, AQIA and the advice provided by the EPA and considers the modification will not present any additional air emissions to what was assessed under Mod 15 and will continue to comply with the existing air emissions limits of the consent and the EPL.
- No additional conditions of consent are recommended.

Noise Impacts

- The SEE included a Noise Impact Assessment (NIA) prepared by Hardwood Acoustics Pty Ltd to assess the potential impacts of the modification. • N/A
- The NIA identified the four closest residential receivers to the Supagas plant are located 540 m north in Bolong, 1.1 km west in Bomaderry, 1.3 km south-east across the Shoalhaven River in Terara and 1.6 km south-west across the Shoalhaven River in Nowra.
- The NIA identified only one noise source associated with the modification being the CO₂ load out pump, to be located between the proposed new CO₂ storage tanks at ground level. The load out pump was verified to have a sound power level of 80 dB(A) *L_{eq,15 minute}*.
- The NIA provided predicted noise levels at the four identified receptors against the development's noise limits for the day, evening and night time periods. The NIA demonstrated the load out pump would be inaudible at each receiver and have a negligible impact on noise amenity.
- EPA reviewed the SEE and NIA and advised the Department the modification would not trigger a variation to the existing EPL and therefore the EPA had no comments on the modification.
- The Department has reviewed the SEE, NIA and the advice provided by the EPA and considers the modification will have negligible impact on noise amenity and will continue to comply with the existing noise limits of the consent and the EPL.
- No additional conditions of consent are recommended.

Hazards

- The SEE included a Preliminary Hazard Analysis (PHA) prepared by Pinnacle Risk Management Pty Ltd to assess the potential risks and hazards associated with the modification. • N/A
 - The PHA was prepared in general accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 6 'Hazard Analysis'* (HIPAP 6), and *Multi-Level Risk*
-

Assessment. The PHA adopted a Level 2, semi-quantitative risk analysis.

- The PHA identified the potential risks associated with the Supagas CO₂ Plant were the release of CO₂ and ammonia from the critical failure of CO₂ storage vessels, ammonia refrigeration system and piping failures.
- The PHA undertook the quantification of consequences for releases of CO₂ and ammonia. The consequence analysis found that releases of CO₂ could have a fatality off-site and an ammonia release could be potentially injurious or cause irritation to sensitive receptors off-site.
- The Applicant undertook a risk analysis and found that individual risk levels did not exceed the risk criteria for the adjacent industrial site and residential areas. The risk analysis found that the frequency of releases being potentially injurious or causing irritation to sensitive receptors were below the risk criteria in *Hazardous Industry Planning Advisory Paper No. 4 "Risk Criteria for Land Use Safety Planning"* (HIPAP 4).
- As such the PHA demonstrated the proposed modification meets the risk criteria described in HIPAP 4.
- In addition, the proposed modification will be designed to relevant standards which include comprehensive safeguards and design requirements to ensure the risk to surrounding land uses is minimised.
- Therefore, the Department considers the proposed modification has satisfied all relevant risk criteria.
- The Department recommends all relevant hazards reporting be updated in accordance with existing conditions of consent.

Visual Impacts

- The modification includes the construction of two 150 tonne capacity liquid CO₂ storage vessels with a maximum building height of 17.2 metres which could impact on the visual amenity of the location.
 - The SEE provided an assessment of visual impacts of the modification, considering the visibility of the modified structures from seven identified key vantage points. The assessment noted the proposed structures are consistent with the scale and height of the facility's existing structures.
 - The assessment noted the additional storage vessels would be visible to passing motorists on Bolong Road and would be visible from the urban area of Bomaderry but is viewed as part of the prevailing scale of the facility. Views from other
- N/A

vantage points including North Nowra and Terara are distant or obscured by existing vegetation or the existing facility.

- The assessment concluded the modification would not have significant adverse visual impacts given the scale and character is consistent with existing structures.
- No concerns were raised by Council regarding the modifications impacts on visual amenity.
- The Department concludes the proposed modifications would have a minimal impact on the existing character of the locality considering the scope of the proposed works compared to the existing scale of the facility.

Flooding Impacts

- The SEE included a Flood Compliance Report prepared by WMAwater Pty Ltd to assess the potential impacts of the modification on flood storage and compliance.
 - The report noted the proposed additional storage vessels and associated plant and equipment is to be raised and located on an existing small footprint. The report considered any loss of temporary floodplain storage would be negligible as a result of the modification.
 - The report additionally contained a TUFLOW hydraulic model to assess the impacts of surface water in a 1% Annual Exceedance Probability (AEP) flood event.
 - The modelling demonstrated the modification would slightly increase peak flood levels in the 1% AEP event upstream from the site.
 - However, the report stated the increase in level occurs within land owned by the Applicant and would not likely adversely impact on surrounding landowners.
 - The report concluded the modification works would not significantly increase the 1%AEP or extreme event flood levels on land outside the Shoalhaven Starches facility.
 - Council advised the modification complies with the Shoalhaven Development Control Plan 2014 (SDCP 2014) and noted there would be no significant increase to the 1%AEP or PMF event flood levels on adjoining landowners.
 - Council recommended conditions of consent regarding structural soundness requirements for works within flood prone land and engineering certification.
 - The Department considers the modification would have minimal increase in extreme flood event levels on adjoining landowners and notes the modification does not include
- N/A

provision of additional hardstand areas to accommodate the proposed storage vessels.

- In addition, the Department considers the existing conditions of consent adequately address the conditions recommended by Council. Therefore, no additional conditions are proposed to be imposed on the consent.
 - The Department concludes the modification would not alter flood impacts on surrounding landowners.
-

7 Evaluation

The Department has reviewed the SEE and all agency advice, taking into consideration the relevant matters under section 4.15 of the EP&A Act and the objectives of the EP&A Act.

The Applicant is proposing to modify the consent to include two additional CO₂ storage vessels and associated plant to improve storage capacity of CO₂.

The Department did not exhibit the modification but engaged the EPA and Council for comments. The agency comments raised no concerns with the proposed modifications as the modification was considered to remain compliant with existing environmental performance limits, risk criteria and flood management standards.

The Department's assessment considered air quality, noise impacts and potential hazards to be the key matters for consideration. The Department's assessment concludes the modification is appropriate on the basis that it would:

- improve the performance of existing operations of the Supagas CO₂ Plant and allow the development to achieve existing production limits approved under Mod 15.
- reduce the impact of scheduled servicing and outages on production, plant and equipment.
- not significantly increase the environmental impacts of the development beyond those assessed under the original development application.

Consequently, the Department is satisfied the modification application should be approved, subject to the recommended modifying conditions of consent.

8 Recommendation

It is recommended that the Team Leader, Industry Assessments, as delegate of the Minister for Planning and Public Spaces:

- **considers** the findings and recommendations of this report
- **determines** that the application 06_0228-Mod-20 falls within the scope of section 4.55(1A) of the EP&A Act
- **forms the opinion** under clause 30A(2)(c) of the Biodiversity Conservation (Savings and Transitional) Regulation 2017 that a BDAR is not required to be submitted with this application as the application will not increase the impact on biodiversity values on the site
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to approve the modification
- **modify** the consent 06_0228
- **signs** the attached approval of the modification (**Appendix B**).

Recommended by:



19/10/2021

Shaun Williams

Senior Environmental Assessment Officer
Industry Assessments

9 Determination

The recommendation is **Adopted** by:



26 October 2021

Joanna Bakopanos

Team Leader

Industry Assessments

as delegate of the Minister for Planning and Public Spaces

Appendices

Appendix A – List of Documents

The Department has relied upon the following key documents during its assessment of the proposed development:

Modification Application

- Statement of Environmental Effects prepared by Cowman Stoddart Pty Ltd dated 5 August 2021 - <https://www.planningportal.nsw.gov.au/major-projects/project/41336>
- Air Quality Assessment prepared by GHD Pty Ltd dated 1 June 2021
- Environmental Noise Impact Assessment prepared by Harwood Acoustics Pty Ltd dated 3 August 2021
- Flood Compliance Report prepared by WMAwater Pty Ltd dated 23 June 2021
- Preliminary Hazard Analysis prepared by Pinnacle Risk Management Pty Ltd dated 29 May 2021

Submissions and Advice

- <https://www.planningportal.nsw.gov.au/major-projects/project/41336>

Department's Assessment Report for MP06_0228-Mod-15

- <https://www.planningportal.nsw.gov.au/major-projects/project/15991>

Appendix B – Modification Instrument

The recommended modification instrument for 06_0228-Mod-20 can be found on the Department's website at: <https://www.planningportal.nsw.gov.au/major-projects/project/41336>