

Viva Geelong Gas Import Terminal

Inquiry and Advisory Committee

Report No. 2 Appendices

Environment Effects Act 1978

Planning and Environment Act 1987

Pipelines Act 2005

5 October 2022

Environment Effects Act 1978

Report No. 2 Appendices under section 9(1)

Planning and Environment Act 1987

Advisory Committee report under section 151

Pipelines Act 2005

Panel report under section 47

Viva Geelong Gas Import Terminal – Report No. 2 Appendices

5 October 2022

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Glossary and abbreviations

Terms are defined in the Glossary and abbreviations section in Report No. 1.

Appendix A Terms of Reference



Terms of Reference

Viva Energy Gas Terminal Inquiry and Advisory Committee

Version: March 2022

The Viva Energy Gas Terminal Inquiry and Advisory Committee (IAC) is appointed to inquire into, and report on, the proposed Viva Energy Gas Terminal Project (the project) and its environmental effects in accordance with these Terms of Reference.

The IAC is appointed pursuant to:

- section 9(1) of the *Environment Effects Act 1978* (EE Act) as an inquiry; and
- part 7, section 151 of the *Planning and Environment Act 1987* (P&E Act) as an advisory committee.

The IAC will also provide advice that can be used to inform the Environment Protection Authority's (EPA) consideration of the development licence applications under the *Environment Protection Act 2017* prepared by the proponent for the project.

The IAC may separately be appointed by the Minister for Energy, Environment and Climate Change as a panel under section 40 of the *Pipelines Act 2005* (Pipelines Act).

Name

1. The IAC is to be known as the 'Viva Energy Gas Terminal Inquiry and Advisory Committee' (IAC).

Skills

2. The IAC members should have the following skills:
 - a. biodiversity/ecology (marine environment and terrestrial / freshwater);
 - b. dredging and contamination;
 - c. greenhouse gas emissions; and
 - d. hazard and public safety.
3. The IAC may seek additional specialist expert advice to assist it in undertaking its role.
4. The IAC will comprise of appointed Chair (IAC Chair), a Deputy Chair and other members.

Purpose of the IAC

5. The IAC is appointed by the Minister for Planning under section 9(1) of the EE Act to hold an inquiry into and report on the environmental effects of the project. The IAC is to:
 - a. review and consider the environment effects statement (EES), submissions received in relation to the project, the predicted environmental effects, and the other exhibited documents;
 - b. consider and report on the potential environmental effects of the project, their significance and acceptability, and in doing so have regard to the draft evaluation objectives in the EES scoping requirements and relevant policy and legislation;
 - c. identify any measures it considers necessary and effective to avoid, mitigate or manage the environmental effects of the project within acceptable limits, including any necessary project modifications; and
 - d. advise on how this relates to relevant conditions, controls and requirements that could form part of the necessary approvals and consent for the project.
6. The IAC is also appointed as an advisory committee under section 151 of the P&E Act to:

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- a. review draft planning scheme amendment C442ggee (PSA), which has been prepared to apply a Specific Controls Overlay (SCO) and establish planning approval for the project under an incorporated document, along with any public submissions received in relation to the draft PSA; and
 - b. recommend any changes to the draft PSA that it considers necessary.
7. The IAC is to produce a report of its findings and recommendations to the Minister for Planning to inform their assessment under the EE Act and to assist the Minister to make a decision about the draft PSA.
 8. The IAC will provide advice to inform the EPA's consideration of the development licence applications prepared by the proponent for the project.
 9. The IAC may separately be appointed by the Minister for Energy, Environment and Climate Change as a panel under section 40 of the Pipelines Act.

Background

Project outline

10. The Viva Energy Gas Terminal Project comprises the development of a gas terminal using a ship known as a floating storage and regasification unit (FSRU) at Refinery Pier in Corio Bay, adjacent to Viva Energy's Geelong Refinery. The project would bring natural gas from other parts of the country and overseas to meet south-eastern Australian gas market demand.
11. The key components of the project include:
 - a. extension of the existing Refinery Pier – a new pier arm, new berth and ancillary pier infrastructure;
 - b. localised dredging for the new berth and ship turning basin, and deposition of dredged sediment at the existing Point Wilson dredged material ground;
 - c. the FSRU continuously moored at the new berth, which would receive liquefied natural gas (LNG) from visiting LNG carriers, store and convert the LNG into natural gas when needed;
 - d. a treatment facility located within the Geelong Refinery site to check that the gas meets transmission system standards, where odorant and nitrogen (when required) is added; and
 - e. a 7-kilometre pipeline to transfer the gas from the FSRU to the South West Pipeline connection point at Lara, comprising a 3-kilometre aboveground section and a 4-kilometre underground section.
12. The project's proponent is Viva Energy Gas Australia Pty Ltd, who is responsible for preparing technical studies, consulting with the public and stakeholders and preparing an EES and draft PSA.

EES assessment process

13. In response to a referral under the EE Act from the proponent, the Minister for Planning determined on 28 December 2020 that an EES was required for the project and issued his decision with procedures and requirements for the preparation of the EES as specified in **Attachment 1**.
14. The EES was prepared by the proponent in response to the EES scoping requirements issued by the Minister for Planning in July 2021 (dated June 2021).
15. The EES will be placed on public exhibition for thirty (30) business days, together with the draft PSA, development licence applications and the pipeline licence application. This public comment process is in accordance with the procedures and requirements issued for this EES by the Minister for Planning. The proponent (Viva Energy Gas Australia Pty Ltd) is responsible for giving notice.

Commonwealth assessment process

16. Because of its potential impacts on matters of national environmental significance, the project was determined to be a controlled action for the purposes of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) on 21 February 2020. The relevant controlling provisions under the EPBC Act are Ramsar wetlands (section 16 and 17B), listed threatened species and communities (sections 18 and 18A), and listed migratory species (sections 20 and 20A).

17. Under the bilateral agreement between the Australian and Victorian Governments, the Victorian EES process is serving as the accredited process for the assessment purposes of the EPBC Act. The assessment of environmental effects to be made by the Victorian Minister for Planning will be provided to the Commonwealth Minister for the Environment to inform the approvals decision under the EPBC Act. To assist the Minister for Planning in making his assessment, the IAC should specifically identify its advice relevant to matters of national environmental significance that may be affected respectively by the project.

Planning approval process

18. The IAC is to consider and provide advice on draft PSA C442ggee that proposes planning controls and provisions for various works and activities associated with construction and operation of the project. The PSA is proposed to apply a SCO to the project area and regulate the use and development of the project in accordance with an incorporated document proposed to be included in the Greater Geelong Planning Scheme.

Development licence process

19. Two development licence applications for the project have been prepared in accordance with the provisions of the *Environment Protection Act 2017* (EP Act). The development licence applications will be jointly advertised with the EES, in accordance with section 70A of the EP Act.
20. Section 52(2)(e) of the EP Act provides that: *if the notice for the proposed development licence is intended to be combined under section 70(a) with a notice for works given under the Environment Effects Act 1978, any submissions... must be made together with any submissions made for the Environment Effects Statement relating to the works; and must be made within the time limits within which the submissions must be made for that Environment Effects Statement.* The IAC process will take place instead of a conference of interested persons under section 239 of the *Environment Protection Act 2017*.
21. The IAC is to provide advice that can be used to inform the EPA's consideration of the development licence applications prepared by the proponent. The IAC may request any further information from the proponent that it considers necessary to assist it to provide that advice. The advice should recommend avoidance, mitigation or management measures that the IAC considers are necessary to ensure compliance with any relevant legislation and/or policy.

Pipeline licence application process

22. A pipeline licence application, for the pipeline component of the project has been prepared in accordance with the Pipelines Act and forms part of the EES. Consequently, it will be jointly advertised with the EES in accordance with section 33 of the Pipelines Act.
23. The persons appointed to the IAC may separately be appointed by the Minister for Energy, Environment and Climate Change as a panel under section 40 of the Pipelines Act. If so, the members must act in accordance with the requirements of the Pipelines Act and any specifications in its instrument of appointment.

Other approvals

24. The project may require other statutory approvals and/or consents, as outlined in the EES, including but not limited to:
- an approved Cultural Heritage Management Plan under the *Aboriginal Heritage Act 2006*;
 - consents under the *Marine and Coastal Act 2018*;
 - a permit to remove listed flora and fauna under the *Flora and Fauna Guarantee Act 1988*; and
 - approvals under the *Water Act 1989* for works on relevant waterways.

Process

Stage 1 – Submissions

25. Submissions on the EES, draft PSA, development licence applications and pipeline licence application are to be provided in writing on or before the close of submissions. Submissions will be collected by the office of Planning Panels Victoria (PPV) through the Engage Victoria platform. All submissions must state the name and address of the person making the submission. Submissions will be collected and managed in accordance with the *'Guide to Privacy at PPV'*.
26. Petition responses will be treated as a single submission and only the first names from a petition submission will be registered and contacted.
27. Pro-forma submitters will be registered and contacted individually if they provide their contact details. However, pro-forma submitters who want to be heard at the Hearing may be encouraged to present as a group, given their submissions raise the same issues.
28. All written submissions and other supporting documentation or evidence received through the course of the IAC process may be published online, unless the IAC specifically directs that the submission or other material, or part of it, is to remain confidential.
29. Electronic copies of each submission on the EES, draft PSA, development licence applications and pipeline licence application are to be provided to the proponent, Department of Environment, Land, Water and Planning (DELWP) (Impact Assessment), City of Greater Geelong council and the Wadawurrung Traditional Owners Aboriginal Corporation.
30. As each submission on the EES is also a submission on the development licence applications, electronic copies of each submission, including the contact details of submitters are to be provided to the EPA. The EPA may contact submitters regarding matters related to the development licence applications.
31. As each submission on the EES is also a submission on the application for a pipeline licence, electronic copies of each submission are to be provided to DELWP (Pipelines Unit) on behalf of the Minister for Energy, Environment and Climate Change.
32. PPV will retain any written submissions and other documentation provided to the IAC for a period of five years after the time of its appointment.

Stage 2 – Public Hearing

33. Prior to the commencement of the public hearing, the IAC must hold a Directions Hearing to make directions it considers necessary or appropriate as to the conduct, scope or scheduling of the public hearing.
34. The IAC must hold a public hearing and may make other such enquiries as are relevant to undertaking its role.
35. When it conducts a public hearing, the IAC has all the powers of an advisory committee that are specified in section 152(2) of the P&E Act.
36. The IAC may inform itself in any way it sees fit, but must review and consider:
 - a. the exhibited EES, draft PSA, development licence applications and pipeline licence application;
 - b. the views of the Wadawurrung Traditional Owners Aboriginal Corporation (if known);
 - c. all submissions and evidence provided to the IAC by the proponent, state agencies, local councils and submitters;
 - d. any information provided by the proponent and parties that responds to submissions or directions of the IAC; and

- e. any other relevant information that is provided to, or obtained by, the IAC.
37. The IAC must conduct its process in accordance with the following principles:
- a. The public hearing will be conducted in an open, orderly and equitable manner, in accordance with the principles of natural justice.
 - b. The public hearing will be conducted with a minimum of formality and without legal representation being necessary for parties to be effective participants.
 - c. The IAC process is to be exploratory and constructive, with adversarial behaviour discouraged and with cross-examination / questioning regulated by the IAC.
38. The IAC may limit the time of parties appearing before it.
39. The IAC may direct that a submission or evidence is confidential in nature and the hearing be closed to the public for the purposes of receiving that submission or evidence.
40. The IAC may conduct a public hearing when there is a quorum of at least two of its members present or participating through electronic means, one of whom must be the IAC Chair or Deputy Chair.
41. If directed by the IAC, recording of the hearing must be undertaken by the proponent. If recorded, the audio recording will be provided to PPV as a weblink and would be made publicly available as soon as practicable after the conclusion of each day of the hearing, or otherwise as directed by the IAC.
42. Any other audio or video recording of the hearing by any other person or organisation may only occur with the prior consent of, and strictly in accordance with, the directions of the IAC.

Stage 3 – Report

43. The IAC must produce a written report for the Minister for Planning containing its:
- a. analysis and conclusions with respect to the environmental effects of the project and their significance and acceptability;
 - b. findings on whether acceptable environmental outcomes can be achieved, having regard to legislation, policy, best practice, and the principles and objectives of ecologically sustainable development;
 - c. recommendations and/or specific measures that it considers necessary and appropriate to prevent, mitigate or offset adverse environmental effects having regard to legislation, policy, best practice, and the principles and objectives of ecologically sustainable development;
 - d. recommendations as to any feasible modifications to the design or management of the project that would offer beneficial outcomes;
 - e. recommendations for any appropriate conditions that may be lawfully imposed on any approval for the project, or changes that should be made to the draft PSA in order to ensure that the environmental effects of the project are acceptable having regard to legislation, policy, best practice, and the principles and objectives of ecologically sustainable development;
 - f. recommendations as to the structure and content of the proposed environmental management framework, including with respect to monitoring of environmental effects, contingency plans and site rehabilitation;
 - g. recommendations with respect to the structure and content of the draft PSA;
 - h. recommendations with respect to the development licence applications, including recommendations about conditions that might appropriately be attached to the development licences if issued; and
 - i. specific findings and recommendations about the predicted impacts on matters of national environmental significance and their acceptability, including appropriate controls and environmental management.
44. The report should include:

- a. information and analysis in support of the IAC's findings and recommendations;
- b. a list of all recommendations, including cross-references to relevant discussions in the report;
- c. a description of the public hearing conducted by the IAC, and a list of those persons consulted with or heard;
- d. a list of all submitters in response to the exhibited EES; and
- e. a list of the documents tabled during the proceedings.

Timing

- 45. The IAC should hold a directions hearing no later than 20 business days from the final date of the exhibition period.
- 46. The IAC should commence the hearing no later than 50 business days from the final date of exhibition period.
- 47. The IAC must submit its report in writing to the Minister for Planning within 30 business days from its last day of its proceedings.
- 48. The DELWP's Impact Assessment Unit must liaise with PPV to agree on the Directions Hearing and Hearing dates, which are to be included on all public notices.

Minister's assessment

- 49. The Minister for Planning will make his assessment of the environmental effects of the project after considering the IAC's report as well as the EES, submissions and any other relevant matters.
- 50. PPV will notify submitters of the release of the Minister for Planning's assessment and IAC report.

Fee

- 51. The fees for the members of the IAC will be set at the current rate for a panel appointed under part 8 of the P&E Act.
- 52. All costs of the IAC, including the costs of obtaining any expert advice, technical administration and legal support, venue hire, accommodation, recording proceedings and other costs must be met by the proponent.

Miscellaneous

- 53. The IAC may apply to the Minister for Planning to vary these terms of reference in writing, at any time prior to submission of its report.
- 54. The IAC may retain legal counsel to assist if necessary.
- 55. The IAC may engage additional technical support if required.
- 56. PPV is to provide any necessary administrative support to the IAC. In addition, the Proponent is to provide any necessary administrative or technical support to the IAC in relation to the conduct of the Hearing (if required).


Richard Wynne MP
Minister for Planning

Date: 2013/1/22

Terms of Reference

Attachment 1

Procedures and requirements under section 8B(5) of the *Environment Effects Act 1978*

The procedures and requirements applying to the EES, in accordance with both section 8B(5) of the Act and the *Ministerial guidelines for assessment of environmental effects under the Environment Effects Act 1978* (Ministerial Guidelines), are as follows.

- (i) The EES is to document investigations and avoidance of potential environmental effects of the proposed project, project alternatives and their effects, as well as the feasibility of associated environmental mitigation and management measures.
- (ii) Primarily, the EES is to incorporate an integrated assessment, and characterisation of associated uncertainties, of the project's potential effects on the marine environment and ecosystem of Corio Bay from:
 - a. dredging works;
 - b. mobilisation of sediment and associated contaminants, such as arsenic and zinc;
 - c. construction at, and around, Refinery Pier;
 - d. seawater intake to and cold water/residual chlorine discharges from the floating storage and gasification unit (FSRU), and
 - e. re-use of FSRU intake seawater within the refinery and warm water/residual chlorine discharges from the refinery.The EES is also to incorporate an integrated assessment of the broader environmental effects of greenhouse gas emissions from FSRU operation.
- (iii) Secondly, the EES is to incorporate a risk-based, integrated assessment of the project's potential environmental effects on air quality, noise, agriculture, land use, native vegetation, habitat for listed threatened species, groundwater, Aboriginal and historic cultural heritage, landscape and visual amenity, and transport.
- (iv) The matters to be investigated and documented in the EES will be set out more fully in scoping requirements. Draft scoping requirements will be exhibited for 15 business days, for public comment, before final scoping requirements are issued by the Minister for Planning.
- (v) The level of detail of investigation for the EES studies should be consistent with the approach set out in the scoping requirements and be adequate to inform an assessment of the significance and acceptability of its potential environmental effects, in the context of the Ministerial Guidelines.
- (vi) The proponent is to prepare and submit to the Department of Environment, Land, Water and Planning (DELWP) a draft EES study program to inform the preparation of scoping requirements.
- (vii) DELWP will convene an inter-agency technical reference group (TRG) to advise DELWP and the proponent during the preparation of the EES on the scoping requirements, the design and adequacy of the EES studies, and coordination with statutory approval processes.
- (viii) The proponent is to prepare and submit to DELWP its proposed EES consultation plan for consulting the public and engaging with stakeholders during the preparation of the EES. Once completed to the satisfaction of DELWP, the EES consultation plan is to be implemented (and updated as appropriate) by the proponent, having regard to advice from DELWP and the TRG.
- (ix) The proponent is also to prepare and submit to DELWP its proposed schedule for the completion of studies, preparation and exhibition of the EES, following confirmation of the draft scoping requirements.
- (x) The proponent is to apply appropriate peer review and quality management procedures to enable

the completion of EES studies to a satisfactory standard.

- (xi) The EES is to be exhibited for a period of not less than 30 business days for public comment, unless the exhibition period spans the Christmas/New Year period, in which case 40 business days will apply.
- (xii) An inquiry will be appointed under the *Environment Effects Act 1978* to consider the environmental effects of the proposal.

Notification

The following parties are to be notified of this decision in accordance with sections 8A and 8B(4)(a)(i) of the *Environment Effects Act 1978*:

- Viva Energy Gas Australia Pty Ltd (proponent);
- Minister for Energy, Environment and Climate Change;
- Minister for Water;
- Secretary of the Department of Environment, Land, Water and Planning;
- Mayor of City of Greater Geelong;
- CEO of the Corangamite Catchment Management Authority;
- CEO of the Environment Protection Authority;
- Executive Director of Aboriginal Victoria;
- Executive Director of Heritage Victoria; and
- CEO of Wadawurrung Traditional Owners Aboriginal Corporation.

Appendix B List of Submitters

No.	Submitter	No.	Submitter
1	An Rogers	31	Angela Munro
2	Bob Rich, PhD	32	Hilda McLeod
3	Paul Dainton	33	Philip Talihmanidis
4	Simon Northeast	34	Jennifer Prowse
5	Judy Cameron	35	Tyali Carruthers
6	Kathleen T Gannaway	36	Peter Byrnes
7	Jennifer Tilleard	37	Julia Ekkel
8	Katie Nemet	38	Adrian Evans
9	Holly High	39	Karen Thomas
10	Jane	40	Fiona Holmes
11	Bridget Brennan	41	Alison Morgan
12	Mona ChungChao	42	Thao Tran
13	Patti Parsons	43	Christine Oughtred
14	Michele Speck	44	William Lorbeck
15	Greater Geelong City Council	45	Douglas (Jim) Mason
16	Michael Sydney	46	Sheena Walters
17	Roman Goeppert	47	Catherine Nitz
18	Yarra Climate Action Now (YCAN)	48	Linda Gleave
19	Sue Attwell (King)	49	Sophie Foyster
20	Doctors for the Environment Australia	50	Fred Ritman
21	Steve Smith	51	Andrea Buckley
22	Niki Smith	52	Jemma Caddell
23	Christine Blacket	53	Jody Winfield
24	Rod Brooks	54	Frances Gartland
25	Kelli Lavelle	55	Alex Mungall
26	Karen Lamb	56	Rikki Bandekow
27	Graeme Parsons	57	Jessica Chapman
28	Arwen Bardsley	58	Amy Fox
29	Lisa Mitchell	59	Nancy Donkers
30	Sarah Brennan	60	Trevor Grenfell

No.	Submitter	No.	Submitter
61	Chris Fox	94	Sukalpa Goldflam
62	Geoffrey Storey	95	Mark Trengove
63	Susan Langridge	96	Justine Tonner-Joyce
64	Jenny Acopian	97	Sarah Treacy
65	Matt Limb	98	Margery Smith
66	Kylie Rose	99	Robyn McLean
67	Wendy Smith	100	Jason Thomas
68	Lily Dunn	101	Lana vanGalen
69	Alice Dunn	102	Tracey Gibbs
70	Mairi Neil	103	Heidi Fog
71	Georgina Moylan	104	Vincent Lauwerier
72	Hannah Reeves	105	Nicole Sadler
73	Peter Sharp	106	Jane Card
74	Meg Odgers	107	Bernie McComb
75	Millie Forwood	108	Meredith Kidby
76	Diane Dunn	109	Nick Thieberger
77	Gabrielle Davies	110	Brigid Magner
78	Clive Whitworth	111	Drew Echberg
79	David Shannon	112	Alexandra Fraser
80	Rebecca Choi	113	Luke Santospirito
81	Vicki Green	114	Judith North
82	David Spear	115	Leesa Neylon
83	Kate Lockhart	116	Isabelle Kluger
84	Kate Padiaditis	117	Anthony Holden
85	Tim Green	118	David Lamb
86	Jelke Spear	119	Ralf Thesing
87	John Lorkin	120	Carly Dober
88	Isobel Bobbera	121	John Beaumont
89	Anke Spear	122	Kirsten Gabel
90	Monica Winston	123	Stephen Lumb
91	Timothy Carr	124	Jonathan Keren-Black
92	Joseph Kime	125	Deborah Frenkel
93	Amanda Scott	126	Paul Ford

No.	Submitter	No.	Submitter
127	Gabrielle Doolan	160	Barbara Mouy
128	Ann Taket	161	Sooren Basil
129	Irene Powell	162	Astrid Werner
130	James Brown	163	Warwick
131	Dale Martin	164	Susan Cook
132	Sandra Webb	165	Marjorie Smidt
133	Genevieve Newton	166	Peter Wells
134	Linda Dal Castello	167	Dana Lusic
135	Emma Rodda	168	Monique Connell
136	Jenny Kleine	169	Josh Whelan
137	Peter Bosland	170	Deviani Segal
138	John Lampard	171	Ian Yule
139	Andy Breden	172	Ros Paterson
140	Christine Morris	173	John de Figueiredo
141	Yvonne Berrett	174	Helen Clarke
142	Kirsty Watkins	175	Vivien Rutter
143	Steb Fisher	176	Anne Tardif
144	Sue Jackel	177	Gray Arden
145	David Smythe	178	Robyn Lansdowne
146	Susan Strong	179	Sarah Kortschak
147	Colin Morehouse	180	Mick Fischer-Brunkow
148	Michael Monash Block	181	Philip J Comer
149	Charles Street	182	Laurence Comerford
150	John Nelson	183	Pete Buckland
151	Lex Chalmers	184	Robyn McLachlan
152	Jacqueline Marks (PES)	185	Bella Dixon
153	Henry Burger	186	Rose Ovenden
154	Barbara Tinney	187	Bronwen Charleson
155	Julie Perrin	188	Alix Mellor
156	Judith Venables	189	Rosie Brooks
157	John Claringbold	190	Gary Saunders
158	Ronald Dunn	191	Jeanette Dodgshun
159	Teresa Hicks	192	Sandra Hawkins

No.	Submitter	No.	Submitter
193	Morgana Robb	226	Tom Carroll
194	Nellie Maertzdorf Ellis	227	Bernard Kersten
195	Shelley Scown	228	Sylvia van der Peet
196	Prue Gill	229	Jeff Butler
197	Karen Stephens	230	Trish Ritman
198	Brent Clark	231	Marcus May
199	Susan Linley	232	Glenda White
200	Louise Hudson	233	Cohen Walkerden
201	Aisea Kaloumaira	234	Whitehall Guesthouse
202	Phoebe Shepherd	235	Katie Flannigan
203	Glenn Staunton	236	Trevor Sault
204	Meike Suggars	237	Rachel Ropotar
205	Sara van der Meer	238	Gaye Welford
206	John Klein	239	Beatrice Naylor
207	Shamus O'Reilly	240	Jason Reading
208	Peter Anthony	241	Jessica Gray
209	Leahanne Schneider	242	Peter Stafford
210	Ruth Tai	243	Colin Sutton
211	Lois O'Connor	244	Jean Christie
212	John Ikin	245	Libby Doughty
213	Diane Vander Flier	246	Bellemo & Cat
214	Ben Calder	247	Emily Edwards
215	Rosemary Smallman	248	Stephanie Campbell
216	Markus Egli	249	Dr Hanne Falkiner
217	John Bowman	250	Penny Woodward
218	Suzanne Baker	251	Bruce MacDonald
219	Tim Williams	252	Elisa Justin
220	Jennifer Kavanagh	253	Anne Bowman
221	Helen Pallot	254	Shane Foyster
222	Frederik Fuijkschot	255	Kerrie Lyons
223	Fiona Kersten	256	Jason MacQuarrie
224	Rosemarie Kiss	257	Madelaine Stamatoiu
225	Eileen Whitehead	258	Merran Williams

No.	Submitter	No.	Submitter
259	John Sinclair	292	Roy Galey
260	Nish Suresh	293	Ian Rogers
261	Julian Rickert	294	Nicholas Sgro-Traikovski
262	Carrie van der Weyden	295	Jane Mummery
263	Maria Russell	296	Robert Castleden
264	Laudato Si'	297	Tim Humphrey
265	Erin Saar	298	Linda Clarke
266	Dale Sherwell	299	Graeme Lewis
267	Jennifer Lenard	300	Robert Coenraads
268	Steve Price	301	Allison Shanahan
269	Merv Giles	302	Melba Group
270	Peter Goy	303	Jonathan Wicks
271	Abigail Benham-Bannon	304	Lyndall Rowley
272	Craig Fryer	305	Barry Smith
273	Mari Lourey	306	Penelope Vos
274	Rhonda Attwood	307	Stephen Hovey
275	Howard	308	Ian Amsden
276	Martine Holberton	309	Olive McIntosh
277	Siobhan Guillot	310	Stella S
278	Ann Sanson	311	Emma Hopkins
279	Elizabeth Neumann	312	Andrew Leckie
280	Clare Valder	313	Robert McKenzie
281	Alan Tattersall	314	Catherine Money
282	Alison Hart	315	Steve Milton
283	Jaanda Pty Ltd	316	Maureen Donnelly
284	Paul Crosby	317	Ro Kent
285	Peter Vadiveloo	318	Antonia Settle
286	Angela C Osborne	319	Jarrad Evans
287	Timothy Ström	320	Nigel Beckwith
288	Slade Carter	321	Provokedesign
289	Michael Gaylard	322	Campbell Aitken
290	Susan Cole	323	Joy Reid
291	Michael Snell	324	Nick Brodribb

No.	Submitter	No.	Submitter
325	Christine Micah	358	Rob Harwood
326	David Thomson	359	Anda Banikos
327	Kahlia Sceney	360	Mark Nienaber
328	Bettina Terry	361	Julie Brand
329	Richard Davies	362	Kathleen Carlisle
330	Michael Staindl	363	Linda Thompson
331	Roslyn Semler	364	Anna Whitehead
332	Derek Viner	365	Janet Opie
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335	Harry Ryper (DNA)	368	Jennifer Mackenzie
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337	Anne Jones	370	Richard Hayllar
338	Trevor Shell	371	Lynette Humphris
339	Jo Fowler	372	Tim Ambrose
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345	Evan Center	378	Marion Truman
346	Kate McMenemy	379	Stephanie Black
347	Bronwyn Hunt	380	Graeme Biggins
348	Helen Ellett	381	Thom kk
349	Carolyn Philpott	382	Robert McLean
350	Sam Worpel	383	Asha Rao
351	Afrika Pearce	384	Alan Storer
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353	Lauren Salathiel	386	Elaine Hopper
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357	Daren Coles	390	Mark Minett

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395	Francis Castellino	428	Wendy Orams
396	Peter Mallen	429	Penny Andrews
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1330	Jeremy Klitzing	1363	Martin Sebastian
1331	Carrie Sze	1364	Bianca Evans
1332	Laurence Clement	1365	Kelly Perry
1333	David Woodhouse	1366	Alex Slater
1334	Nikki Lusk	1367	Rebecca Stokes
1335	Julie Woods	1368	Rose Read
1336	Janice Brown	1369	Claire Weekley
1337	Peter Jack	1370	Bonnie Uppill
1338	Simone Francis	1371	Kim Foster-Owens
1339	Suzanne Hudgell	1372	Angela Nasso
1340	Rosemary Nugent	1373	Meg Hanlon
1341	Kylie Hesketh	1374	Stella Franklin
1342	Michele Burn	1375	Nicholas Latimore
1343	Katt Murray	1376	Tim Savage
1344	Nicole Fidge	1377	Catherine Simpson
1345	Simon Reeves	1378	Megan Ballinger

No.	Submitter	No.	Submitter
1379	Anders Stenhouse	1412	Laureen Chivell
1380	Sophie Wade	1413	Gay Curtis
1381	Sarah Rickard	1414	Kelly Little
1382	Jenny Haydon	1415	Damien Griffiths
1383	Arcadia Callow	1416	Linley Hurrell
1384	Mia Smith	1417	Sarah Laverty
1385	Jen Sinclair	1418	Jon Wright
1386	James Bayard	1419	Patrick McLennan
1387	Tamsin Kelly	1420	Julie Cowell
1388	Kieran Prescott	1421	Carlo Misso
1389	Gabriel Matic	1422	Rhiannon Lematua
1390	Bree Gorman	1423	Gillian Upton
1391	Shannon Regan	1424	Robert McIntosh
1392	Johanne Martens	1425	Nicolas Pascal
1393	Rahni Gee	1426	Anne Crawford
1394	Craig Collas	1427	Stephen Hind
1395	Sonia Randhawa	1428	Protect the West Group SW Victoria
1396	Jessica Gerger	1429	Sandy Campbell
1397	Kylee Delios	1430	Rhonda Chrisanthou
1398	Greg Noy	1431	Frances Grundy
1399	Clea Morgan	1432	Sam K
1400	Andrea Myers	1433	Sanket Kakkad
1401	Mari Sleger	1434	Courtney Gardner
1402	Bernadette Systa	1435	Stacey Conroy
1403	Chris Corr	1436	Annett Finger
1404	Margaret Hender	1437	Susan Perron
1405	Bernard Peasley	1438	Sylvia Lo Piccolo
1406	Felicity Case	1439	Cecily Maller
1407	Corinne Thompson	1440	Jill Frederick
1408	Teresa Sutton	1441	Janet Miller
1409	Anthony Dunn	1442	Libby Ayre
1410	Josie Garlick	1443	Eva van der Vlies
1411	Elaine O'Brien	1444	Michael Nolan

No.	Submitter	No.	Submitter
1445	Nicola Callinan	1477	Jacquie Blight
1446	Dan van der Vlies	1478	Gladstone Conservation Council
1447	Patricia Heath	1479	Heather Cooney
1448	Maria Blampied	1480	Sally Harper
1449	Katherine Tonner	1481	Maggie Day
1450	Annette Williams	1482	Anna
1451	Benjamin Latter	1483	Rosie Lloyd
1452	Marlene Medley	1484	Sophia Grubnic
1453	Grace McKenzie-McHarg	1485	Lachie Bugg
1454	Roger Corben	1486	David Armstrong
1455	Leiset O'Reilly	1487	Julie Fraser
1456	Bernadette Greenwood	1488	Alexander Jones
1457	Sue Buchan	1489	Chris Shearer
1458	Jodie Winnell	1490	Susan Anderson
1459	Stephanie Wysser	1491	Ella Summers
1460	Samantha Horrocks	1492	Andrew Withers
1461	Deborah Jordan	1493	Hugh Whitehead
1462	Adrienne Sandow	1494	Alan Blyton
1463	Jane Rafe	1495	Colin Peace
1464	Rob Connor	1496	John Young
1465	Andrew Parsons	1497	Alexander Shaw
1466	Jill Ingham	1498	David McEwen
1467	Elizabeth Cameron	1499	Pam Blamey
1468	Peter Weymouth	1500	Susanna Foran
1469	Gwen Williams	1501	Siobhain O'Leary
1470	DEA, Doctors for the Environment Australia	1502	Frances Maxwell
1471	James Watt	1503	Teresa Szakiel
1472	Surf Coast Energy Group (SCEG)	1504	Catriona du Jardin
1473	Margaret Aldous	1505	Tiani Tomasovic
1474	Marilyn Wright	1506	Stephanie Kelly
1475	Jenny Rowe	1507	Bianca Smith
1476	Catherine Bateson	1508	Marine Education Science Community Centre (MESAC)

No.	Submitter	No.	Submitter
1509	Katy Elwin	1542	Peter Chomley
1510	Jennifer Bishop	1543	Paul Hayes
1511	Faye Chapman	1544	Jade Guitera
1512	Brenden Grull Painting & Decorating	1545	Jacqueline Dunn
1513	Tom McNamara	1546	Amelia Pearce
1514	Katrina Hamer	1547	Ann Miller
1515	Paul Swift	1548	Eleanor Pallett
1516	Rebecca Bennett	1549	Kajol Eagle
1517	Claire Cahalan	1550	Annie McCallum
1518	Priya Pathmanathan	1551	Anthony McInerney
1519	Jen Lilburn	1552	Christine Richardson
1520	Mik Aidt	1553	Katherine Rowe
1521	Nadine Underwood	1554	Dale Muccignat
1522	Kate Masterton-Bojang	1555	Emma Campbell
1523	Bridie Longg	1556	Sam Coghill
1524	Jasmine White	1557	Jacky Noble
1525	Karyn Green	1558	Karen Stagnitti
1526	Kimberly Courtney	1559	Carly Haynes
1527	Mark van den Bergen	1560	Heather Murfet
1528	Gayle Burmeister	1561	Peter Spear
1529	Alexandra Sutherland	1562	Pippa Arton-Powell
1530	Julie O'Brien	1563	Fiona Sanderson
1531	Julie Heath	1564	Inara Schubert
1532	Marco Setiawan	1565	Leeanne Carleton
1533	Christine Weston	1566	L. Ray
1534	Gabriel Shuster	1567	Brian Miller
1535	John Mitchell	1568	Attica Broderick
1536	Sarah Naylor	1569	Annie Arton-Powell
1537	Felicity Crombach	1570	Carmela Bush
1538	Tanja Milbourne	1571	Dave Kelman
1539	Justin Coburn	1572	Harriet Sanderson-Baker
1540	Helen Lyth	1573	Lisa Millar
1541	Tom Denison	1574	Sally Carmichael

No.	Submitter	No.	Submitter
1575	Samantha Glover	1608	William Wilkinson
1576	Katherine Scorpo	1609	Caroline Rigby
1577	Miranda Laird	1610	Shaun McLeod
1578	Don Juniper	1611	Tim Forcey
1579	Kenneth Laird	1612	Janette Allison
1580	Lucy Fahey	1613	Katie Hayes
1581	Kim Clatworthy	1614	Yvonne Parker
1582	Patrick Kavanagh	1615	Erica Hunt
1583	Geelong Environment Council	1616	Emma Harris
1584	Erica Pearce	1617	Dorothy Cormack
1585	Susan McLeish	1618	Barb Sheehan
1586	Christine Hart	1619	Michaela McHugh
1587	Sam Connor	1620	Morgan Laird
1588	Vishnupriya Shaw	1621	Janelle Bridge
1589	Neil Plummer	1622	Friends of Cowies Creek
1590	Danielle Forer	1623	Santiago Corujeira Gallo
1591	Meika Dorward	1624	Jackie Limsowtin
1592	Andrew Norton	1625	Allison KayAnn
1593	Michelle MacEwan	1626	Sophie Small
1594	Tuen Man Cheung	1627	Janice Bennison
1595	Imogen Arton-Powell	1628	Louise Macdonald
1596	Claire Davis	1629	Nola Wilmot
1597	Abbey DeLorenzo	1630	Meg Bullock
1598	John Pearce	1631	David Leermakers
1599	Julie Kiroloch	1632	Jenny Knox
1600	Madeleine Millett-Riley	1633	Andre Limsowtin
1601	Melinda Gomez	1634	Timothy Martin
1602	Ella Holmes	1635	Kate Simpson
1603	Nadia Andrews	1636	Alice Broadbridge
1604	Ron Bishop	1637	Sonya Zwolinski
1605	Monica Rivera	1638	Fridays For Future Greater Geelong
1606	LEAN Victoria	1639	Isabelle Barlow
1607	Bree Lord	1640	Daniel Goldberg

No.	Submitter	No.	Submitter
1641	Matthew Dingle	1673	Jo Jackson King
1642	Dean Bridgfoot	1674	Heather Turland
1643	Australian Conservation Foundations Macnamara Community Group	1675	Jeremy Cailles
1644	Dale Stohr	1676	Samantha Hammond
1645	Celeste Robertson	1677	Valerie Swanson
1646	Annie Malesic	1678	The Institute for Energy Economics and Financial Analysis
1647	Emma-Lise Donati	1679	Kylie Blackmore
1648	Eilidh Cormack	1680	Charlotte Goss
1649	Kim Taylor	1681	Katie Haydon
1650	Elizabeth McDonald	1682	Linda Pickering
1651	Sarah Mansfield	1683	Claire Cattigan
1652	Cynthia Lyons	1684	Eithne Sheedy
1653	Kelly Matos	1685	Gail Layh
1654	Milli Rathjen	1686	Tim Johnston
1655	Martin Andrews	1687	David Langmead
1656	Hannah Cameron	1688	Lis McKay
1657	Deb	1689	Sarah Robinson
1658	Gosia Suchorska	1690	Wendy Radford
1659	Richard Hamilton	1691	Mandy Gange
1660	Jed Castle	1692	Emma Wisbey
1661	Amelia Easdale	1693	Margaret Carney
1662	Marcus Maginness	1694	Mireille Limsowtin
1663	Judith Shelley	1695	Allen Harvie
1664	Amanda Healy	1696	Elizabeth Rouse
1665	Krista Bonfantine	1697	Leanne Fitzpatrick
1666	Maryrose Carney	1698	Michael Fedele
1667	Lucy Wang	1699	Greer Meehan
1668	Munro Monroe	1700	Deborah Coffey
1669	Kate Blacket	1701	Margaret Bryant
1670	Cameron Robertson	1702	Hugh Johnstone
1671	Iainie Ratajczak	1703	Alexandra Flynn
1672	Tyson Densley	1704	Layla Dickinson

No.	Submitter	No.	Submitter
1705	Josephine Missio	1737	Maggie Cowling
1706	Karen Large	1738	Jennifer Baker
1707	Stuart Humphries	1739	Rob Crittenden
1708	Vicki Mills	1740	Nani Thomas
1709	Paul Gleeson	1741	Bec Godycki
1710	Jessica Boyd	1742	Dannye Radakovich
1711	Madi O'Brien	1743	OCEAN (Otway Climate Emergency Action Network)
1712	Di Schulze	1744	Climate and Health Alliance (CAHA)
1713	Alan Flynn	1745	Marc Baptista
1714	Nicholas Bryant	1746	Louis De Koker
1715	Gracie Forshaw	1747	Elliot Henkel
1716	Candice Macqueen	1748	Jessica Sejean
1717	Shane McDonald	1749	Ande Bunbury
1718	Ann-Ael Gicquel-Sinclair	1750	Sally Tonner
1719	Gretel Templeton	1751	Tom Wright
1720	Richelle McDonald	1752	Megan Budd
1721	Brendan Bolton	1753	Alisha Sluggett
1722	Clare Stoffels	1754	Chantelle Hall
1723	Tayla Schuetz	1755	Auburn Youla
1724	Anthony Mantella	1756	Juliet Mclean
1725	Rhys Lehmann	1757	Eric Harth
1726	Gail Bateman	1758	Ane Glahn-Bertelsen
1727	Ainsley Ryan	1759	Hayden Butterworth
1728	Bryce Conway	1760	Ilana Russell
1729	Jordan Leahy	1761	Michael Warburton
1730	Kristy Bolton	1762	Association of Geelong and District Angling Clubs Inc.
1731	Mitchell Pope	1763	Sharon Bush
1732	Jo Lane	1764	Mark Cannatelli
1733	Hannah Feely	1765	Ted Clark
1734	Peter Hogan	1766	Alison Durant
1735	Lauren Ainsworth	1767	Megan Knott
1736	Simone Forwood	1768	James Styles

No.	Submitter	No.	Submitter
1769	Mariah Sampson	1802	Goshen Watts
1770	Frances Asha	1803	Lucienne Noontil
1771	Lydia Kearney	1804	Shayne Davey
1772	Marcus Foot	1805	Dominic Jones
1773	Andrew Wellington	1806	Joan Selby Smith
1774	Shaun Flynn	1807	Vicky Ellmore
1775	Rosalind Horne	1808	Sophie Medlin
1776	Steve Levakis	1809	Penny FitzGerald
1777	Don Stokes	1810	Louise Segrave
1778	Alexandra Heath	1811	Matthew Fraser
1779	Mark Vickery	1812	Nathan Straker
1780	Antonia Miller	1813	Elliott Okerstrom
1781	Michele Lindner	1814	Rebecca Cairns
1782	Jacob Lawrence	1815	Clare Hurley
1783	Anna Williams	1816	Peter Cook
1784	Joel Rickard	1817	Vicki Perrett
1785	Jasmine Wilden	1818	Australian Conservation Foundation Community Geelong
1786	Lauren Smith	1819	Maria Hauser
1787	Andrew Cox	1820	Sarah Jacobs
1788	Lee McKay	1821	Matthew Tung
1789	Jutta Beher	1822	Jacquelyn Cocomber
1790	Romeo Farasin	1823	Denise Butcher
1791	Brendan Leishman	1824	Chris Linke
1792	Janet Meade	1825	Hayley Rundell
1793	Jenni Arton-Powell	1826	Vanessa Birch
1794	Matthew L. Hall	1827	Phill Wilde
1795	Liz Zetzmann	1828	Richard Harris
1796	Margaret L'Estrange	1829	Dale Keating
1797	Geraldine Hunt	1830	Rosaria Burchielli
1798	Raelene Gavin	1831	Julie Bernardson
1799	Jennifer Callanan	1832	Florian Vichot
1800	Eileen Dunn	1833	Bret Harper
1801	Belinda Haydon	1834	Leanne Masters

No.	Submitter	No.	Submitter
1835	David Massey	1868	Marley Rocha
1836	Stuart Fry	1869	Jacqueline van der Klooster
1837	Sarah Fisher	1870	Tealah Tyrrell
1838	Linda Henricus	1871	Peter Greenwood
1839	Barwon Paediatrics	1872	Peter Mewett
1840	Karli O'Brien	1873	Geelong Renewables Not Gas campaign
1841	Matt Hrkac	1874	Heather Lawson
1842	Gillian Bormann	1875	Deline Skinner
1843	Kaylah Gawne	1876	James Murphy (Sea All Dolphin Swims)
1844	Rebecca Wray	1877	Penelope Swales
1845	Peter Moraitis	1878	Nicole Kraft
1846	Michael Wood	1879	Anna Lycett
1847	Jessica Shearer	1880	Geelong Cats Football Club
1848	Mandy McMullan	1881	Leonie Curtis
1849	Valentina Novak	1882	Vivienne Johnston
1850	Bernardo Tobias	1883	Adrien Limsowtin
1851	Helen Hodgkins	1884	Environment Protection Authority
1852	David Dillon	1885	Robert Davis
1853	Kerry Ross	1886	Janis Evans
1854	Bernadette Taylor	1887	Janet Massey
1855	Craig Fridey	1888	Matthew Richards
1856	Robon Ennor	1889	Friends of the Earth Melbourne
1857	Deb Kearney	1890	Elizabeth Jones
1858	Kay Wennagel	1891	Andrew Rivett
1859	Pauline Limsowtin	1892	Stephanie Francis
1860	Gaetan Limsowtin	1893	M Woods
1861	Karen McCallum	1894	Peter Kelly
1862	Neil Tolliday	1895	Ports Victoria
1863	Judith	1896	Chris Halpin
1864	Norlane Community Initiatives	1897	Liam McCafferty
1865	Brooklyn McGovern (Sea All Dolphin Swims)	1898	Maurice Schinkel
1866	Deborah Evans	1899	Emily Wade
1867	Sue Greenwood	1900	Aurora Kurth

No.	Submitter	No.	Submitter
1901	Claire Thomas	1934	Olivia Jackson-Corbeil
1902	Jess Davis	1935	Darcy Dunn
1903	Lorraine Young	1936	Angela Breen
1904	Janet Wade	1937	Bree Wilkinson
1905	Andrew Barrett	1938	Vanessa Thomas
1906	Jo Hunter	1939	Elle Uebergang
1907	Karen Gloury	1940	Charlotte Abbey
1908	Naomi Peters	1941	Luzie Boltz
1909	Jen Petinatos	1942	Bronwyn Coate
1910	Anna Craig	1943	Michelle Jepson
1911	James Walker	1944	Cassie Nesbitt
1912	Geelong Sustainability Group Inc	1945	Roland Maxwell
1913	Alexandra Law	1946	Chelsea Webster
1914	Jon Hughes	1947	Chris Medlin
1915	Rita Kinsella	1948	Jennifer Grant
1916	Douglas Hobson	1949	Michelle Brown
1917	Kathy MacKendrick	1950	Lorna Whittaker
1918	Mark Duggan	1951	Carla Pascoe Leahy
1919	Susan Forday	1952	Kathleen Swan
1920	Michelle Limb	1953	Sarah Laird
1921	Save Westernport Inc	1954	Warren Chapman
1922	Alice Wells	1955	Denise Hutchison
1923	Catherine Saxton	1956	Giuseppe Scelsi
1924	Anne Marinelli	1957	Carol Campbell
1925	Michael Farrell	1958	Pia Bernardi
1926	Suzanne Glendenning	1959	Catherine Mc Naughton
1927	Cherie Seeto	1960	Judy Pile
1928	Kathleen Rix	1961	Nat Fox
1929	Queenscliffe Community Association	1962	Noel Turner
1930	Phillip Limbrick	1963	Kim Lipszyc
1931	Luke Jordan Whitworth	1964	Carolien Kattenpoel Oude Heerink
1932	Su Shea	1965	Lauren Dillon
1933	Daryl Cuthell	1966	Aaron Densham

No.	Submitter	No.	Submitter
1967	Port Phillip Emergency Climate Action Network and the Beyond Gas Network	2000	Paula Ewington
1968	Geelong Grammar School	2001	Tanya Hendry
1969	Emma Cameron	2002	Dita Kasal
1970	Ella Hunt	2003	Kat Bane
1971	Will Cailles	2004	Ian Sheppard
1972	Matthew Swan	2005	Viola Rosario
1973	Natalie Starling	2006	David Cooper
1974	GeelongPort Pty Ltd and Ports Pty Ltd	2007	Kathryn Hannan
1975	Russell Armstrong	2008	Hannah Cunningham
1976	Lilli Clancy	2009	Nes Ben Romdhane
1977	Lauris Myers	2010	G Davies
1978	Meredith Henderson	2011	Karen Davies
1979	Jasmine Cooper Sutton	2012	Linda Chitham
1980	Louise Harvey	2013	Colleen Norman
1981	Liz Reen	2014	Philippa Lidgett
1982	Megan Henderson	2015	Russell Norman
1983	Urszula Wynd	2016	Save Westernport Inc
1984	Lara Cattery	2017	Madeleine Serong
1985	Ada Cheung	2018	Krystina Mossop
1986	Martin Mansfield	2019	Patrick Blampied
1987	Nikki Welsh	2020	Hamish Martin
1988	Kelly Rae	2021	Anneke Martin
1989	Anna Maria Fomin	2022	Lyndi Chapman
1990	Monika Doepgen	2023	Harrison Lengelsen-Brown
1991	Rosie Etherton	2024	Juan Nunez-Iglesias
1992	Laura Grufas	2025	Letitia Davis
1993	Brett Smith	2026	Ryan Nation
1994	North Shore Residents Group	2027	Timothy Fitzpatrick
1995	Tom Borthwick	2028	Jennie Mills
1996	Kirsty Magnuson	2029	Environment Victoria
1997	Celestina Leach	2030	Sina Lengelsen
1998	Malcolm Robins	2031	Emma Berry
1999	Borough of Queenscliffe	2032	Eleanor Marsh

No.	Submitter
2033	Cameron Inglis
2034	Caroline Caldwell
2035	Belinda Moloney
2036	Melanie Lesevic
2037	Mornington Peninsula Climate Action Network
2038	Mark Crittenden
2039	Alex Delaney
2040	Stephen Segrave
2041	Denise Ruth
2042	The Sustainable Hour podcast
2043	Bruce Gill

Appendix C List of Parties

Submitter	Represented by
Viva Energy Australia Pty Ltd (Proponent)	Stuart Morris KC with Sean McArdle and Roshan Chaile of Counsel, instructed by Davis Advisory, who called expert evidence on: <ul style="list-style-type: none"> - gas and transition to renewables from Rick Wilkinson of Energy Quest - gas and transition to renewables from Andrew Harpham of Frontier Economics - marine modelling from Dr Peter Yeates of Hydronumerics - marine ecology and water quality impact from Professor Ian Wallis of CEE - dredged sediment from Dr Belinda Goldsworthy of AECOM - marine ecology and water quality impact from Scott Chidgey of CEE - underwater noise from Craig McPherson of JASCO - terrestrial ecology from Brett Lane of Nature Advisory - greenhouse gas impact from Dr Anthony Hume of AECOM - business impact from Anthony King of AECOM - traffic impact from Adrian Koorn of AECOM - landscape and visual impact from Steve Schutt of Hansen Partnership - air quality impact from David Rollings of AECOM - noise impact from Jacqueline Davis of AECOM - noise peer review from Ross Leo Review of Clarity Acoustics - groundwater impact from Bryan Chadwick of AECOM - contamination and acid sulphate soils impact from Mark Davidson of AECOM - social impacts from Melissa Bailey of AECOM - safety, hazard and risk from Andrew Mathers of Nuffield Group - maritime and port operations safety from Kylie McDonald of Viva - land use impact from Kristina Butler of AECOM
DELWP Impact Assessment Unit	Rob Piccinin
Environment Protection Authority	Robert Forrester of Counsel, instructed by Norton Rose Fulbright
City of Greater Geelong	Peter Smith
Wadawurrung Traditional Owners Aboriginal Corporation (WTOAC)	Dr David Jones
Australian Conservation Foundation (ACF) Community Geelong	Sally Fisher, who called expert evidence on:

Submitter	Represented by
	<ul style="list-style-type: none"> - greenhouse gas emissions from Matthew Sullivan-Kilgour of Ironbark Sustainability
Geelong Grammar School	<p>Adrian Finanzio SC with Rupert Watters and Serena Armstrong of Counsel, instructed by Harwood Andrews, who called expert evidence on:</p> <ul style="list-style-type: none"> - coastal engineering and processes from Andrew McCowan of Water Technology - marine ecology from Matthew Edmunds of Australian Marine Ecology - gas market from Jim Snow of Oakley Greenwood - process safety risks from Nigel Cann of Arup - noise from Darren Tardio of Enfield Acoustics <p>and the following non expert evidence:</p> <ul style="list-style-type: none"> - Geelong Grammar School from Rebecca Cody of Geelong Grammar School
GeelongPort Pty Ltd and Ports Pty Ltd	<p>Marita Foley SC with Jordan Wright of Counsel, instructed by Clayton Utz, who called expert evidence on:</p> <ul style="list-style-type: none"> - port operations from Martin Mannion of Mannion Marine - safety, hazard and risk from Anand Pillay of DNV GL - planning from Stuart McGurn of Urbis
Anna Maria Fomin	
Anthony Gleeson	
Belinda Haydon	
Dr Belinda Moloney	
Chris Cherry	
Chris Halpin	
Christine Cook	
Claire Weekley	
Dan Tadmire and Timo Lan	
Daniel Goldberg	
Darcy Dunn	
Diane Dunn	
David Dillon	
David Huck	
David Melzer	
David Spear	
Dr Denise Ruth	
Diane Dunn	

Submitter	Represented by
Dibs Fitzgerald	
Dita Kasal	
Doctors for the Environment Australia	Dr Manasa Saripalli
Eileen Sims	
Eilidh Cormack	
Environment Victoria	Rai Miralles
Fred Ritman	
Fridays for Future Greater Geelong	Caroline Danaher and Maree Fagan
Friends of the Earth Melbourne	Freja Leonard
Geelong Environment Council	Joan Lindros
Geelong Sustainability Group Inc	Vicki Perrett
Geoffrey Storey	
The Institute for Energy Economics and Financial Analysis	Bruce Robertson
Jacqueline Dunn	
Jacqueline Kriz	
Jaimie Jeffrey	
James Malcher	
Janet Johnston	
Janice Bennison	
Jason Thomas	
Jeanette Swain	
Jennifer Hurley	
Jessica Chapman	
Dr Jim Crosthwaite	
Dr Johanne Martens	
John Finlayson	
John Godfrey	
John Young	
Justin Coburn	
Kajol Eagle	
Karen Campbell	
Kate Padiaditis	
Kylie Rose	

Submitter	Represented by
Laura Grufas	
Lauren Dillon	
Lawrence Bretag	
Madeleine Serong	
Malcolm Robins	
Mark Mackie	
Matt Limb	
Meg Bullock	
Michael Nolan	
Millie Forwood	
Mornington Peninsula Climate Action Network	Rachel Coffey
Norlane Community Initiatives	Simon Reeves
North Shore Residents Group	Garth Norman
OCEAN (Otway Climate Emergency Action Network)	Lisa Deppeler
Patrick Blampied	
Peter Chomley	
Dr Peter Cook	
Queenscliffe Community Association	David Connoley
Rebecca Sahr	
Rikki Bandekow	
Robert Patterson	
Rowan Russell	
Russell Kealey	
Sarah Hathway	
Save Westernport Inc	Jane Carnegie and Julia Stockigt
Sophia Marsden-Smith	
Dr Stephen Fisher	
Sue Attwell (King)	
Sue Bull	
Susan Langridge	
The Sustainable Hour podcast	Mik Aidt and Anthony Gleeson
Tim Forcey	

Submitter	Represented by
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Trevor Grenfell	
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Warren Chapman	
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Appendix D Document list

Version 53: 22 August 2022

No.	Date	Description	Presented by
1	12 Apr 22	Letter from DELWP Environment to Inquiry and Advisory Committee (IAC) - Late submission request	Mr Brooks, DELWP
2	13 Apr 22	Email from PPV to DELWP Environment - Response to late submission request	PPV
3	21 Apr 22	Directions Hearing notification letter	IAC
4	28 Apr 22	Letter from EPA to IAC – Environment Protection Authority (EPA) request for information notice issued to Proponent	Ms de Wit, Norton Rose Fulbright for EPA
5	“	EPA Request for Information Notice RFI001981 - 14 April 2022	“
6	29 Apr 22	Letter from DELWP Environment to IAC - no longer providing late submission	Mr Brooks, DELWP
7	29 Apr 22	Viva Energy Gas Terminal IAC - Request for Submission from Wadawurrung Traditional Owners Aboriginal Corporation (WTOAC)	IAC
8	“	Viva Energy Gas Terminal IAC - Request for Submission from Ports Victoria with attachment	“
9	“	Viva Energy Gas Terminal IAC - Request for Submission from Worksafe Victoria	“
10	“	Viva Energy Gas Terminal IAC - Request for Submission from Corangamite Catchment Management Authority (CCMA)	“
11	“	Viva Energy Gas Terminal IAC - Request for Submission from Southern Rural Water	“
12	3 May 22	Letter from EPA to IAC - Request to record hearing	Ms de Wit, Norton Rose Fulbright for EPA
13	5 May 22	IAC Request for Further Information (RFI)	IAC
14	10 May 22	Viva Energy Gas Terminal IAC - Directions	IAC
15	12 May 22	Letter from Geelong Grammar School (GGS) to IAC - Response to directions - Hearing format and arrangements	Mr Tobin, Harwood Andrews for GGS
16	16 May 22	Viva Energy Gas Terminal IAC – Hearing Timetable (v1) and Distribution list (v2)	IAC
17	16 May 22	North Shore Residents Group (s1994) - suggested site visit locations (Direction 9) – 15 May 2022	Mr Norman for North Shore Residents Group

No.	Date	Description	Presented by
18	16 May 22	Letter from Proponent to IAC – Confirmation of expert witnesses (Direction 1)	Mr Davis, Davis Advisory for Proponent
19	16 May 22	Letter from GeelongPort Pty Ltd and Ports Pty Ltd (GeelongPort) to IAC – Confirmation of expert witnesses (Direction 1)	Ms Everett and Mr Bartley, Clayton Utz for GeelongPort
20	16 May 22	Geelong Grammar School (s1968) - suggested site visit locations (Direction 9)	Mr Tobin, Harwood Andrews for GGS
21	18 May 22	Letter from David Dillon (s1852) to IAC - Response to GGS request on hearing format -17 May 2022	Mr Dillon
22	18 May 22	Letter from Australian Conservation Foundation (ACF) Community Geelong (s1818) to IAC - Response to GGS request on hearing format	Ms Fisher for ACF Community Geelong
23	18 May 22	Letter from Proponent to IAC - Response to GGS request on hearing format	Mr Davis, Davis Advisory for Proponent
24	19 May 22	Viva Energy Gas Terminal IAC - Determination of procedural matter concerning Hearing arrangements	IAC
25	20 May 22	Letter from GGS to IAC - Confirmation of expert witnesses (Direction 1)	Mr Tobin, Harwood Andrews for GGS
26	20 May 22	Letter from Southern Rural Water (SRW) to IAC – Submission in response to IAC request	Mr Morden for SRW
27	23 May 22	Letter from GGS to IAC - Confirmation of final expert witness (Direction 1)	Mr Tobin, Harwood Andrews for GGS
28	31 May 22	WTOAC – Part A Submission in response to IAC request	Dr Jones for WTOAC
29	1 Jun 22	Letter from Proponent to IAC - Request for extension to file late expert witness reports and Part A	Mr Davis, Davis Advisory for Proponent
30	1 Jun 22	Email from GGS to IAC - Response to Proponents request to file late expert witness reports	Mr Shrimpton, Harwood Andrews for GGS
31	2 Jun 22	Viva Energy Gas Terminal IAC - Response to proponent's request to file late evidence	IAC
32	1 Jun 22	Instructions for Document Sharing Platform	Mr Davis, Davis Advisory for Proponent
33	“	Proponent - Part A Submissions (Direction 12)	“
34	“	Part A Submissions Annexure 1 - Proposed Changes to Mitigation Measures	“

No.	Date	Description	Presented by
35	“	Part A Submissions Annexure 2 - Submission Response Table	“
36	“	Part A - day 1 - Incorporated Document - 1 June 2022	“
37	“	Executive Summary of Andrew Harpham - Gas and transition to renewables	“
38	“	Expert Statement of Adrian Koorn - Transport impacts	“
39	“	Expert Statement of Andrew Mathers -Safety hazard and risk assessment	“
40	“	Expert Statement of Anthony Hume - Greenhouse gas impact	“
41	“	Expert Statement of Anthony King - Business impact	“
42	“	Expert Statement of Belinda Goldsworthy - Offshore contamination including: <ul style="list-style-type: none"> a. Appendix A b. Appendix B 	“
43	“	Expert Statement of Brett Lane - Terrestrial ecology	“
44	“	Expert Statement of Bryan Chadwick - Groundwater impact	“
45	“	Expert Statement of Craig McPherson - Underwater acoustics	“
46	“	Expert Statement of David Rollings - Air quality	“
47	“	Expert Statement of Ian Wallis - Marine environmental assessment	“
48	“	Expert Statement of Jacqueline Davis - Noise and vibration	“
49	“	Expert Statement of Kristina Butler - Land use impact	“
50	“	Expert Statement of Kylie McDonald - Maritime and port operations safety	“
51	“	Expert Statement of Mark Cook - Lighting design	“
52	“	Expert Statement of Mark Davidson - Contamination	“
53	“	Expert Statement of Ross Leo - Peer review of noise and vibration	“
54	“	Expert Statement of Scott Chidgey - Marine ecology and water quality impact	“
55	“	Expert Statement of Steve Schutt - Landscape and visual including: <ul style="list-style-type: none"> a. Appendix A-1 b. Appendix A-2 c. Appendix B 	“

No.	Date	Description	Presented by
56	2 Jun 22	Expert Statement of Jen Burch - Aboriginal cultural and historic heritage including:	“
	7 Jun 22	a. Attachment CHMP 17816 Contingency Plans	“
57	2 Jun 22	Expert Statement of Peter Yeates - Marine ecology and water quality impact	“
58	2 Jun 22	Expert Statement of Rick Wilkinson - Gas and transition to renewables	“
59	3 Jun 22	Letter from GeelongPort to IAC - Request for extension to file late planning evidence	Ms Everett and Mr Bartley, Clayton Utz for GeelongPort
60	6 Jun 22	Email to GeelongPort - IAC response to GeelongPort request to file late planning evidence	PPV
61	6 Jun 22	Viva Energy Gas Terminal IAC - High Level Site Visit Itinerary	IAC
62	7 Jun 22	Letter from Ports Victoria to IAC – Submission in response to IAC request dated 23 06 22	Mr Webb for Ports Victoria
63	8 Jun 22	Viva Energy Gas Terminal IAC - Letter to Proponent on Vivas expert witnesses and addendum statement	IAC
64	7 Jun 22	Letter from Proponent to IAC – Regarding delivery of expert statement by Frontier Economics - 7 06 22	Mr Davis, Davis Advisory for Proponent
65	7 Jun 22	Letter from ACF to IAC - Request for extension to file late evidence	Ms Fisher for ACF Community Geelong
66	8 Jun 22	Letter from GGS to IAC - Response to Proponents request regarding expert statement by Frontier Economics	Harwood Andrews for GGS
67	8 Jun 22	Email from GGS to IAC - Request for extension to file late evidence and non-expert evidence	Mr Shrimpton, Harwood Andrews for GGS
68	8 Jun 22	Viva Energy Gas Terminal IAC - Response to requests for extensions for the filing of evidence	IAC
69	8 Jun 22	Expert Statement of Anand Pillay - Safety, hazard and risk	Ms Everett and Mr Bartley, Clayton Utz for GeelongPort
70	“	Expert Statement of Martin Mannion - Port planning and operations	“
71	8 Jun 22	Expert Statement of Darren Tardio - Noise	Harwood Andrews for GGS
	14 Jun 22	a. Appendix F: EMF Mitigation measures – Mark up (word copy)	“
72	“	Expert Statement of Matt Edmunds - Marine ecology	“
73	“	Expert Statement of Nigel Cann - Process safety risks	“

No.	Date	Description	Presented by
74	8 Jun 22	Proponent - Response to EPA's request for information ID RFI001981	Mr Davis, Davis Advisory for Proponent
75	9 Jun 22	Expert Statement of Andrew McCowan - Effects of dredging and seawater discharges	Harwood Andrews for GGS
76	8 Jun 22	Letter from Worksafe Victoria to IAC – Submission in response to IAC request	Mr Radford for Worksafe Victoria
77	8 Jun 22	Letter from GeelongPort to IAC - Site inspection arrangements	Ms Everett and Mr Bartley, Clayton Utz for GeelongPort
78	10 Jun 22	Expert Statement of Andrew Harpham - gas and transition to net zero	Davis Advisory for Proponent
79	10 Jun 22	Expert Statement of Stuart McGurn - Planning	Mr Bartley, Clayton Utz for GeelongPort
80	10 Jun 22	Letter from Proponent to parties - Expert Conclaves	Mr Davis, Davis Advisory for Proponent
81	10 Jun 22	Non Expert Statement of Rebecca Cody - Geelong Grammar School: <ul style="list-style-type: none"> a. Segment 001 b. Segment 002 c. Segment 003 d. Segment 004 e. Segment 005 f. Segment 006 	Harwood Andrews for GGS
82	13 Jun 22	Letter from GeelongPort to Proponent - opposing maritime and port operations expert conclave	Ms Everett and Mr Bartley, Clayton Utz for GeelongPort
83	14 Jun 22	Letter from Proponent to GeelongPort – Response to objection of maritime and port operations expert conclave	Mr Davis, Davis Advisory for Proponent
84	14 Jun 22	Letter from Geelong Port to Proponent - Safety, hazard and risk expert conclave	Ms Everett and Mr Bartley, Clayton Utz for GeelongPort
85	15 Jun 22	Expert Statement of Matthew Sullivan-Kilgour - greenhouse gases	Ms Fisher for ACF Community Geelong
86	15 Jun 22	Expert Statement of Jim Snow - gas market	Harwood Andrews for GGS
87	15 Jun 22	Letter From Proponent to GeelongPort - Response to Safety, hazard and risk expert conclave letter	Mr Davis, Davis Advisory for Proponent

No.	Date	Description	Presented by
88	16 Jun 22	Letter from Proponent to IAC – Presentation order of expert evidence at hearing	Mr Davis, Davis Advisory for Proponent
89	“	Letter from Proponent to IAC – Requesting extension for expert Conclave for Greenhouse Gas Emissions and Climate Change	“
90	16 Jun 22	Viva Energy Gas Terminal IAC - Hearing Timetable (v2)	IAC
91	16 Jun 22	Email to Proponent - IAC response to extension request for expert conclave for Greenhouse Gas Emissions and Climate Change	PPV
92	16 Jun 22	Viva Site visit map: <ul style="list-style-type: none"> a. Aboriginal Place b. Landuse typologies c. LVIA viewpoint locations d. Project overview e. Terrestrial ecology f. Traffic survey locations 	Ms Bishop for Proponent
93	16 Jun 22	Geelong Grammar School Part C - Site visit map - 16 June 2022	Mr Shrimpton, Harwood Andrews for GGS
94	16 Jun 22	Extension request on port operation and navigational issues conclave	Ms Everett and Mr Bartley, Clayton Utz for GeelongPort
95	17 Jun 22	Traffic Management Plan Maps from GeelongPort Site Tour	“
96	“	Site inspection maps: <ul style="list-style-type: none"> a. Part B - Key project locations along the pipeline route b. Part D – Unaccompanied site visit Itinerary and maps 	Ms Bishop for Proponent
97	“	Letter to the Committee from the Proponent regarding the Expert Statement by Mr McPherson	Mr Davis, Davis Advisory for Proponent
98	“	Presentation to IAC from DELWP Impact Assessment Unit	Mr Piccinin, DELWP Impact Assessment Unit
99	“	Addendum to the Expert Witness Statement of Jen Burch	Ms Van Weezup for the Proponent
100	“	Comparison document of the underwater noise technical report A2, Appendix A-3 - 2.0 and 3.0	“
101	“	Statement of agreed opinions and facts for Marine Ecology	“

No.	Date	Description	Presented by
102	"	Statement of agreed opinions and facts for Marine Modelling	"
103	"	Statement of agreed opinions and facts for Safety, Hazard and Risk	"
104	"	Underwater noise impact assessment – Version 2	"
105	"	Aerial image of the project area	Ms Bishop for Proponent
106	"	Aerial image of the refinery	"
107	"	Extension request for acoustic conclave statement and IAC response	IAC
108	Hearing Day 1 20 Jun 22	Previous Evidence of Mr Jim Snow, dated 1 October 2021	Mr Morris KC for Proponent
109	"	Previous Evidence of Mr Jim Snow, dated 22 September 2021	"
110	"	Previous Evidence of Mr Jim Snow, dated Oct 2021	"
111	"	Response to the IAC RFI	"
112	"	Rick Wilkinson Response to Submission	"
113	"	Statement of agreed opinions and facts for Gas Market	"
114	"	Viva Presentation Rationale Pt 1	"
115	"	Viva Presentation Rationale Pt 2	"
116	"	Email to Parties - IAC response to request for extension of expert meeting on port operations and navigation	PPV
117	Hearing Day 2 21 Jun 22	Presentation of Evidence of Rick Wilkinson - Gas and transition to renewables	Mr Morris KC for Proponent
118	"	Presentation of Evidence of Andrew Harpham - gas and transition to net zero	"
119	"	AEMO Gas Statement of Opportunities, March 2022	"
120	"	Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2000)	"
121	"	Best Practice Environmental Management Guidelines for Dredging, EPA Pub 961	"
122	"	Consolidated Environmental Reference Standard (ERS) Prepared by EPA, 29 Mar 2022	"
123	"	Hydronumerics 2022 Regional Modelling Report <ul style="list-style-type: none"> a. Part 1 b. Part 2 c. Part 3 	"

No.	Date	Description	Presented by
d. Part 4			
124	“	National Assessment Guidelines for Dredging 2009	“
125	“	PPBWS and BP Ramsar Site Management Plan	“
126	“	Presentation for Marine Opening Remarks	“
127	“	Presentation of Evidence of Dr Ian Wallis - Marine environmental assessment	“
128	“	Presentation of Evidence of Dr Peter Yeates - Marine ecology and water quality impact	“
129	“	Viva Energy Geelong Energy Hub Summary	“
130	“	Letter from Proponent to IAC - Proposed changes to hearing timetable - 21 06 22	Mr Davis, Davis Advisory for Proponent
131	“	Viva Energy Gas Terminal IAC - Hearing Timetable (v3)	IAC
132	Hearing Day 3 22 Jun 22	Statement of agreed opinions and facts for noise	Mr Morris KC for Proponent
133	“	ACCC Gas Inquiry 2017-2025 Interim Report, January 2022	“
134	“	Presentation of Evidence of Dr Belinda Goldsworthy - Offshore contamination	“
135	“	Presentation of Evidence of Mr Scott Chidgey - Marine ecology and water quality impact	“
136	Hearing Day 4 23 Jun 22	Additional material prepared by Mr Chidgey on seagrasses and components near Refinery Pier (Nearmaps Compilation)	Mr McArdle for Proponent
137	“	Statement of Agreed Opinions and Facts for Greenhouse Gas	Ms Gregg, Davis Advisory for Proponent
138	24 Jun 22	Statement of Agreed Opinions and Facts for Port Operations and Navigation	Mr Bartley, Clayton Utz for GeelongPort
139	24 Jun 22	Presentation of Evidence of Mr Craig McPherson – underwater noise	Davis Advisory for Proponent
140	“	Presentation of Evidence of Mr Brett Lane – terrestrial ecology	“
141	“	Presentation of Evidence of Dr Anthony Hume – greenhouse gas impact	“
142	Hearing Day 6 27 Jun 22	Clarification of Closed Loop Mode Discharges from Dr Ian Wallis	Davis Advisory for Proponent
143	“	Hearing Submission	Sarah Fisher

No.	Date	Description	Presented by
144	“	Letter from WorkSafe Victoria to IAC - submission confidentiality and involvement in hearing – 24 06 22	Ms Petroulias for WorkSafe Victoria
145	“	Counsel Opening Remarks for Greenhouse Gas	Mr Morris KC for Proponent
146	“	Presentation of Evidence of Mr Anthony King – business impact	Davis Advisory for Proponent
147	“	Presentation of Evidence of Mr Adrian Koorn - traffic	“
148	“	Presentation of Evidence of Mr Stephen Schutt - landscape and visual	“
149	“	AECOM meeting minutes – 12 Jul 21 and 19 Aug 21	Mr Bartley, Clayton Utz for GeelongPort
150	“	Addendum to Technical to Report D (terrestrial ecology assessment) – Peer Review – 1 Jun 22	Davis Advisory for Proponent
151	Hearing Day 7 28 Jun 22	West-East Pipeline Pre-Feasibility Study - 22 March 2018	Davis Advisory for Proponent
152	“	Proposed Changes to Traffic Mitigation Measures	“
153	“	Opening Remarks for Air and Noise	“
154	“	Presentation of Evidence of Mr David Rollings - air quality	“
155	“	Presentation of Evidence of Ms Jacqueline Davis - noise impact	“
156	“	Presentation of Evidence of Mr Ross Leo - peer review of noise	“
157	“	Memorandum by Mr Ross Leo for Review of Existing Noise Environment	“
158	“	EPA Guideline for Assessing and Minimising Air Pollution, publication 1961	“
159	“	EPA Technical Guide Measuring and Analysing Industry Noise and Music Noise, publication 1997	“
160	“	EPA Guide to the Environment Reference Standard, publication 1992	“
161	“	EPA Noise Protocol, publication 1826.4	“
162	Hearing Day 8 29 Jun 22	Presentation of Evidence of Mark Davidson - Contamination and Acid Sulfate Soil	Davis Advisory for Proponent
163	“	Presentation of Evidence of Kristina Butler – Land Use Impacts	“
164	“	Presentation of Evidence of Mr Bryan Chadwick - groundwater impact	“

No.	Date	Description	Presented by
165	Hearing Day 9 30 Jun 22	Dr Peter Yeates Response to IAC Questioning	Davis Advisory for Proponent
166	“	Opening Remarks for Air and Noise with Annotations	“
167	“	Technical Note 001: Extension to Port Zone	Davis Advisory for Proponent
168	“	Draft Statement of Agreed Facts and Opinions on Noise with track changes	“
169	“	Jacqueline Davis CV (Appendix A of Document 48)	“
170	“	Supplementary Statement on Noise Prepared by Ms Davis	Mr Morris KC for Proponent
171	“	Appendix A draft Statement Noise Mitigation Measures with Track Changes: a) Attachment F to Tabled Doc 71 – Word Version b) Attachment F to Tabled Doc 71 – PDF Version	“
172	“	Viva Energy Gas Terminal IAC - Hearing Timetable (v4)	IAC
173	“	Article Reducing Noise from an Oil Refinery Catalytic Distillation Column in Noise Control Engineering Journal	Davis Advisory for Proponent
174	“	CV of Ms Melissa Bailey: a) long form version b) Short Corporate CV	“
175	“	Viva Energy Gas Terminal Project - Consultation Plan, July 2021	“
176	Hearing Day 10 1 Jul 22	Letter to the IAC re PIANC Study Clarification [30.06.22]	Davis Advisory for Proponent
177	“	Technical Report D: Addendum – Peer Review Terrestrial Ecology Impact Assessment	“
178	“	Worley Report, FSRU Mooring Analysis (preliminary draft)	“
179	“	Worley Report, FSRU and LNGC Compatibility and Side-by-Side Mooring Analysis (preliminary draft)	“
180	“	Opening Remark Safety, Hazard and Risk	“
181	“	Presentation of Evidence Mr Mathers on Safety Hazard and Risk	“
182	“	VCAT Decision - SITA Australia Pty Ltd and PMW(Lyndhurst) Pty Ltd	“
183	Hearing Day 11 4 Jul 22	Supplementary Statement of Nigel Cann	Mr Finanzio for Geelong Grammar School

No.	Date	Description	Presented by
184	“	Victoria’s Gas Substitution Roadmap	Davis Advisory for Proponent
185	Hearing Day 12 5 Jul 22	Slides for IAC’s questions on Greenhouse Gas Impact for Dr Hume	IAC
186	“	Slides for IAC’s questions on Marine Modelling for Dr Yeates	“
187	“	Slides for IAC’s questions on Terrestrial Ecology for Mr Lane	“
188	“	Slides for IAC’s questions on Air Quality for Mr Rollings	“
189	“	Slides for IAC’s questions on Groundwater for Mr Chadwick	“
190	“	Slides for IAC’s questions on Marine Ecology for Dr Wallis	“
191	“	Technical Memo prepared by Dr Wallis on Ichthyoplankton Data	Davis Advisory for Proponent
192	“	Letter outlining proposed order of witnesses	Harwood Andrews for Geelong Grammar School
193a	“	Technical Report on Benthic Habitats	Davis Advisory for Proponent
193b	“	Technical Report on Phytoplankton Sampling	“
193c	“	Technical Report on Zooplankton Sampling	“
193d	“	Technical Report on Temperature and Salinity	“
193e	“	Technical Report on Infauna Sampling	“
193f	“	Technical Report on Current Monitoring	“
193g	“	Technical Report on Light Attenuation	“
193h	“	Technical Report on Ichthyoplankton Sampling	“
194a	“	Email chain between Viva and GGS regarding RFI dated 17 March 2022 (1 of 2)	Harwood Andrews for Geelong Grammar School
194b	“	Email chain between Viva and GGS regarding RFI dated 17 March 2022 (2 of 2)	“
194c	“	Email chain between Viva and GGS regarding RFI dated 27 March 2022	“
194d	“	Email chain between Viva and GGS regarding RFI dated 14 April 2022	“
194e	“	Email chain between Viva and GGS regarding RFI dated 4 May 2022	“
195	“	Final Moolap Coastal Strategic Framework	Davis Advisory for Proponent
196	“	Mitigation Measures Clarification by Mr McPhearson	“

No.	Date	Description	Presented by
197	“	Slides for IAC’s questions on marine ecology and water quality impacts for Mr Chidgey	IAC
198	Hearing Day 14 7 Jul 22	Submission	WTOAC
199	“	Slide Presentation	“
200	“	Proponent Part B Submission (Word doc and PDF Version)	Davis Advisory for Proponent
201	“	Mitigation Register Part B Submission	“
202	“	Effect of In Situ Light Reduction on Density and Growth of the Seagrass <i>Heterozostera Tasmanica</i> (Not uploaded to Engage Vic Website due to commerciality considerations)	“
203	“	Noise Legal Submission	“
204	“	Viva submission on the Victorian Government Gas Roadmap	“
205	“	EE Act legal Submission	“
205a.	“	Attachment to EE Act Legal Submission	“
206	“	Air Quality Memorandum	“
207	“	Worley Proof of Concept Study, Concept Report	“
208	“	Corio Bay Channel Safety Adjustment Program, Turbidity from Dredging Cardno 2011	“
209	“	Corio Bay Channel Improvement Program by Lawson and Treloar 1998	“
210	“	Assessing Water Quality with Submersed Aquatic Vegetation by Densson et al 1993	“
211	“	Technical Report F Updated Figures by Mr Chadwick	“
212	“	Slide Presentation	Ms Fisher for ACF Community Geelong
213	“	Slide Presentation Mr Sullivan-Kilgour	“
214	“	Submission	Mr Smith for City of Greater Geelong
215	“	Dr Hume’s questions to Viva Energy about operational control (June 2021)	Davis Advisory for Proponent
216	“	Viva Energy responses to Dr Hume’s questions (August 2021)	“
217	“	Submission	Mr Forrester for EPA
218	“	Further Noise Measurement Detail by Mr Leo	Davis Advisory for Proponent

No.	Date	Description	Presented by
219	“	Geelong Grammar Attended Measurements by Mr Leo	“
220	Hearing Day 15 8 Jul 22	Emails provided by Dr Hume in relation to operational control	“
221	“	Avalon Corridor Strategy – Cultural Values Strategy	Dr Jones for WTOAC
222	“	Channel Deeping Existing Conditions Report	“
223	“	Response to Committee question on the amended ME05	Davis Advisory for Proponent
224	“	Geelong Hydrogen Hub EES Referral Form	“
225	“	Geelong Hydrogen Hub EES Attachment-A Terrestrial Ecology	“
226	“	Geelong Hydrogen Hub EES Attachment-B Marine Ecology	“
227	“	Geelong Hydrogen Hub EES Attachment-C Surface Water	“
228	“	Geelong Hydrogen Hub EES Attachment-D Groundwater	“
229	“	Geelong Hydrogen Hub EES Attachment-E Contamination	“
230	“	Geelong Hydrogen Hub EES Attachment-G Air Quality	“
231	“	Geelong Hydrogen Hub EES Attachment-H Noise	“
232	“	Geelong Hydrogen Hub EES Attachment-I Traffic and Transport	“
233	“	Geelong Hydrogen Hub EES Attachment-J Safety, Hazard and, Risk	“
234	“	Geelong Hydrogen Hub EES Attachment-K GHG	“
235	“	Geelong Hydrogen Hub EES Appendix-A Figures	“
236	“	Correspondence from Mr David Rollings re Sensitivity Testing	“
237	“	Mr Scott Chidgey - Response to IAC Request for Information	“
238	“	Hearing Timetable (v5) - 08 07 22	IAC
239	Hearing Day 16 11 Jul 22	Presentation Slides – Rebecca Cody	Harwood Andrews for Geelong Grammar School
240	“	Presentation Slides – Andrew McGowan	“
241	“	Sandia Report US Department of Energy Dec 2004	ACF Community Geelong
242	“	Legal submission regarding acceptability standard	Davis Advisory for Proponent

No.	Date	Description	Presented by
243	“	Presentation of Matt Edmunds	Harwood Andrews for Geelong Grammar School
244	“	Presentation of Nigel Cann	“
245	“	Presentation of Jim Snow	“
246	Hearing Day 17 12 Jul 22	Update to the MNES assessment prepared by Nature Advisory, B Lane	Davis Advisory for Proponent
247	“	Response to <i>Siting and Design Guidelines for Structures on the Victorian Coast</i> , B Lane	“
248	“	Technical Note 002: Cultural Heritage Management Plan (CHMP) Map (TN002)	“
249	“	Dredging Simulations for the Port Adelaide Channel Deepening, McCowan and Kahl 2005.	“
250	“	1993 Corio Bay Channel Improvement EES extracts	“
251	“	Port of Melbourne EMP for Dredging Turbidity Detailed Design, 2008	“
252	“	QRA Assumption Population Distribution for Societal Risk (provided by Mr Andrew Mathers)	“
253	“	Technical Memorandum by Andrew Mathers on amount of gas supplied by 29 LNG carrier cargoes per year	“
254	“	Dr Belinda Goldsworthy's Comments on the Mitigation Measures	“
255	“	JCJ Consulting SIRA Workshop Report (Redacted)	“
256	“	Technical Memorandum by Dr Peter Yeates re Extended Review of Mitigations	“
257	“	Letter to the Committee re SIRA Documents [06.07.22]	“
258	“	Letter to IAC (SIRA documents) 11.7.22	Ms Everett and Mr Bartley, Clayton Utz for GeelongPort
259	“	CONFIDENTIAL - SIRA risk Assessment Workshop excel spreadsheet	Davis Advisory for Proponent
260	Hearing Day 18 13 Jul 22	VCAT Decision for Viva Energy Australia Pty Ltd v Glen Eira CC (Corrected) [2021] VCAT 701	“
261	“	Overpressure Levels of Concern - NOAA Office of Response and Restoration	“
262	“	VCAT Decision for Wilcon Projects Pty Ltd v Hobsons Bay CC [2016] VCAT 1929	“

No.	Date	Description	Presented by
263	“	Major Hazard Facilities Advisory Committee Final Report, 19 July 2016	“
264	“	Consultation Paper on the high level design of a potential energy capacity mechanism, Energy Security Board, June 2022	“
265	“	Transcripts of Mr Jim Snow's Interview for the Australian Hydrogen Forum 2022: Doc 265(i) - Part 1 Doc 265(ii) – Part 2	“
266	“	Transcript of the WORM Hearing, 4 October 2021	“
267	“	AEMO Demand Forecasts, Step Change Scenario, Victoria only	“
268	“	The NSW Roads and Maritime Services Construction Noise and Vibration Guideline	Mr Withers, Norton Rose Fulbright for EPA
269	“	Presentation – Darren Tardio – Viva Gas IAC Hearing (not uploaded to Engage Victoria due to file size)	Harwood Andrews for Geelong Grammar School
270	Hearing Day 19 14 Jul 22	NEL Electrolyser Media Statement	Davis Advisory for Proponent
271	“	Viva Energy Electrolyser Media Statement	“
272	“	Mr Tardio Noise Presentation (Including Video) (not uploaded to Engage Victoria due to file size)	Harwood Andrews for Geelong Grammar School
273	“	Noise Log Provided by Mr Tardio	“
274	“	Recording Provided by Mr Tardio (not uploaded to Engage Victoria due to file size)	“
275	“	images from camera tows over the seabed (underwater footage) (not uploaded to Google Drive or Engage Victoria due to file size)	Davis Advisory for the Proponent
276	Hearing Day 20 18 Jul 22	Responses to Questions from the Panel	Ms Fisher for ACF Geelong
277	“	Overview of the Hydrogen Hub (18.7.22)	Clayton Utz for GeelongPort
278	“	Presentation of Mr Mannion	“
279	“	Draft Scoping Requirements for Offshore Wind Farm Project Environment Effects Statement (Victoria) (July 2022)	Dr Jones for WTOAC

No.	Date	Description	Presented by
280	“	Response to questions raised by the IAC	Dr Jones for WTOAC
281	27 Jul 22	Response to questions from the IAC of Mr Edmunds (annotated 27 July) (Note Tabled documents 424 and 425 outline those documents between 281 and 372 that were not suitable to be uploaded to Engage Victoria due to copyright status).	Harwood Andrews for Geelong Grammar School
282	“	Edmunds 1a - Statement of agreed opinions and facts for Marine Ecology (annotated 27 July)	“
283	“	Edmunds 1b - Minutes of Marine Ecology Conclave dated 15 June 2022 (annotated 27 July)	“
284	“	Edmunds 2a - Chlorination by-products in power station cooling water (BEEMS 2011) (annotated 27 July)	“
285	“	Edmunds 2b - Chlorination by-product concentration levels in seawater and fish of an industrialised bay (Science of the Total Environment 2015, Boudjellaba et al.) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
286	“	Edmunds 2g - Simulating the spread of disinfection by-products and anthropogenic bromoform emissions from ballast water discharge in Southeast Asia (Ocean Science, 2019, Maas et al.) (annotated 27 July)	“
287	“	Edmunds 2d - Disinfection by-products and ecotoxicity of ballast water after oxidative treatment (NIVA, 2013, Delacroix et al.) (annotated 27 July)	“
288	“	Edmunds 2e - EPA Victoria Guidelines for Environmental Management 2002 (annotated 27 July)	“
289	“	Edmunds 2f - Bromination of Marine Dissolved Organic Matter following Full Scale Electrochemical Ballast Water Disinfection (2015, Gonsior et al.) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
290	“	Edmunds 2h - Occurrence and speciation of chlorination by-products in marine waters and sediments of a semi-enclosed bay exposed to industrial chlorinated effluents (HAL, 2019, Manasfi et al.) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
291	“	Edmunds 2i - Treated ballast water and its impact on port water quality (DAWE, 2019, Summerson et al.) (annotated 27 July)	“
292	“	Edmunds 2j - Emerging risks from ballast water treatment: The run-up to the International Ballast Water Management Convention (Chemosphere, 2014, Werschkun et al.) (annotated 27 July)	“

No.	Date	Description	Presented by
293	“	Edmunds 3a - Ecological consequences of dredged material disposal in the marine environment: A holistic assessment of activities around the England and Wales coastline (Marine Pollution Bulletin, Bolam et al.) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
294	“	Edmunds 3b - Modelling potential impacts of bottom trawl fisheries on soft sediment biogeochemistry in the North Sea (Geochemical Transactions, 2001, Duplisea et al.) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
295	“	Edmunds 3c - The Puck Bay as an example of deep dredging unfavourably affecting the aquatic environment (International Journal of Oceanological and Hydrobiology, 2009, Graca) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
296	“	Edmunds 3d - Port Phillip Bay Environmental Study, Final Report (CSIRO, 1996, Harris et al.) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
297	“	Edmunds 3e - Functional trait responses to sediment deposition reduce macrofauna-mediated ecosystem functioning in an estuarine mudflat (Biogeosciences, 2018, Mestdach et al.) (annotated 27 July)	“
298	“	Edmunds 3f - Dredging-induced turbid plumes affect bio-irrigation and biogeochemistry in sediments inhabited by <i>Lanice conchilega</i> (ICES Journal of Marine Science, 2020, Mestdach et al.) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
299	“	Edmunds 3g - Impacts of bottom trawling on benthic biogeochemistry in muddy sediments: Removal of surface sediment using an experimental field study (Marine Environmental Research, 2021, Morys et al.) (annotated 27 July)	“
300	“	Edmunds 3h - Port Phillip Bay Integrated Model: Final Report (CSIRO, 1997, Murray et al.) (annotated 27 July)	“
301	“	Edmunds 3i - The impact of dredging works in coastal water: A review of the sensitivity to disturbance and subsequent recovery of biological resources on the seabed (Oceanography and Marine Biology: An Annual Review, 1998, Newell et al.) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
302	“	Edmunds 3j - Anthropogenic disturbance keeps the coastal seafloor biogeochemistry in a transient state (Scientific Reports, 2017, Velde et al.) (annotated 27 July)	“
303	“	Edmunds 4a - Feedback between sediment and light for seagrass: Where is it important? (Limnology and	“

No.	Date	Description	Presented by
		Oceanography, 2016, Adams et al.) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	
304	“	Edmunds 4b - Effects of In Situ Light Reduction on Density and Growth of the Seagrass <i>Heterozostera Tasmanzca</i> in Western Port, Victoria, Australia (Bulthuis, 1983) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
305	“	Edmunds 4c - Turbidity – Detailed Design (2008, Port of Melbourne Corporation) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
306	“	Edmunds 4d - Light thresholds to prevent dredging impacts on the Great Barrier Reef seagrass, <i>Zostera muelleri</i> ssp. <i>Capricorni</i> (Frontiers in Marine Science, 2016, Chartrand et al.) (annotated 27 July)	“
307	“	Edmunds 4e - Drivers of change to seagrass distributions and communities on the Great Barrier Reef (Reef and Rainforest Research Centre Cairns, 2009, Collier) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
308	“	Edmunds 4f - Light thresholds for seagrasses of the GBR: a synthesis and guiding document. Including knowledge gaps and future priorities (Reef and Rainforest Research Centre Limited, Cairns, 2016, Collier et al.) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
309	“	Edmunds 4g - Gold Coast Seagrass Sensitivities and Resilience (SRMP-003). Report to Gold Coast Waterways Authority (2015, Connolly et al.) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
310	“	Edmunds 4h - EPA Victoria Dredging Guidelines (2001) (annotated 27 July)	“
311	“	Edmunds 4i - Forecasting Responses of Seagrass Distributions to Changing Water Quality Using Monitoring Data (Ecological Applications, 2003, Fourqueran et al.) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
312	“	Edmunds 4j - Statistical Aspects of Turbidity Monitoring (Port of Melbourne Corporation, 2007, Fox et al.) Part 1 (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
313	“	Edmunds 4k - ““Part 2 (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
314	“	Edmunds 4l - ““Part 3 (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“

No.	Date	Description	Presented by
315	“	Edmunds 4m - “Part 4 (annotated 27 July) [not uploaded to Engage Vic]	“
316	“	Edmunds 4n - “Part 5 (annotated 27 July) [not uploaded to Engage Vic]	“
317	“	Edmunds 4o - “Part 6 (annotated 27 July) [not uploaded to Engage Vic]	“
318	“	Edmunds 4p - Seagrass resilience in Port Phillip Bay: Final report to the seagrass and reefs program for Port Phillip Bay (Melbourne University, 2015, Jenkins et al.) (annotated 27 July) [not uploaded to Engage Vic]	“
319	“	Edmunds 4q - Effects of irradiance, temperature, and nutrients on growth dynamics of seagrasses: A review (Journal of Experimental Marine Biology and Ecology, 2007, Lee et al.) (annotated 27 July) [not uploaded to Engage Vic]	“
320	“	Edmunds 4r - Current state of knowledge regarding the effects of dredging-related ‘pressure’ on seagrasses (WAMSI Dredging Science Node Report, 2017, McMahan et al.) (annotated 27 July)	“
321	“	Edmunds 4s - Response and recovery of a mixed tropical seagrass assemblage to variation in the frequency and magnitude of light deprivation (Report of Theme, 2017, Statton et al.) (annotated 27 July)	“
322	“	Edmunds 4t - Channel Deepening Project Light Monitoring Programme. Turbidity and Kd Relationships (Report of Port of Melbourne, 2008, Thomas) (annotated 27 July) [not uploaded to Engage Vic]	“
323	“	Edmunds 5a - Post-dredging recovery of seagrasses in the Geraldton region (CSIRO, 2008, Babcock et al.) (annotated 27 July) [not uploaded to Engage Vic]	“
324	“	Edmunds 5aa - Photosynthesis and Metabolism in Seagrasses at the Cellular Level (Biology, Ecology and Conservation, 2006, Larkum et al.) (annotated 27 July) [not uploaded to Engage Vic]	“
325	“	Edmunds 5b - An integrated study of the Gladstone Marine System, GISERA, 2015, Baird) (annotated 27 July) [not uploaded to Engage Vic]	“
326	“	Edmunds 5bb - Effects of Temporary PAR reduction on the seagrass Amphibolis griffithii (Black) den Hartog, 2004, Mackey) (annotated 27 July) [not uploaded to Engage Vic]	“
327	“	Edmunds 5c - Field verification of a light-driven model of biomass changes in the seagrass Halodule wrightii	“

No.	Date	Description	Presented by
		(Marine Ecology Progress Series, 2001) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	
328	“	Edmunds 5cc - Current state of knowledge regarding the effects of dredging-related ‘pressure’ on seagrasses (WAMSI Science Node Report, 2017, McMahon et al.) (annotated 27 July)	“
329	“	Edmunds 5d - Deepwater seagrass dynamics in Hay Point Measuring variability and monitoring impacts of capital dredging (2008, Chartrand et al.) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
330	“	Edmunds 5dd - Remote estimation of aquatic light environments using machine learning: A new management tool for submerged aquatic vegetation (Science of the Total Environment, 2021, Pearson et al.) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
331	“	Edmunds 5e - Development of a Light-Based Seagrass Management Approach for the Gladstone Western Basin Dredging Program (Gladstone Western Basin Dredging Light-Based Management Approach, 2012, Chartrand et al.) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
332	“	Edmunds 5ee - Natural Dynamics: understanding natural dynamics of seagrasses of the north west of Western Australia (WAMSI Dredging Science Node Report, 2017, Vanderkluft et al.) (annotated 27 July)	“
333	“	Edmunds 5f - Light Thresholds to Prevent Dredging Impacts on the Great Barrier Reef Seagrass (Frontiers in Marine Science, 2016, Chartrand et al.) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
334	“	Edmunds 5ff - Recovery mechanisms: understanding mechanisms of seagrass recovery following disturbance (WAMSI Dredging Science Node Report, 2017, Vanderkluft et al.) (annotated 27 July)	“
335	“	Edmunds 5g - Light thresholds for seagrasses of the GBRWHA: a synthesis and guiding document (2016, Collier et al.) (annotated 27 July)	“
336	“	Edmunds 5gg - Determining light stress bio-indicators and thresholds for a tropical multi-species seagrass assemblage (WAMSI Dredging Science Noed Report, 2017, Statton et al.) (annotated 27 July)	“
337	“	Edmunds 5h - Ecological Resilience Indicators for Five Northern Gulf of Mexico Ecosystems (Chapter 4, Congdon et al.) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“

No.	Date	Description	Presented by
338	“	Edmunds 5hh - Sediment burial stress response, bio-indicators and thresholds for a tropical multi-species seagrass assemblage (WAMSI Dredging Science Node Report, 2017, Statton et al.) (annotated 27 July)	“
339	“	Edmunds 5i - Gold Coast seagrass sensitivities and resilience (2016, Connolly et al.) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
340	“	Edmunds 5ii - Response and recovery of a mixed tropical seagrass assemblage to variation in the frequency and magnitude of light deprivation (WAMSI Dredging Science Node Report, 2017, Statton et al.) (annotated 27 July)	“
341	“	Edmunds 5jj - Response of a mixed tropical seagrass assemblage to burial by inorganic and organic sediments under low light (WAMSI Dredging Science Node Report, 2017, Statton et al.) (annotated 27 July)	“
342	“	Edmunds 5k - Effects of Dredge Deposits on Seagrasses: An Integrative Model for Laguna Madre (2003, Dunton et al.) Part 1 (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
343	“	Edmunds 5k - "" Part 2 (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
344	“	Edmunds 5kk - Comparisons of benthic filter feeder communities before and after a large-scale capital dredging program (WAMSI Dredging Science Node Report, 2017, Wahab et al.) (annotated 27 July)	“
345	“	Edmunds 5l - Port Phillip Bay Channel Deepening Project EES – Marine Ecology Specialist Studies – Physical Pressures and Effects Analysis (annotated 27 July)	“
346	“	Edmunds 5ll - Effects of dredging-related stressors on sponges: laboratory experiments (WAMSI Dredging Science Node Report, 2017, Pineda et al.) (annotated 27 July)	“
347	“	Edmunds 5m - Port Phillip Bay Channel Deepening Project EES – Marine Ecology Specialist Studies Volume 16: Seagrass Impact and Risk Assessment (annotated 27 July)	“
348	“	Edmunds 5mm - Predicting the temporal response of seagrass meadows to dredging using Dynamic Bayesian Networks (2015, Wu et al.) (annotated 27 July)	“
349	“	Edmunds 5n - Port Phillip Bay Channel Deepening Study EES – Marine Ecology Specialist Studies Volume 19:	“

No.	Date	Description	Presented by
		Sediment Biota Impact and Risk Assessment (annotated 27 July)	
350	"	Edmunds 5nn - Dynamics of a deep-water seagrass population on the Great Barrier Reef: annual occurrence and response to a major dredging program (Scientific Reports 2015, York et al.) (annotated 27 July)	"
351	"	Edmunds 5o - Port Phillip Bay Channel Deepening Project Proof of Concept Modelling: Primary Production (annotated 27 July)	"
352	"	Edmunds 5p - Port Phillip Bay Channel Deepening Project Trial Dredging Experiment: Microphytobenthos (annotated 27 July)	"
353	"	Edmunds 5q - Lakes Entrance Existing Conditions: Marine Habitats and Communities - Part 1 (annotated 27 July)	"
354	"	Edmunds 5q - "" Part 2 (annotated 27 July)	"
355	"	Edmunds 5r - Barry Beach Channel Dredging Ecological Impact Assessment (annotated 27 July)	"
356	"	Edmunds 5s - Seagrass Stress Response Model: The importance of Light, Temperature, Sedimentation and Geochemistry (Eldridge et al.) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	"
357	"	Edmunds 5t - Environmental impacts of dredging on seagrasses: A review (Marine Pollution Bulletin, 2006, Erftemeijer et al.) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	"
358	"	Edmunds 5u - Lakes Entrance Seagrass Survey October 2012 (annotated 27 July)	"
359	"	Edmunds 5v - Forecasting Responses of Seagrass Distributions to Changing Water Quality Using Monitoring Data (Ecological Applications, 2003, Fourquaran et al.) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	"
360	"	Edmunds 5w - Effects of dredging on critical ecological processes for marine invertebrates, seagrasses and macroalgae, and the potential for management with environmental windows using Western Australia as a case study (2017, Fraser et al.) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	"
361	"	Edmunds 5x - Port Phillip Bay Channel Deepening Project Monthly Monitoring Program, December 2005 (annotated 27 July)	"
362	"	Edmunds 5y - Factors Controlling Seagrass Revegetation onto Dredged Material Deposits (Journal of Coastal	"

No.	Date	Description	Presented by
		Research, 2009. Kaldy et al.) (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	
363	“	Edmunds 5z - Connecting Sediment load targets to ecological outcomes for seagrass (2020, Lambert et al.) (annotated 27 July)	“
364	“	Edmunds 6a - Proponents Part B Submission – (Duplicate Doc 200) (annotated 27 July)	“
365	“	Edmunds 6b - Mitigation Register – (Duplicate of Doc 201) (annotated 27 July)	“
366	“	Edmunds 6c - Viva Energy Gas Terminal Project Environment Effects Statement – EMF Chapter 14 (annotated 27 July)	“
367	“	Edmunds 6d - EPA Victoria Guidelines for Dredging 2001 (annotated 27 July)	“
368	“	Edmunds 6e - EPA South Australia Dredge Guidelines 2020 (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
369	“	Edmunds 6g - Ports Australia Dredging and Australian Ports May 2015 (annotated 27 July)	“
370	“	Edmunds 6h - Numerical modelling of dredge plumes: a review (WAMSI Dredging Science Node Report, 2016, Sun et al.) (annotated 27 July)	“
371	“	Edmunds 6i - EPA WA - Technical Guidance Environmental impact assessment of marine dredging proposals (annotated 27 July)	“
372	“	Edmunds 6f - Ports Australia Environmental Code of Practice for Dredging and Dredged Material Management (annotated 27 July) <i>[not uploaded to Engage Vic]</i>	“
373	18 Jul 22	Presentation of A Pillay	Clayton Utz for Geelong Port
374	“	Response to IAC questions	ACF Geelong
375	Hearing Day 21 19 Jul 22	Technical Note 003: LNG Carrier and Terminal Separation Distance	Davis Advisory for the Proponent
376	“	Technical Note 004: Regarding Sandia Report (TN004) (updated 29 July)	“
377	“	CONFIDENTIAL - Refinery Pier Licence and Variation (Redacted)	“
378	“	Viva Submission Regarding Consent	“

No.	Date	Description	Presented by
379	“	Submission	Harwood Andrews for Geelong Grammar School
380	“	Index of document provided to Geelong Port	Davis Advisory for the Proponent
381	“	Submission	Clayton Utz for Geelong Port
382	“	List of Documents Accompanying Submissions	Harwood Andrews for Geelong Grammar School
382a	“	Crib Point IAC Report	“
382b	“	Expert witness statement of Jerome Fahrer Expert Witness Statement to the Crib Point IACq	“
382c	“	Department of Industry, Innovation, and Science, Regulatory Impact Statement: Australian Domestic Gas Security Mechanism (2017)	“
382d	“	APPEA, Australian East Coast Natural Gas: FAQs	“
382e	“	EPA Victoria, SEPP N-1	“
382f	“	EPA Victoria, Publication 1826: Noise Protocol	“
382g	“	EPA, Publication 1757.2: Summary of Noise Framework	“
382h	“	EPA Victoria, Publication 1412: Guidance on SEPP N-1 and NIRV	“
382i	“	EPA Victoria, Publication 280: Guidance on SEPP N-1	“
382j	“	WorkSafe, Land use planning nearing a Major Hazard Facility (April 2022)	“
382k	“	WorkSafe slides presented to Viva and the School in August 2021	“
382l	“	Great Barrier Reef Marine Park Authority, Guidelines on the use of Hydrodynamic numerical modelling for dredging projects in the Great Barrier Reef Marine National Park (2012)	“
382m	“	Guideline on dredge plume modelling for environmental impact assessment, Sun et al., (2020)	“
382n	“	‘Developing Tools for the Management of Nutrient and Sediment interactions with seagrass ecosystems in Port Phillip Bay: Broad scale modelling’, Appendix 2 to Jenkins and Keogh, Seagrass Resilience in Port Phillip Bay: Final Report to the Seagrass and Reefs Program for Port Phillip Bay, Lee at al., (2015).	“

No.	Date	Description	Presented by
382o	“	West Australian Marine Science Institute, Determining light stress bio-indicators and thresholds for a tropical multi-species seagrass assemblage (2017)	“
382p	“	CEE, Overview Impact Assessment – Seagrass (January 2007)	“
382q	“	Mornington Peninsula and Bass Coast Shire Councils, Closing Submissions in Crib Point IAC	“
383	Hearing Day 22 20 Jul 22	Mark up of Tabled Document 201 (Mitigation Register) 19 July 2022	Mr Withers, Norton Rose Fulbright for EPA
384	“	Sandia Report	Clayton Utz for Geelong Port
385	“	Presentation	North Shore Residents Group
386	“	Video of ships passing North Shore (not uploaded to Engage Victoria due to file size)	“
387	Hearing Day 23 21 Jul 22	Presentation	Norlane Community Initiative
388	“	Submission	Dr Fisher
389	22 Jul 22	Submission and Link to Video - The Sustainable Hour podcast	Mr Aidt for the Sustainable Hour podcast
390	“	Transcript of Video - The Sustainable Hour podcast	“
391	“	Audio of Video presentation - The Sustainable Hour podcast	“
392	“	Hearing Presentation	Mr Robertson for the Institute for Energy Economics and Financial Analysis
393	“	Hearing Submission	Ms King (Atwell)
394	Hearing Day 24 25 Jul 22	Hearing Presentation	Mr Robins
395	“	CONFIDENTIAL - Submission in regard to Access Rights (response to Viva’s submission)	Clayton Utz for Geelong Port
396	“	Hearing Presentation	Ms Perrett for Geelong Sustainability Group
397	“	Hearing Presentation	Mr Godfrey

No.	Date	Description	Presented by
398	“	Hearing Presentation (updated 26 July 2022)	Mr Nolan
399	“	Hearing Presentation	Ms Leonard for Friends of the Earth
400	“	Hearing Submission a. Part 1 b. Part 2 (updated 5 August 2022)	Ms Stockigt for Save Westernport Inc
401	“	Viva Energy Gas Terminal IAC - Hearing Timetable (v6)	IAC
402	Hearing Day 25 26 Jul 22	Hameed Paper – Electrochlorination plant discharge	Ms King (Atwell)
403	“	Speaking notes	“
404	“	Technical Note 005 - Viva Energy 2014 Spill (TN005)	Davis Advisory for the Proponent
405	“	Technical Note 006 - Marine Pests (TN006)	“
406	“	Hearing Presentation (updated 27 July 2022)	Mr Crosthwaite
407	“	Response to IAC questions	Ms Leonard for Friends of the Earth
408	“	Hearing Presentation	Mr Forcey
409	Hearing Day 26 27 Jul 22	Hearing Presentation	Dibs Fitzgerald
410	“	Letter from GeelongPort to IAC regarding commercial agreement	Ms Everett and Mr Bartley, Clayton Utz for GeelongPort
411	“	ASX Announcement, Agreement between Viva Energy & GeelongPort	Davis Advisory for the Proponent
412	“	Hearing Submission	Ms Langridge
413	“	Hearing Submission	Ms Marsden-Smith
414	“	Hearing Presentation	“
415	“	Hearing Submission	Mr Thomas
416	“	Response to IAC questions	Mr Miralles for Environment Victoria
417	“	Hearing Presentation	“
418	Hearing Day 27 28 Jul 22	Article - Global Warming Potential - 20 years vs. 100 years	Mr Crosthwaite

No.	Date	Description	Presented by
419	“	Why does gas set the price so high in the recent electricity market	“
420	“	Hearing Submission	Mr Chomley
421	“	Hearing Submission	Mr Kealey
422	“	Hearing Submission	Mr Dunn
423	“	Hearing Submission	Mr Spear
424	“	Letter from GGS to IAC - Edmund’s materials	Harwood Andrews for GGS
425	“	Index to documents 282 to 371	“
426	“	Edmunds 2c - Canadian Water Quality Guidelines for the Protection of Aquatic Life – Reactive Chlorine Species (Canadian Environmental Quality Guidelines - Canadian Council of Ministers of the Environment, 1999) <i>[not uploaded to Engage Vic]</i>	“
427	“	Hearing Submission	Mr Huck
428	29 Jul 22	Hearing Submission	Mr Goeppert
429	“	Hearing Submission	Ms Sims
430	“	Letter from EPA to IAC - Providing Second EPA Request for information notice RFI002392	Ms Vilagosh, Norton Rose Fulbright for EPA
431	Hearing Day 28 1 Aug 22	Technical Note 007 - Geelong Refinery Flare (TN007)	Davis Advisory for the Proponent
432	“	Technical Note 008 - Community Consultation and Engagement (TN008)	“
433	“	Technical Note 009 - Response to North Shore Residents Group (NSRG) Presentation (TN009)	“
434	“	Technical Note 010 - Risks in Community (TN010)	“
435	“	Technical Note 011 - Project Rationale (TN011)	“
436	“	Technical Note 012 - Operation Separation Distance at Refinery Pier (TN012)	“
437	“	Hearing Submission	Ms Jeffrey
438	“	Hearing Submission	Ms Bull
439	“	Hearing Submission	Mr Reeves fir Norlane Community Initiatives (NCI)
440	“	Hearing Submission	Mr Limb
441	“	Technical Note 013 - Offshore Location Considerations (TN013)	Davis Advisory for the Proponent

No.	Date	Description	Presented by
442	"	Technical Note 014 - Refinery Alarm Process (TN014)	"
443	Hearing Day 29 2 Aug 22	WTOAC – Part B Submission – EES Consultation Report	Dr Jones for WTOAC
444	"	Hearing Submission	Ms Weekley
445	"	EPA - Closing Submission	Norton Rose Fulbright for EPA
446	Hearing Day 30 3 Aug 22	Hearing Submission (Maree Fagan)	Ms Fagan for Fridays for Future Greater Geelong
447	"	Hearing Submission (Caroline Danaher)	Ms Danaher for Fridays for Future Greater Geelong
448	"	Hearing Submission	Mr Ritman
449	"	Environmental Risk Register	Davis Advisory for the Proponent
450	"	Hearing Submission	Ms Johnston
451	"	ACF Response to Technical Note TN004 (Sandia Report)	Ms Fisher for ACF Community Geelong
452	4 Aug 22	Hearing Submission	Ms Campbell
453	"	Closing Submissions	Davis Advisory for the Proponent
454	"	Closing Submissions - Appendix A - Response to the Edmunds Material	"
455	"	Closing Submissions - Appendix B - Hydrodynamics	"
456	"	Mitigation Register	"
457	"	Proponent - Part C Incorporated Document	"
458	"	Proponent - Response to EPA Submission	"
459	"	Technical Note 019 - PIANC Study Update (TN019)	"
460	"	Closing submission supporting document - 01 - PPB 2005 Channel Deepening Panel Report	"
461	"	Closing submission supporting document - 02 - PPB supplementary EES Main Report - Chapter 13 - The Bay (not uploaded to Engage Victoria due to file size)	"
462	"	Closing submission supporting document - 03 - PPB supplementary EES Technical Appendix 47-3 (Edmunds MPB report)	"

No.	Date	Description	Presented by
463	"	Closing submission supporting document - 04 - PPB supplementary EES Technical Appendix 50 (CEE seagrass impact assessment report)	"
464	"	Closing submission supporting document - 05 - PPB supplementary EES Technical Appendix 41 (hydrodynamic model calibration report)	"
465	"	Closing submission supporting document - 06 - Office of Environmental Monitor Annual review 4 - January 2012	"
466	"	Closing submission supporting document - 07 - Victoria Auditor General report - PPB Channel Deepening Achievement of Objectives, Nov 2012	"
467	"	Closing submission supporting document - 08 - PPB seagrass monitoring milestone report 14 (Hirst et al)	"
468	"	Closing submission supporting document - 09 - PPB Channel Deepening Environmental Management Plan - rev 9, July 2009 (not uploaded to Engage Victoria due to file size)	"
469	"	Closing submission supporting document - 10 - Lawson and Treloar Corio Bay Sediment Transport Model Verification, 1997 <i>[not for publication on Engage Victoria]</i>	"
470	"	Closing submission supporting document - 11 - Geelong Dredging Program 2014 - EMP (City Bend)	"
471	"	Closing submission supporting document - 12 - Geelong Dredging Program 2014 - drawings (City Bend)	"
472	"	Closing submission supporting document - 13 - Geelong Dredging Program 2015 EMP (Refinery Pier)	"
473	"	Closing submission supporting document - 14 - Geelong Dredging Program 2016 - EMP (Corio Channel)	"
474	"	Closing submission supporting document - 15 - Channel Improvement 1997 turbidity and seagrass report - Marine Science and Ecology	"
475	"	Closing submission supporting document - 16 - Batley and Simpson 1999 <i>[not for publication to Engage Victoria]</i>	"
476	"	GGs Submissions in relation to technical notes 15 16 and 17	Harwood Andrews for GGS
477	"	Letter from EPA to IAC - Response to IAC questions following closing submissions	Ms Vilagosh, Norton Rose Fulbright for EPA
478	Hearing Day 32	Technical Note 018 - Safety and Risk Studies (TN018)	Davis Advisory for the Proponent

No.	Date	Description	Presented by
	5 Aug 22		
479	"	Occupational Health and Safety Regulations 2017 (12 July 2022)	"
480	"	Interim Response to EPA RFI (Table Doc 430)	"
481	"	Hearing Submission	Ms Chapman
482	"	Hearing Presentation	Dr Ruth
483	"	Letter from GGS to IAC - Port Submissions with highlighting by Geelong Grammar School	Harwood Andrews for GGS
484	"	Marked up by GGS - Submission of GeelongPort	"
485	"	ACCC Gas Inquiry 2017-2025 Interim Report, July 2022	Davis Advisory for the Proponent
486	"	Letter 7 July 2022 Viva to GGS regarding proposed noise monitoring	Harwood Andrews for GGS
487	"	Letter 13 July 2022 Viva to AECOM - Terms of Reference for noise monitoring	"
488	"	Letter 14 July HA (GGS) to Davis (Viva) - proposed noise monitoring	"
489	"	Letter 25 July 2022 Davis (Viva) to HA (GGS) - proposed noise monitoring	"
490	"	Letter 26 July 2022 HA (GGS) to Davis (Viva) - proposed noise monitoring	"
491	"	Crib Point - Ministers-Assessment-March-2021	"
492	"	Transcription Viva preliminary matters and GGS submissions - 3 August 202 a. Clean version b. Tracked version	"
493	"	GGS - Submission - Viva IAC opening oral submissions	"
494	8 Aug 22	Letter from Proponent to IAC - Transcript for hearing day 32 and correction in closing submission.pdf	Davis Advisory for the Proponent
495	"	Transcript for Hearing Day 32 (5 Aug 2022)	"
496	9 Aug 22	Viva Energy Gas Terminal IAC - Determination on Technical Notes (TN015, TN016 and TN017)	IAC
497	"	Technical Note 015 - Hydrodynamics Technical Note - Regional Hydrodynamic Modelling (TN015) – 2 Aug 22	Davis Advisory for the Proponent
498	"	Technical Note 016 - Hydrodynamics Technical Note - Sensitivity Test for Sediment Settling (TN016) - 2 Aug 22	"
499	"	Technical Note 017 - Hydrodynamics Technical Note - Wind Comparisons (TN017) - 3 Aug 22	"

No.	Date	Description	Presented by
500	“	WTOAC comments on Part C Mitigation Register	Dr Jones for WTOAC
501	“	WTOAC comments on Part C Incorporated Document	“
502	10 Aug 22	Hearing Submission	Ms Dunn
503	“	Letter from EPA to IAC - Comments on Part C Mitigation Register and technical notes - 10 Aug 22	Ms Vilagosh, Norton Rose Fulbright for EPA
504	16 Aug 22	Letter from GGS to IAC - Comments on Part C mitigation measures and incorporated document	Mr Tobin, Harwood Andrews for GGS
505	“	GGs comments on Part C Mitigation Register - without prejudice mark up	“
506	“	GGs comments on Part C Incorporated Document - without prejudice mark up	“
507	“	GGs Submissions on Technical Notes 15, 16 and 17	Harwood Andrews for GGS
508	“	GGs - Memorandum from Andrew McGowan on review of Technical Notes 15, 16 and 17	“
509	22 Aug 22	Hearing Submission - 27 July 2022	Mr Dillon

Appendix E Procedural Issues

1. Requests for Information

The IAC prepared a Request for Information (RFI) that was provided to the Proponent on 4 May 2022 and tabled at the Directions Hearing the following day (D13). The Proponent responded to the RFI through submissions, evidence and Technical Notes. It also responded to a range of other queries and information requested by the IAC and the parties through the Hearing process. The IAC thanks the Proponent and its team for its responsiveness in providing this information.

EPA issued two RFIs under section 50 of the EP Act seeking further information to inform its assessment of the Development Licence applications. The first was dated 14 April 2022 (D5) and the second was dated 27 July 2022 (D430).

At EPA's request, the IAC directed the Proponent to table its response to the first RFI which it did on 8 June 2022 (D76). The second RFI was issued on Day 26 of the Hearing, and there was insufficient time for the Proponent to prepare a detailed response before the close of the Hearing. It tabled an interim response on the final day of the Hearing (D480).

The EPA RFIs and the Proponent's responses have assisted the IAC in formulating its advice to EPA to inform consideration of the Development Licence applications (clause 8 of the Terms of Reference).

2. Expert meetings

The IAC directed expert meetings be convened and statements of agreed opinions and facts be prepared for areas of like evidence. Meetings occurred and statements were prepared for the following areas:

- marine ecology (D101)
- marine modelling (D102)
- safety, hazard and risk (D103)
- the gas market (D113)
- noise (D132, D168)
- greenhouse gas (D137)
- port operations and navigation (D138).

Some of the meetings were attended by observers:

- an EPA representative attended the marine ecology and noise expert meetings
- a GeelongPort representative attended the port operations and navigation expert meeting.

It was originally proposed to have a combined meeting between the safety, hazard and risk experts and the port operations and navigation experts. Following objections from GeelongPort, separate meetings were held.

There was some dispute as to whether the agreed statement for the noise expert meeting accurately recorded the matters that were agreed and disagreed. Some of Mr Tardio's track changes to a draft of the statement were not reflected in the final signed version (D132). A track change version was subsequently produced (D137).

3. GeelongPort's withdrawal

GeelongPort provided a comprehensive submission in response to the exhibited EES (S1974), comprehensive written and oral submissions at the Hearing (D277, D381 and D395), and presented evidence from three experts:

- Mr Mannion on port operations (D70)
- Dr Pillay on safety, hazard and risk (D69)
- Mr McGurn on land use (D79).

GeelongPort engaged in rigorous cross examination of the Proponent's witnesses on business impact (Mr King), safety, hazard and risk (Mr Mathers), maritime and port operations safety (Ms McDonald) and land use impact (Ms Butler).

GeelongPort presented its evidence and main submissions on Days 20, 21 and 22 of the Hearing.

On Day 26, after it had completed its case, GeelongPort wrote to the IAC (D410) advising that it had reached a commercial agreement with the Proponent for the construction and provision of pier and berthing infrastructure for the Project, subject to (among other things) the Minister's Assessment of the Project under the EE Act finding that the Project will have acceptable environmental outcomes. The letter stated:

As part of the agreement, GeelongPort has agreed to notify the IAC that it has withdrawn its involvement in the public hearing and withdrawn its submissions provided to the IAC. Accordingly, GeelongPort will play no further role in the hearing process.

Further details of the agreement are recorded in D411, the Proponent's announcement to the Australian Stock Exchange about the agreement. The agreement itself was not produced to the IAC on the basis that it was subject to commercial confidentiality.

The IAC sought clarification from GeelongPort as to how it should treat GeelongPort's submissions and evidence in light of its decision to withdraw from the Hearing, given the submissions and evidence had already been presented. GeelongPort clarified that the agreement relates to access issues and commercial matters, that all other aspects raised by GeelongPort are matters that have been put before the IAC, that it is up to the IAC to determine how to approach those matters, and that GeelongPort was no longer seeking the IAC to adjudicate on the matters raised in its submissions.

The Proponent acknowledged that both the submissions and evidence presented by GeelongPort were before the IAC, and that those matters could not be 'unheard'. It acknowledged the possibility that other parties may adopt the GeelongPort submissions, which subsequently occurred.

The Proponent addressed the implications of GeelongPort's withdrawal in more detail in its closing submissions (D453). It submitted that the appropriate approach for the IAC to take was:

- to assess the environmental effects of the Project on the basis that GeelongPort no longer opposes the Project and the matters submitted by GeelongPort in support of its prior opposition were no longer matters that GeelongPort contends would preclude a favourable assessment of the Project
- the IAC could continue to have regard to GeelongPort's evidence, but should assess it on the basis that GeelongPort no longer relies on that evidence to oppose the Project, and is now of the view that the matters raised in that evidence have been satisfactorily addressed, or can be addressed through mitigation measures.

GeelongPort's submissions were adopted in part of whole by several parties to the Hearing. Geelong Grammar School (GGS) provided a marked up version of GeelongPort's main submissions highlighting the parts that it formally adopted (most of the submission was adopted) (D483). At least one other submitter (S878) expressly adopted the GeelongPort submissions in their entirety in her oral submissions on Day 28.

Several other submitters indicated that they had relied on aspects of the GeelongPort submissions (particularly in relation to safety, hazard and risk) when preparing their own submissions and presentations to the IAC, and were very concerned at GeelongPort's decision to withdraw. They were concerned that they would be disadvantaged if the IAC was to not have regard to GeelongPort's submissions and evidence, particularly its evidence on safety, hazard and risk.

While the IAC acknowledges the agreement between GeelongPort and the Proponent, it has had regard to the evidence that was presented, and to GeelongPort's submissions to the extent that they were adopted by other parties. Where those submissions and evidence raised issues that only impact GeelongPort, the IAC has taken its withdrawal into account and has weighted the material on that basis. Submissions and evidence that were adopted by others, or that raised broader issues have been afforded more weight.

4. Relevance of the Geelong Hydrogen Hub proposal

GeelongPort's original submission (S1974) briefly referred to its plans for a Hydrogen Hub at the Port (at paragraphs 31(a), 46 and 47).

In its RFI (D13) the IAC requested further information about the Hydrogen Hub proposal and what, if any, assessment had been undertaken of the Project's potential impacts on the Hydrogen Hub.

The Proponent's response (D111) indicated that the Hydrogen Hub had not been raised by GeelongPort during the Proponent's consultation with GeelongPort about the Project. The Proponent was not aware of the Hydrogen Hub proposal until GeelongPort referred it to the Minister for a decision under the EE Act about whether an EES is required. This happened in May 2022, well after the Project's EES had been prepared.

The Proponent tabled the Hydrogen Hub EES referral information (which is publicly available) (D224 to D235). This included concept plans (D235) which indicate the Hydrogen Hub proposal includes an extension to Refinery Pier, in generally the same location as that proposed for the Project, where ammonia ships would dock to offload ammonia to supply an onshore hydrogen production plant at Lascelles Wharf.

It appears (at least on the basis of the concept design shown in D235) that the Hydrogen Hub may not be able to proceed if the Project proceeded. Mr Mannion addressed this issue in his evidence for GeelongPort (D70), where (in the context of assessing the Project's impacts on the Port and port operations) he stated that *"the Project directly conflicts with GeelongPort's own plans for a different proposed development in the same general area for a hydrogen hub"*.

In response to the evidence tabled by GeelongPort and the information contained in D224 to D235, the IAC raised the question of what relevance the Hydrogen Hub proposal has to its assessment of the Project. It asked both the Proponent and GeelongPort to address it on this issue.

GeelongPort provided a written overview of the Hydrogen Hub proposal (D277), explaining in broad terms the infrastructure proposed, and providing information on the status of the proposal

and the referral under the EE Act. It is clear from this material that the proposal is at an early stage.

GeelongPort's position was that the Hydrogen Hub is of "*limited relevance to the IAC's assessment of the Project*". It stated (D277 at paragraph 5):

... it is an example of the type of development that GeelongPort is planning for as part of the growth and expansion of its operations at the Port of Geelong; however, given the early stage of the approvals process, it is not the case that physical conflict between any locations proposed to be used for the Hydrogen Hub, and locations proposed to be used for the Project, is of itself a reason for the IAC to recommend that the Project not proceed.

The Proponent reiterated in its Part B submission that it was not aware of the Hydrogen Hub until after the EES had been prepared. In its closing submission it pointed to the fact that GeelongPort has described it as "*irrelevant*".

GGs took a different position on the relevance of the Hydrogen Hub. It submitted that the Project may constrain the Hydrogen Hub (or an offshore FSRU proposal in Port Phillip Bay by Vopak), and that it would be premature to approve the Project under the circumstances. It submitted that (D379):

... While it might be to Viva's commercial advantage to be the first to obtain approval, in a policy sense, it is more desirable that the best, most appropriate and most useful infrastructure is allowed, particularly if it involves a mutually exclusive choice between options. At this level and in this context, neither the Committee nor the government should feel pressured to approve Viva's proposal without carefully examining the other options.

The IAC's task is set out in its Terms of Reference. The Terms of Reference do not require an assessment of the comparative merits of the Project with any other proposal including the Hydrogen Hub. Instead, the IAC's task is to assess the environmental impacts of the Project having regard to the evaluation objectives and relevant policy and legislation. The Hydrogen Hub proposal is of limited relevance to that task.

Further, GeelongPort and the Proponent have reached a commercial agreement for the construction of the infrastructure required for the Project should it proceed. This would preclude GeelongPort from pursuing the Hydrogen Hub proposal, at least in the form and at the location shown in the EE Act referral information.

The IAC has therefore afforded little weight to the Hydrogen Hub proposal in its considerations, other than as an example of how the Project may constrain future port expansion in and around Refinery Pier.

5. The Proponent's terrestrial ecology evidence

Technical Report D addressed terrestrial ecology impacts. It was authored by AECOM.

Prior to the EES being exhibited, the Proponent engaged Nature Advisory to undertake a peer review of Technical Report D. Nature Advisory reviewed a version of Technical Report D dated 17 October 2021 and prepared a peer review report dated March 2022. The Nature Advisory peer review report was not exhibited with the EES, and was not produced to the IAC.

AECOM produced Technical Report D: Addendum – Peer Review in response to the Nature Advisory peer review report. The Addendum is dated 1 June 2022, and appears to have been produced after exhibition of the EES closed.

The Proponent called Brett Lane of Nature Advisory to present terrestrial ecology evidence to the IAC. It did not call the authors of Technical Report D or the Addendum (in both cases, AECOM).

Mr Lane's written evidence (D43) contains no mention of the Addendum. Nor does his presentation to the IAC (D140). However he referred to the Addendum in passing in his oral evidence in chief on Day 6 of the Hearing.

It was not until GGS' cross examination of Mr Lane commenced on Day 6 that the existence of the Addendum became apparent. The Proponent's legal team were not aware of its existence. It became clear from Mr Lane's answers to questions put to him by Counsel for GGS that the Addendum contained additional information in response to the gaps in Technical Report D that had been identified in the Nature Advisory peer review report from March 2022.

The IAC stood the matter down to allow the Proponent's legal team to seek instructions. After receiving those instructions, Counsel for the Proponent apologised and advised the IAC that the Addendum was a lengthy document (of 159 pages) that contained information that was clearly relevant to the IAC's assessment and to GGS' cross examination of Mr Lane, and should have been produced earlier in the process.

The IAC directed the Proponent to circulate the Addendum, and directed that the parties be given an opportunity to review it, and that Mr Lane be recalled for cross examination once that had been done. The Proponent produced a copy of the Addendum the following day (D150). It was tabled again by the Proponent on Day 10 (D177, which is described as the 'final version').

Mr Lane was recalled on Day 11 to be cross examined.

6. The Proponent's social and business impact evidence

The Proponent called Mr King to give evidence in relation to the business impacts of the Project. Mr King was the final reviewer of Technical Report L, the social and business impact assessment. The IAC had several questions in relation to the social impact assessment which Mr King was not able to answer (he explained at the Hearing that while he reviewed the whole of Technical Report L, he was responsible only for the business impact aspects and not for the social impacts aspects). The Proponent called Ms Bailey, who was the reviewer of the social impacts aspects of Technical Report L. She did not prepare written evidence, but appeared on Day 9 to answer the IAC's questions.

7. The Proponent's witnesses who were not called

The Proponent advised in its Part A submission that it had filed written evidence from the following witnesses but was not intending to call them:

- Ms McDonald, who provided evidence on navigation and port operations (D50)
- Ms Burch, who provided evidence on Aboriginal cultural heritage and post-contact heritage (D56).
- Mr Cook, who provided evidence on lighting design and light spill (D51).

On 8 June 2022, the IAC wrote to the Proponent (D63):

- directing it to ensure Ms McDonald is available to be called if required, as the IAC may have questions for Ms McDonald, and anticipated that other parties (in particular GeelongPort) may wish to cross examine her
- requesting it to instruct Ms Burch to prepare an addendum to her evidence directly responding to the matters raised in the WTOAC's Part A submission (D28) and indicating that there may be a need to call Ms Burch
- indicating that at that stage, the IAC did not foresee a need to call Mr Cook.

The Proponent subsequently indicated it would call both Ms McDonald and Ms Burch (D88).

On Day 1, the IAC asked parties if any were intending to cross examine either Ms Burch or Mr Cook. No parties indicated that they wished to do so. The IAC confirmed there was no need to call Mr Cook on Day 1. It confirmed on Day 7 that having reviewed both her evidence and her addendum, it had no questions for Ms Burch and there was no need to call her.

8. Technical Note 4

The Proponent produced and tabled Technical Note 4 on Day 21 of the Hearing. Technical Note 4 responded to submissions in relation to the Sandia Report, including those of ACF made on Day 15.

On Day 28, ACF requested an opportunity to provide a written response to Technical Note 4 in lieu of a closing submission. The IAC agreed, and directed that the response be provided by 4pm on Wednesday 3 August 2022. The IAC made it clear that this was required for procedural fairness reasons, to allow the Proponent an opportunity to respond to the material in its closing submission on the final Hearing day (Friday 5 August 2022).

ACF subsequently provided a response by the due date (D451).

9. Technical Note 9

The Proponent produced and tabled Technical Note 9 on Day 28 of the Hearing. Technical Note 9 was a reply to the North Shore Residents Group submissions made on Day 23.

On Day 29, North Shore Residents Group requested an opportunity to provide a written response to Technical Note 9. The IAC did not agree to the request, as (unlike Technical Note 4), Technical Note 9 was by way of a reply submission, and did not contain new information or technical material. There was no procedural fairness reason to allow North Shore Residents Group to respond to the Proponent's reply submission.

10. Technical Note 12

The Proponent produced and tabled Technical Note 12 on Day 28 of the Hearing. Technical Note 12 dealt with operational separation distances at Refinery Pier.

As the IAC was closing the Hearing at the end of the final day (Day 32, Friday 5 August 2022), ACF requested an opportunity to provide a written response to Technical Note 12. The IAC noted the very late stage of the request, and explained that if it were to agree to any such request, it would raise procedural fairness concerns as the Proponent had completed its reply submissions.

The IAC did not make a ruling on the request at the time, but instead provided ACF the opportunity to put its request in writing, and indicated that any such request would have to be dealt with as a procedural matter on the papers following the close of the Hearing. No written request was received.

11. Technical Notes 15, 16 and 17

The Proponent sought to table three Technical Notes on Wednesday 3 August 2022, on the second last day of the Hearing:

- Technical Note 015 – Hydrodynamics Technical Note – Regional Hydrodynamic Modelling
- Technical Note 016 – Hydrodynamics Technical Note – Sensitivity Test for Sediment Settling

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- Technical Note 017 – Hydrodynamics Technical Note – Wind Comparisons.

These Technical Notes were initiated by the Proponent, and were not prepared in response to requests from the IAC. The Proponent did not foreshadow the production of this material in advance.

On 4 August 2022, GGS tabled a written submission (D476) objecting to the IAC receiving Technical Notes 15 to 17. In summary, GGS's grounds of objection were:

- the substance of the Technical Notes (being further hydrodynamic modelling) is in the nature of expert evidence
- GGS would not have a fair opportunity to properly respond to the material because it was not able to be tested through cross examination of the Proponent's experts, or put to GGS's expert
- receiving the material at this stage in the proceeding, after GGS has cross-examined, led evidence, and made written submissions, would constitute a breach of procedural fairness that is not curable through allowing GGS a right of reply to the material.

GGs submitted that if the IAC did receive the material, it should do so on the basis that the material is submission unsupported by evidence, and should give the material no weight whatsoever.

The IAC is required to afford procedural fairness to all parties (clause 37 of the Terms of Reference and section 161(1)(b) of the PE Act). The IAC is not bound by the rules of evidence, and may inform itself in any way it sees fit (clauses 35 and 36 of the Terms of Reference and sections 152 and 161(1)(d) of the PE Act).

Pursuant to these powers and obligations, the IAC determined to accept the Technical Notes, as they are relevant to the matters before the IAC. The IAC issued a written determination on 9 August 2022 (D496) which stated:

Having considered the matter, and after inviting submissions from other parties on the matter on the final day of the Hearing (Friday 5 August), the IAC has decided to accept the Technical Notes as submissions (not evidence), produced late in the Hearing, and will weight the Technical Notes accordingly.

Any party who wishes to provide a written response to Technical Notes 15, 16 and 17 may do so by 4.00pm on Tuesday 16 August 2022. The IAC reiterates its verbal comments on the final day of the Hearing that any party not electing to take up this opportunity will not be regarded as accepting any of the matters referred to in the Technical Notes.

GGs provided a further submission on Technical Notes 15 to 17 on 16 August 2022 (D507), reiterating that it would be unfair and unlawful to give the material any weight at all. GGS repeated many of the concerns outlined in its earlier submission relating to the nature of the material, which it characterised as "*fresh expert evidence*" that is not able to be tested through cross examination of the author of the material. It submitted that if the material were treated as submissions, submissions made by a lawyer for the Proponent in relation to the outcomes of further hydrological modelling, if carried out, cannot rationally be given any weight because it is mere assertion of a person not qualified express an opinion.

Attached to GGS's further submission was a note prepared by Dr McCowan responding to Technical Notes 15 to 17 (D508). Dr McCowan disputed a number of the comments, assertions and conclusions reached in the Technical Notes.

The IAC has had regard to the Technical Notes, and Dr McCowan's response.

The IAC agrees with GGS that the information contained in the Technical Notes is in the nature of technical evidence that is contested by Dr McCowan, and was unable to be tested through the Hearing process. It would be a fiction to characterise the content of the Technical Notes as submissions from the Proponent's lawyers. Even if it was so characterised, the Proponent's lawyers are not technically qualified to make the assertions made or draw the conclusions drawn in the Technical Notes. The IAC notes accepts GGS' submissions that GGS would be denied procedural fairness if the IAC were to afford any significant weight to the Technical Notes in its deliberations.

The IAC has afforded the Technical Notes very little weight, and they have not been determinative in the IAC's findings and conclusions.

12. Dr Edmunds' material

Dr Edmunds (marine ecology expert for GGS) appeared on Day 17. He was rigorously cross examined by Mr McArdle for the Proponent, during which Mr McArdle called for the production of a number of papers which Dr Edmunds referred to in answering questions. Dr Edmunds also took a number of questions on notice from the IAC.

At the conclusion of Dr Edmunds' oral evidence, the IAC put together a carefully formulated list of the additional material it was requesting from him, both in response to the IAC's questions and in response to the material called for by Mr McArdle.

Dr Edmunds provided a response that was filed on Day 20 that consisted of a covering memorandum and 91 separate attachments, including a range of scientific papers, guidelines (mainly relating to dredging) issued by regulators in various jurisdictions around Australia and some duplicates of documents that had previously been tabled including copies of the Proponent's Part B submission and Mitigation Register. The material ran to thousands of pages and was substantially in excess of what the IAC was expecting in response to its list of the additional information requested.

GGs offered to 'triage' the documents and to mark up relevant passages in the various attachments provided by Dr Edmunds so that the material was more responsive to the IAC's request. This exercise understandably took some time and was not completed until Day 27. GGS tabled a letter explaining which of the attachments were provided in response to what questions, and an index to the material (D424 and D425).

GGs made it clear that the material was compiled by Dr Edmunds in response to what he understood the IAC's request to be, and GGS had not sought to edit, filter or limit the scope of the material in any way, other than to triage the material as described above.

While the Proponent raised concerns about the amount of material provided, and the scope and relevance of some of that material, it did not object to the material being tabled.

The way in which this material was initially presented was unhelpful to the IAC. It was not responsive to the IAC's request and went well beyond the scope of what the IAC asked for, both in response to its own questions and in response to the material called for by Mr McArdle.

The IAC accepted the material and has considered the material to the extent that it was relevant. It acknowledges that a considerable amount of work was undertaken by GGS's legal team to complete the 'triage' exercise, and the IAC thanks those who undertook that work.

13. Confidential documents

The IAC's Terms of Reference enable the IAC to direct that material received during the process is confidential in nature (clause 28). Several documents were accepted by the IAC on a confidential basis. These documents are listed in the Document list, but were not circulated to the parties and have not been published on the Engage Victoria website.

Simplified IALA Risk Assessment (SIRA) documents

The IAC requested the production of documents relating to the SIRA workshop which identified some of the navigational and operational risks arising from the Project, consisting of:

- the SIRA Workshop Report prepared by JCJ Consulting (D255)
- a SIRA risk assessment workshop excel spreadsheet (D259).

The Proponent had provided these documents to GeelongPort prior to the Hearing on a confidential basis, and had agreed to them being provided to GeelongPort's safety, hazard and risk and navigation and port operations experts. GeelongPort put questions to the Proponent's safety, hazard and risk and navigation and port operations experts in cross examination. Parts of the documents were screenshared during the cross examination.

The Proponent supplied the documents in response to the IAC's request, but asked that the unredacted JCJ report (D255) and the spreadsheet (D259) remain confidential. The Proponent provided a redacted version of the JCJ report that could be made public and uploaded to the Engage Victoria website.

The reasons the Proponent requested that the material remain confidential are outlined in a letter to the IAC dated 8 July 2022 (D257), and are (in summary):

- the documents consider a range of extreme and unlikely scenarios which could be read as likely events by those who are unfamiliar with risk assessment processes
- that misunderstanding may give rise to alarm and unnecessary distress.

GeelongPort disagreed that the SIRA documents should be kept confidential, for the reasons set out in its letter to the IAC dated 11 July 2022 (D258), which are (in summary):

- Technical Report N referred to a marine risk assessment being conducted for LNG carriers entering the Port of Geelong and berthing and unberthing at Refinery Pier
- Ms McDonald's evidence statement expressly referred to the SIRA workshop and confirmed that the workshop was part of the marine risk assessment
- the documents had been put to Ms McDonald during cross examination and both were displayed on screen, with no objection from the Proponent
- the SIRA workshop was not conducted on a confidential basis and was attended by a number of stakeholders including GeelongPort and government entities
- the SIRA documents are not marked confidential, and do not contain the type of information that is usually kept confidential
- the IAC process is a public process and principles of transparency and natural justice require the public hearing to be conducted in an open manner.

The IAC accepted the Proponent's submissions that the risks outlined in the SIRA documents, while extremely unlikely, may be misunderstood by some readers, and may cause unnecessary alarm and distress. It therefore directed that the material remain confidential.

Material on access rights

The IAC requested the Proponent to provide a written submission outlining the legal framework for gaining access to seabed leases, Crown land and port infrastructure needed for the Project to proceed if it was not able to negotiate access rights with GeelongPort. This was provided as D378. Attached was a copy of the Proponent's current licence to use Refinery Pier (D377). The Proponent requested that the licence remain confidential as it contained material about commercial in confidence arrangements between the Proponent and GeelongPort. GeelongPort supported the licence remaining confidential.

GeelongPort provided a submission in response to the Proponent's submission on access rights (D395) and requested that the submission be treated as confidential on the same basis.

The IAC agreed to accept both the licence (D377) and GeelongPort's submission on access rights (D395) as confidential.

WorkSafe submission

The IAC requested WorkSafe to provide advice to the IAC (D9) on the following:

- an outline of WorkSafe's role in regulating the Project as a future Major Hazard Facility (MHF), and the relationship with regulating the existing Refinery as an existing MHF
- WorkSafe's view, to the extent possible, on the Proponent's approach to addressing safety risks for the Project undertaken to date and particular areas of concern (if any) in a safety assessment procedural sense
- WorkSafe's view on the future work program for the Project leading to the point where approvals may be given for the future MHF.

WorkSafe provided a submission in response to the IAC's request (D76). The covering email attaching D76 indicated that the submission was confidential. The IAC requested WorkSafe to confirm whether it intended to make a formal request that the submission be treated as confidential. WorkSafe responded indicating that a formal application for confidentiality was not required (D144). As a result, the material was not treated as confidential.

Material subject to copyright

The IAC accepted some material that is subject to copyright, including several of the scientific papers and publications provided by Dr Edmunds. This material was not uploaded to the Engage Victoria website.

Appendix F Legislative and policy context

This section outlines the key elements of legislative and policy context and should be read in conjunction with the relevant elements of the EES, including EES Chapter 5 and EES Attachment III. Unless otherwise stated, the legislation is Victorian.

Environment Effects Act

Legislation

The *Environment Effects Act 1978* (EE Act) provides for the integrated assessment of projects with the potential for significant environmental effects. In response to a referral made by Council, the Minister for Planning determined that an EES would be required and an Inquiry appointed to consider the environmental effects of the Project. The EES was prepared in response to the EES Scoping Requirements issued by the Minister for Planning.

The Minister's Assessment is not an approval as such, but is an assessment of the environmental effects of the Project that must be considered by decision makers in determining whether to grant approvals required for the Project under other legislation, and any conditions to be imposed.

EES Guidelines

The *Ministerial Guidelines for the assessment of environmental effects under the Environment Effects Act 1978*, DELWP 2006 (EES Guidelines) are made under section 10 of the EE Act and define the general objective of the EES process:

To provide for the transparent, integrated and timely assessment of the environmental effects of projects capable of having a significant effect on the environment.

The EES Guidelines incorporate specific principles of best practise ensuring a systems and risk-based approach to the assessment of potential effects, an integrated perspective of the relationship of different effects to inform decision-making and the need to ensure consistency with principles and objectives of ecologically sustainable development.

The EES Guidelines recognise that *“projects may give risk to environmental effects through relatively direct cause-effect pathways, or through more complex, indirect pathways”*. In addition, if there is a risk of significant adverse effects, the cumulative effects of a project in combination with other activities may need to be assessed.

The EES Guidelines state that potential for significant effects will reflect the following factors:

- *Significance* of the environmental assets affected, in relation to:
 - *Character* of the potentially affected environmental assets.
 - *Geographic occurrence* of the environmental assets.
 - *Values or importance* of the environmental assets, based on expert knowledge, relevant policy and evidence of social values.
- *Potential magnitude, extent and duration* of adverse effects on environmental assets in the short, medium and longer term, as a result of the development, operation and where relevant, decommissioning of a project.
- *Potential for more extended adverse effects in space and time*, as a result of interactions of different effects and environmental processes affecting environmental assets.

An EES should provide an environmental management framework for managing project effects and risks. In relation to adaptive environmental management, the EES Guidelines provide:

Where adaptive management is proposed as a method of managing key environmental effects or risks of a project, the EES will need to demonstrate capability of the proponent to monitor environmental effects and respond within timeframes that will provide reasonable confidence of acceptable outcomes being achieved. Where a combination of 'static' or proactive and adaptive management techniques is proposed, their respective roles should be clearly explained.

EES Advisory Note

The *Environment Effects Act Advisory Note*, DELWP updated 10 February 2021 (the EES Advisory Note) states that the purpose of an EES is to clearly characterise likely environmental effects/impacts, rather than risks. Key residual effects of the activity need to be clearly described in terms of expected magnitude, extent and duration in the impact assessment.

The EES Advisory Note provides that while a full or detailed environmental risk assessment does not necessarily need to be undertaken, an environmental risk assessment may be used as a tool to identify and prioritise environmental effects to satisfy the need to take a *"risk-based approach"* to the assessment of effects/impacts.

In cases where events are possible but unlikely (such as accidents), an environmental risk assessment might be helpful to explain how an unlikely occurrence relates to the potential for adverse consequences. The Advisory Note distinguishes between probability (likelihood) and uncertainty, and states that uncertainty *"is about how certain (or not) one is in predicting the likelihood and consequence of a risk"*.

The EES Advisory Note states that EESs need to provide a clear identification of the uncertainty associated with predictions, and describe the implications of the level of uncertainty. Discussion of uncertainty is just as important in regard to impact assessment as risk assessment.

The EES Advisory Note provides:

While the environmental risk assessment should inform the focus of the assessment of impacts, the primary approach to the assessment of impacts/effects in the EES should be that of the impact assessment framework. The environmental risk assessment (should it be utilised at all) should not detract from or confuse the presentation and reader's understanding of predicted impacts/effects.

Environment Protection and Biodiversity Conservation Act

Legislation

The *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) is the Commonwealth Government's principal environmental protection and biodiversity conservation legislation. It provides the legal framework for the protection of matters of national environmental significance (MNES).

The Project was referred to the Commonwealth under the EPBC Act and was deemed to be a controlled action based on the potential for significant impacts on the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar wetland, listed threatened species and communities, and listed migratory species, and therefore requires assessment and approval. The Ramsar site covers 22,650 hectares and comprises six distinct areas, one of which is Point Wilson/Limeburners Bay. The Project was deemed to be a controlled action under the EPBC Act based on the potential for significant impacts on this part of the larger site.

Following the EES process and the assessment by the Victorian Minister for Planning, the Commonwealth Minister for the Environment (or delegate) will decide whether the action is approved, approved with conditions or refused under the EPBC Act.

Significant impact guidelines

The *Significant Impact Guidelines 1.1 - Matters of National Environmental Significance* (2013) under the EPBC Act provide overarching guidelines on determining whether an action is likely to have a significant impact on a matter protected under national environmental law. The guidelines define a 'significant impact' as "*an impact which is important, notable, or of consequence, having regard to its context or intensity*". To be considered 'likely' it is "*sufficient if a significant impact on the environment is a real or not remote chance or possibility*".

The guidelines embody the precautionary principle:

If there is a scientific uncertainty about the impacts of your action and potential impacts are serious or irreversible, the precautionary principle is applicable. Accordingly, a lack of scientific certainty about the potential impacts of an action will not itself justify a decision that the action is not likely to have a significant impact on the environment.

Significant impact criteria are provided to assist in determining whether potential impacts of an activity are likely to be significant on a MNES. The criteria are different according to the conservation category of the MNES (for example, critically endangered or vulnerable).

Ramsar Site Management Plan

The *Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar Site Management Plan* (2018) provides the framework for the maintenance of the Ramsar site's unique ecological character. The primary objective of the Plan is to maintain, and where necessary improve, the ecological character of the Ramsar site and promote wise and sustainable use.

No approval is required under the Plan itself, but it is relevant in considering the significance of the Project's environmental effects and the EPBC Act approval. It is referred to in Chapter 18 of Report No. 1 in the IAC's assessment of impacts on MNES.

The Plan defines 10 resource condition targets including to maintain:

- condition and extent of seagrass within the Ramsar site (at more than 2900 hectares)
- condition and extent of saltmarsh within the Ramsar site (at more than 1200 hectares)
- condition and extent of mangroves within the Ramsar site (at more than 50 hectares)
- abundance of waterfowl (maximum total annual abundance is more than 80,000)
- abundance of shorebirds (maximum total annual abundance is more than 20,000)
- Australian fairy tern, bar-tailed godwit, eastern curlew, great knot, hooded plover, lesser sand plover and red knot within the site.

National Environment Protection (Ambient Air Quality) Measure (Cth)

The National Environment Protection (Ambient Air Quality) Measure, amongst other things, sets:

- national environmental protection goals for certain substances
- standards that consist of quantifiable characteristics of the air against which ambient air quality can be assessed
- methods for measurement, monitoring and reporting of air quality.

Environment Protection Act

The *Environment Protection Act 2017* (EP Act) came into effect on 1 July 2021, replacing the former *Environment Protection Act 1970*.

The EP Act sets out the legislative framework for the protection of human health and the environment from pollution and waste. The Act sets out principles of environmental protection which EPA must consider when determining whether or not to issue a Development Licence (amongst other matters) including:

- integration of environmental, social and economic considerations
- proportionality
- primacy of prevention
- waste management hierarchy
- evidence-based decision making
- precautionary principle
- equity, accountability
- conservation.

The Proponent requires Development Licences applications for operation of the FSRU and associated emissions and discharges from the FSRU and reuse of FSRU discharge water at the Refinery.

General environmental duty

The centrepiece of the new laws is the ‘general environmental duty’ (GED) which applies to all Victorians. When undertaking any activity which may pose a risk of harm to human health or the environment, there is a general obligation to take all reasonably practicable steps to eliminate or minimise the risk of those harms arising (with elimination being the clear preference).

The GED is an ongoing duty and requires continuous consideration of the evolving ‘state of knowledge’.

Environment Protection Regulations and Environment Reference Standard

The EP Act is supported by the Environment Protection Regulations 2021 (EP Regulations) and the Environment Reference Standard (ERS). The ERS is made up of many ‘reference standards’ which contain environmental values, indicators and objectives for different components of the environment. The ERS forms part of the state of knowledge, which also includes information from manuals, safety data, industry body guidance, guidance notes and outcomes from decisions the EPA has made. This means the state of knowledge will evolve with the Project as time goes on.

Noise Protocol

The *Noise limit and assessment protocol for the control of noise from commercial, industrial, and trade premises and entertainment venues* (EPA Publication 1826.4) (Noise Protocol) provides procedures for determining noise limits for new and existing commercial, industrial and trade premises and entertainment venues. It sets the methodology for assessing the effective noise level to determine unreasonable noise under the EP Regulations.

NSW Noise and Vibration Guidelines

The *NSW Roads and Maritime Construction Noise and Vibration guideline* (August 2016) sets out the NSW approach to assessing and mitigating construction noise and vibration impacts. It

provides guidance on identifying feasible and reasonable noise mitigation measures for construction, minor works and maintenance projects.

Climate legislation and policy

Victorian legislation

The *Climate Change Act 2017* (CC Act) is Victoria's principal legislative framework for managing climate change risks. The objectives of the Act include:

- to set a long-term greenhouse gas (GHG) emissions reduction target together with 5-yearly interim targets
- to facilitate the consideration of climate change issues in specified areas of decision making of the State Government
- to set policy objectives and guiding principles to inform state government decision-making and policy
- to provide for a strategic response to climate change through a climate change strategy, adaptation action plans and emissions reduction pledges.

The CC Act legislates the state's emissions reduction target of net zero emissions by 2050, and requires five yearly interim targets to be set. Victoria's current interim targets are:

- a reduction of 28–33 percent below 2005 levels by the end of 2025
- a reduction of 45–50 percent below 2005 levels by the end of 2030.

Under section 17, a person making certain decisions or taking specified actions must have regard to:

- the potential impacts of climate change relevant to the decision or action (including potential biophysical impacts, long and short term economic, environmental, health and other social impacts, beneficial and detrimental impacts, direct and indirect impacts, and cumulative impacts)
- the potential contribution to the state's GHG emissions (including potential short term and long term GHG emissions, direct and indirect GHG emissions, increases and decreases in GHG emissions, and cumulative impacts of GHG emissions).

Relevant decisions include whether a Development Licence should be granted under the EP Act.

Section 20 provides that Government of Victoria “*will endeavour*” to ensure that any decision made by it appropriately takes account of climate change by having regard to the Act's policy objectives which include (s22(a)):

to reduce the State's greenhouse gas emissions consistently with the long term emissions reduction target and interim emissions reduction targets.

The *Renewable Energy (Jobs and Investment) Act 2017* legislates Victoria's renewable energy targets:

- by 2020, for 25 percent of electricity to be generated from renewable energy sources
- by 2025, for 40 percent of electricity to be generated from renewable energy sources
- by 2030, for 50 percent of electricity to be generated from renewable energy sources

Commonwealth legislation

The *Climate Change Act 2022* (Cth) came into force on 14 September 2022. It implements the Federal Government's GHG emissions reduction targets of:

- 43 percent below 2005 levels by 2030

-
- net zero emissions by 2050.

In addition, objects of the Act include to:

- advance an effective and progressive response to the urgent threat of climate change drawing on the best available scientific knowledge
- set out Australia's GHG emissions reduction targets which contribute to the global goals of:
 - holding the increase in the global average temperature to well below 2°C above pre-industrial levels
 - pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels
- promote accountability and ambition by requiring the Commonwealth Minister to prepare annual climate change statements.

The *National Greenhouse and Energy Reporting Act 2007* (Cth) (NGER Act) establishes the Commonwealth Government's national framework for reporting GHG emissions. The Proponent currently reports under this framework and should the Project proceed, the Project's emissions would be included in that reporting.

The NGER (Measurement) Determination 2008 describes the methods, standards and criteria to be applied when estimating GHG emissions, energy production and energy consumption.

The Greenhouse and Energy Reporting (Safeguard Mechanism) Rule 2015 provides the details for the operation of the 'safeguard mechanism' which requires large emitters (more than 100,000 tonnes CO₂-e annually of Scope 1 emissions) to keep their GHG emissions below baseline levels or surrender Australian carbon credit units (ACCUs) to offset emissions over the baseline. The operation of the FSRU in open or combined loop modes is not expected to trigger the safeguard mechanism requirements but operation in closed loop mode would.

Victoria's Climate Change Strategy

Made under the CC Act, *Victoria's Climate Change Strategy* is a roadmap to net-zero emissions and a climate resilient Victoria by 2050. Given Victoria's reliance on fossil fuels, the strategy recognises the link between energy and climate policy. It states that renewable energy provides the largest opportunity to cut Victoria's GHG emissions and acknowledges Victoria's target of having 50 percent of its electricity generated from renewables by 2030. The link between energy and climate policy is reflected in the strategy's five-point plan (in 'A clean energy economy' and 'Innovation for the future'). The strategy places significant emphasis on achieving greater energy efficiency.

City of Greater Geelong climate strategies and plans

The City of Greater Geelong (CoGG) *Sustainability Framework Action Plan 2020-22* sets out a range of actions CoGG has committed to achieving including to implement its Zero Carbon Emission Strategy and a *Climate Change Response Plan* that consolidates and renews CoGG's adaptation and mitigation programs.

The CoGG *Climate Change Response Plan 2021-2030* acknowledges that climate change is a global emergency and includes the actions required to achieve net zero community emissions by 2035.

Gas policy and forecasting reports

Gas Substitution Roadmap

Victoria's *Gas Substitution Roadmap* sets out a roadmap for the state's transition away from fossil gas and to:

- make energy more affordable
- achieve the state's net zero emissions targets.

It commits the Victorian Government to “*a just and equitable transition that ensures energy affordability, reliability, security and safety for all Victorians*”. The Roadmap was released during the Hearing.

AEMO Gas Statement of Opportunities 2022

The Australian Energy Market Operator (AEMO) 2022 Gas Statement of Opportunities forecasts the adequacy of gas supplies to meet consumers' changing gas needs over the next 20 years as Australia transitions to a net-zero emissions economy. It covers Australian jurisdictions other than Western Australia and the Northern Territory (essentially the southeast Australia gas market). It models a number of plausible scenarios for peak gas demand and annual consumption based on differing rates of transition. The Gas Statement of Opportunities also relies on AEMO's 2022 *Victorian Gas Planning Report Update* which focuses on the gas supply demand balance in Victoria for the next five years. AEMO updates its forecasts annually.

Gas Inquiry 2017-2025 Interim Report, July 2022

The Australian Competition and Consumer Commission (ACCC) provides regular six monthly reporting on the gas supply and domestic price outlook, commercial and industrial user experience in seeking gas supply, transportation and storage, as well as an in depth examination of upstream competition and the timeliness of supply. In its July 2022 report the ACCC used AEMO's demand estimates from the 2022 Gas Statement of Opportunities, together with supply side information obtained from market participants using its compulsory information gathering powers under Part VIIA of the *Competition and Consumer Act 2010* (Cth).

Marine and Coastal Act

Legislation

The *Marine and Coastal Act 2018* (MACA) provides an integrated and coordinated approach to protecting and managing the marine and coastal environment. The objectives of the Act include:

- to protect and enhance the marine and coastal environment
- to promote the resilience of marine and coastal ecosystems, communities and assets to climate change
- to acknowledge Traditional Owner knowledge, rights and aspirations for land and sea country
- to promote the ecologically sustainable use and development of the marine and coastal environment and its resources in appropriate areas.

Consents will be required under the MACA to use or develop, or undertake works on, marine and coastal Crown land (which includes land within 200 metres inland of the high-water mark).

Consents are required for:

-
- dredging works, including spoil disposal
 - installation and continuous mooring of the FSRU
 - construction of the new pier arm
 - construction of the aboveground pipeline
 - construction of the seawater pipe from the FSRU to the existing Refinery cooling water intake.

Marine and Coastal Policy 2020

The Marine and Coastal Policy sets out policies for achieving integrated and coordinated planning and management of Victoria's marine and coastal environment for the next 10-15 years. It provides guidance to decision makers in achieving the MACA's objectives and applies to the planning and management of all matters relating to and affecting the marine and coastal environment, including all private and public land and waters between the outer limit of Victorian coastal water and five kilometres inland of the high-water mark of the sea.

It's vision "*is for a healthy, dynamic and biodiverse marine and coastal environment that is valued in its own right, and that benefits the Victorian community, now and in the future*".

Dredging Guidelines

The *Best Practice Environmental Management – Guidelines for Dredging 2001* (EPA Publication 691) (Victorian Dredging Guidelines) provide advice on the environmental requirements for dredging and disposal of sediments in Victorian waters. They describe issues that should be addressed and suggest potential measures to minimise the environmental impact of dredging and disposal. Relevant information includes:

- dredging technology and the effects of dredging on the environment
- technical requirements for testing for chemical contaminants in sediments to be dredged
- estimated release of nutrients during dredging
- estimated maximum sustained turbidity to maintain seagrass
- spawning periods for fish.

The *National Assessment Guidelines for Dredging 2009* (National Dredging Guidelines) set out the framework for the environmental impact assessment and permitting of the ocean disposal of dredged material under the *Environment Protection (Sea Dumping) Act 1981* (Cth). The framework includes:

- evaluating alternatives to ocean disposal
- assessing loading and disposal sites
- assessing potential impacts on the marine environment and other users
- determining management and monitoring requirements.

Legally, the National Dredging Guidelines do not apply in the internal waters of a state and therefore are not directly applicable to the Project. However the National Dredging Guidelines contain more contemporary approaches to dredging and dredge spoil management so are often considered alongside the Victorian Dredging Guidelines.

Siting and design guidelines for structures on the Victorian Coast

The *Siting and design guidelines for structures on the Victorian Coast* (DELWP, May 2020) consider siting and design challenges of development in the coastal environment in response to pressures of population growth and climate change. They identify practices to reduce the vulnerability of the

coastline while managing coastal land and infrastructure, maintaining public access and enhancing visitor experience.

Flora and Fauna Guarantee Act

Legislation

The *Flora and Fauna Guarantee Act 1988* (FFG Act) provides for the conservation of Victoria's native flora and fauna. It includes objectives to:

- guarantee that native flora and fauna can persist and improve in the wild, retaining the ability to adapt to environmental change
- prevent species and communities from becoming threatened and to recover threatened species and communities
- protect, conserve, restore and enhance biodiversity including flora, fauna and their habitats, genetic diversity, ecological communities and processes
- ensure use of biodiversity is ecologically sustainable
- identify and conserve areas of critical habitat.

The FFG Act also includes principles which require proper consideration in making decisions, policies and the like. These principles include consideration of:

- Traditional Owner rights and interests
- the potential impacts of climate change
- the best available information
- the precautionary principle.

Following recent amendments to the FFG Act, a new threatened species list under the FFG Act was released in June 2022, replacing the previous list which used a single category "threatened". The new list aligns with the listing categories and criteria for species (but not communities) with those set out in the Common Assessment Method intergovernmental agreement, to which Victoria is a party. As a result, the current threatened species list includes many more species than the previous list.

Biodiversity 2037

Protecting Victoria's Environment – Biodiversity 2037 (Biodiversity 2037) is the Flora and Fauna Guarantee Strategy for the FFG Act. Biodiversity 2037 is the Victorian Government's plan to halt the decline of biodiversity and achieve improvement in biodiversity over the next 20 years. Biodiversity 2037 identifies the fundamental importance of biodiversity to the health and wellbeing of current and future generations and acknowledges that currently "*there is continued decline in the quality and extent of habitat*" for native species.

Principles of decision-making include the precautionary principle that "*decisions to prevent significant impacts are not avoided because of a lack of scientific certainty*".

Occupational Health and Safety Act

Legislation and regulations

The *Occupational Health and Safety Act 2004* (OHS Act) aims to protect the health, safety and welfare of employees and other people at work, and to ensure that the health and safety of the public is not put at risk by work activities.

The *Occupational Health and Safety Regulations 2017* (OHS Regulations) include requirements for safe operation of a MHF (Part 5.2 and Schedules 14 to 18). Key requirements (which must be approved by WorkSafe Victoria) include preparation of:

- a safety case which demonstrates appropriate measures are in place to manage and control all hazards and risks safely
- a safety management system which provides a comprehensive and integrated management system for all risk control measures adopted
- an emergency management plan.

Operators of a MHF must, so far as is reasonably practicable, eliminate the risk of a major incident occurring, or else reduce the risk by adopting risk control measures (Regulation 371).

When stationed at Berth No. 5, the FSRU will be classified as a MHF and require a licence and approved safety case. An amendment to the current Refinery MHF safety case for odorant storage within the treatment facility will also be required. The Refinery MHF safety case and the FSRU MHF safety case will both consider the implications of the other MHFs in close proximity.

Guidelines

WorkSafe's guidelines on land use planning near a major hazard facility (available online only) aim to ensure that the risks to community safety from incidents at MHFs are not increased by new developments or changes in land use surrounding MHFs. The guidance sets out the situations in which WorkSafe may advise against planning scheme amendments or land use and development in the 'inner safety area' and 'outer safety area' of a MHF. It also explains how the dimensions of the 'inner safety area' and 'outer safety area' are set.

The NSW Department of Planning's *Hazard Industry Planning Advisory Paper No. 4 Risk Criteria for Land Use Safety Planning, January 2011* (HIPAP No. 4) provides suggested risk criteria for various types of risk and land uses relevant to the assessment of new hazardous facilities and development in the vicinity of such facilities with the aim of providing the basis for compatible land use safety planning.

Gas Safety Act

The main purpose of the *Gas Safety Act 1997* is to make provision for the safe conveyance, sale, supply, measurement, control and use of gas and to generally regulate gas safety. It requires, among other things, a gas company to submit a safety case to Energy Safe Victoria (ESV) for each relevant gas facility (which includes a pipeline). In the case of this Project, the gas pipeline and nitrogen and odorant injection facilities within the treatment facility will require acceptance of a safety gas by ESV.

Heritage legislation

The *Aboriginal Heritage Act 2006* provides for the protection of Aboriginal cultural heritage in Victoria. The Act's objectives include:

- to provide for the protection of Aboriginal cultural heritage and Aboriginal intangible heritage in Victoria.

Section 49 requires that a Cultural Heritage Management Plan be prepared and approved for an area where an EES is required prior to any works commencing. Part 4 of the Act describes the processes associated with the preparation and approval of Cultural Heritage Management Plans.

Cultural Heritage Management Plan17816 has been prepared for the Project in consultation with the WTOAC.

The *Heritage Act 2017* provides for the protection and conservation of post-contact heritage by establishing the Victorian Heritage Register and Heritage Inventory for places, objects and archaeological sites of heritage value. It provides for permits to be acquired prior to the removal or damage of registered places.

Planning legislation

Planning and Environment Act

The PE Act provides the framework for planning the use, development and protection of land in Victoria in the interests of current and future generations.

Section 4 of the PE Act provides the Victorian planning objectives are to:

- provide for the fair, orderly, economic and sustainable use, and development of the land
- provide for the protection of natural and man-made resources and the maintenance of ecological processes and genetic diversity
- secure a pleasant, efficient and safe working, living and recreating environment for all Victorians and visitors
- conserve and enhance places of scientific, aesthetic, architectural or historic interest or otherwise of special cultural values
- protect public utilities and other assets to enable the orderly provision of public utilities and facilities for the communities' benefit
- facilitate development in accordance with other objectives
- facilitate the provision of affordable housing
- balance the present and future interests of all Victorians.

The objectives of the planning framework established under the Act are, relevantly to:

- ensure sound, strategic planning coordinated at all levels of government
- enable land use and development planning and policy to be easily integrated with environmental, social, economic, conservation and resource management policies
- ensure environmental, social and economic effects are considered when decisions are made about the use and development of land
- facilitate development which achieves the objectives of planning
- provide for effective enforcement procedures to achieve compliance with planning schemes, permits and agreements.

The PE Act establishes the framework for preparing and amending planning schemes. All planning scheme amendments must be prepared having regard to the Victorian planning objectives.

Plan Melbourne

Plan Melbourne 2017 – 2050 (Plan Melbourne) provides the overarching strategic vision for growth in Melbourne and surrounding areas including Geelong. Plan Melbourne aims to maintain Melbourne as a distinctive, liveable and sustainable city. It identifies five key challenges and opportunities, including:

- remaining competitive in a changing economy, by boosting productivity and supporting growth and innovation across all industries and regions

-
- the need for both mitigation of and adaptation to climate change impacts (it notes that the target of net zero emissions by 2050 “will create a low-carbon economy, generate new jobs, drive innovation within new and traditional industries, and improve the city’s liveability”).

Plan Melbourne identifies Geelong Port as a transport gateway of state significance that will be a focus for investment and growth. Themes running throughout Plan Melbourne include:

- enabling Victoria to maintain its competitive advantages, including its energy resources, that create a diverse, flexible and resilient economy
- supporting renewable energy opportunities.

Greater Geelong Planning Scheme

(i) Municipal Planning Statement

Clause 02.02 (Vision) states:

Council’s overarching vision for Greater Geelong is:

Geelong, coast, country and suburbs, is the best place to live through prosperity and cohesive communities in an exceptional environment.

The key land use and development aspirations that support this vision are to facilitate:

- A prosperous economy that supports jobs and education opportunities.
- A fast, reliable and connected transport network.
- Sustainable development that supports population growth and protects the natural environment.
- An inclusive, diverse, healthy and socially connected community.
- A destination that attracts local and international visitors.

Clause 02.03-2 (Environmental and landscape values) notes that the coastline is an important natural feature of the municipality, that is vulnerable to the impacts of development, climate change and natural processes. Strategic directions include to protect, maintain and enhance the coast, estuaries and marine environment.

Clause 02.03-7 (Economic development) states that while manufacturing will continue to be an economic and employment driver, the municipality’s economy will need to focus on emerging industry sectors that underpin economic development. It notes the need to support industry through the maintenance and improvement of infrastructure including Geelong Port. Strategic directions include:

- Focus new industrial development around major transport routes and infrastructure assets.
- Encourage the growth of new and economically sustainable industry sectors.

Clause 02.03-8 (Transport) states:

The Geelong Port is a vitally important resource for the City’s economy.

Forecast trade growth will place significant demands on port infrastructure capacity requiring potential expansion....

The maintenance of public amenity in surrounding communities needs to be a consideration in context of growth pressures at the port.

Strategic directions

- Provide for the continued growth and development of Geelong Port as a key economic resource and focal point for infrastructure development for the Victorian community.
- Maintain and enhance the efficiency of the port.

-
- Balance the needs of a working port having regard to the amenity of the land uses at the port interface.

(ii) Clause 12.01 (Biodiversity)

Clause 12.01-1S (Protection of biodiversity) aims to protect and enhance Victoria's biodiversity.

Key strategies include:

- Ensure that decision making considers the impacts of land use and development on Victoria's biodiversity, including consideration of cumulative impacts.
- Avoid impacts of land use and development on important areas of biodiversity.
- Consider impacts that may affect the biodiversity value of nationally and internationally significant sites including Ramsar wetlands and sites used by important migratory bird species

Clause 12.01-2S (Native vegetation management) aims to ensure no net loss to biodiversity as a result of the removal, destruction or lopping of native vegetation. The key strategy is apply the three-step approach:

- avoid the removal of native vegetation
- minimise impacts that cannot be avoided
- provide offsets to compensate for unavoidable impacts.

Policy to be considered includes:

- Biodiversity 2037.

The **Native Vegetation Guidelines** provide for the assessment of impacts and describe how offsets are calculated to compensate for loss. The Guidelines are an incorporated document in all planning schemes and are to be considered when preparing an amendment. Decision guidelines for applications to remove native vegetation are set out in Table 6 of the Guidelines and include:

- whether efforts to avoid and minimise native vegetation are commensurate with the biodiversity and other values of native vegetation and whether focus has been paid to areas of highest native vegetation value
- the role of the native vegetation to be removed in protecting water quality, waterway and riparian ecosystems
- the role of the native vegetation to be removed in preventing land degradation
- whether an offset has been identified and can be secured.

(iii) Clause 12.02 (Marine and coastal environment)

Clause 12.02-1S (Protection of the marine and coastal environment) seeks to protect coastal and foreshore environments and improve public access and recreation facilities around Port Phillip Bay by focusing development in areas already developed or that can tolerate more intensive use.

Strategies include to:

- enhance the ecological values of the ecosystems in the marine and coastal environment
- protect and enhance the extent and condition of native habitats and species diversity
- minimise direct, cumulative and synergistic effects on ecosystems and habitats
- maintain and enhance water quality and biodiversity in and adjacent to coastal estuaries, wetlands and waterways, including by minimising disturbance of sediments
- protect and enhance natural features, landscapes, seascapes and public visual corridors
- plan for marine development and infrastructure to be sensitive to marine national parks and environmental assets.

Policy to be considered includes:

- *Marine and Coastal Policy*, DELWP, 2020
- *Siting and Design Guidelines for Structures on the Victorian Coast*, DELWP, 2020
- *Victorian Coastal Strategy*, Victorian Coastal Council, 2014

(iv) Clause 13 (Environmental risks and amenity)

This policy states that planning should identify, prevent and minimise the risk of harm to the environment, human health, and amenity through:

- land use and development compatibility
- effective controls to prevent or mitigate significant impacts.

Planning should:

- manage the potential for environmental changes to impact on the economic, environmental or social wellbeing of society
- ensure development and risk mitigation does not detrimentally interfere with important natural processes.

Clause 13.01-2S (Coastal inundation and erosion) aims to manage coastal hazard risk and climate change impacts. Key strategies include responding to marine and coastal processes in the context of the coastal compartment type.

Clause 13.05-1S (Noise) aims to assist the management of noise effects on sensitive land uses. Key strategies include ensuring that community amenity and human health is not adversely impacted by noise emissions, particularly for sensitive uses including residential and education uses.

Clause 13.06-1S (Air quality) aims to assist in the protection and improvement of air quality. Key strategies include ensuring, wherever possible, suitable separation between sensitive land uses and uses that generate air pollutants.

Clause 13.07-1S (Land use compatibility) aims to protect community amenity, human health and safety while facilitating appropriate uses with potential adverse off-site impacts. Key strategies include:

- ensuring use or development is compatible with nearby land uses
- avoiding or minimising adverse off-site impacts from industrial uses through land use separation, siting, building design and operational measures.

Clause 13.07-2S (Major hazard facilities) aims to minimise the potential for human and property exposure to risk from incidents at a MHF and to ensure the ongoing viability of MHFs. Key strategies include:

- ensuring MHFs are sited, designed and operated to minimise risk to surrounding communities and the environment
- applying appropriate threshold distances from sensitive land uses for new major hazard facilities and between major hazard facilities.

(v) Clause 15 (Heritage)

Clause 15.03-2S (Aboriginal cultural heritage) aims to ensure the protection and conservation of places of Aboriginal cultural heritage significance. Key strategies include ensuring that permit approvals align with the recommendations of any relevant approved CHMP. Decisions must consider:

- the findings and recommendations of the Aboriginal Heritage Council

-
- the Aboriginal Heritage Act.

(vi) Clause 17 (Economic development)

This policy states that planning is to provide for a strong and innovative economy, to contribute to the economic wellbeing of the state and foster economic growth by (among other things) facilitating decisions and resolving land use conflicts, so that each region may build on its strengths and achieve its economic potential.

Strategies in **Clause 17.01-1R (Diversified economy – Geelong G21)** include:

- building on the region’s competitive strengths and economic assets
- supporting new businesses that provide employment and innovation opportunities
- supporting industries that utilise skills within the region.

Strategies in **Clause 17.01-1L (Diversified economy – Greater Geelong)** include supporting the development of seafood and aquaculture industries, particularly in North Geelong, Portarlington and Avalon.

Clause 17.03-2S (Sustainable industry) aims to facilitate the sustainable operation of industry. Key strategies include:

- providing adequate separation and buffer areas between sensitive uses and offensive or dangerous industries to ensure residents are not affected by adverse environmental effects, nuisance or exposure to hazards
- minimising inter-industry conflict and encouraging like industries to locate within the same area.

Clause 17.04-1S (Facilitating tourism) aims to encourage tourism development to maximise economic, social and cultural benefits of the state as a competitive tourist destination.

(vii) Clause 18 (Transport)

Clause 18.02-6S (Ports) aims to support the effective and competitive operation of Victoria’s commercial trading ports, and to facilitate their ongoing sustainable operation and development. Key strategies include:

- providing for the ongoing development of ports including Geelong Port in accordance with approved Port Development Strategies
- managing impacts of ports and related industrial development on nearby sensitive uses
- accommodating uses in the port environs that depend upon, or gain significant economic advantage from, proximity to the port’s operations
- ensuring industrially zoned land within the port environs continues to support the role of the port as a critical freight and logistics precinct
- ensuring any new use or development does not prejudice the efficient operations of the port
- ensuring development does not expose people to unacceptable health or safety risks and consequences associated with an existing MHF
- ensuring that any use or development within port environs is consistent with policies for the protection of the environment, and takes into account planning for the port.

Policy to be considered includes:

- *Port of Geelong Port Development Strategy 2018* (Victorian Regional Channels Authority, 2018).

Strategies in **Clause 18.02-6L (Geelong Port)** include facilitating increased throughput at the port through the development of extended berths at Corio Quay North and South and Lascelles Wharf.

(viii) The Geelong Port Development Strategy 2018

The *Geelong Port Development Strategy 2018* is referenced at Clause 18.02-6S and in the Port Zone. The Strategy identifies the key issues and challenges facing Geelong Port in its ambition to grow to enable it to serve its designated role and economic function as Victoria’s premier dry bulk and bulk liquid hub. It addresses the requirements of the *Port Management Act 1995* and associated Ministerial Guidelines including current and projected trade, land use, port infrastructure and transport infrastructure.

(ix) Zones and Overlays

Project works are proposed across a variety of zones and overlays. The Port Zone will need to be extended to cover part of the pier extension and Berth 5. The relevant purposes of the zones and overlays are broadly summarised in Table 1.

Table 1 Zone and Overlay purposes

Control	Purposes
Zones	
Port (PZ)	<ul style="list-style-type: none"> - To recognise the role of Victoria’s commercial trading ports in supporting the economy. - To provide for shipping access and the development of ports as key areas of the State for the interchange, storage and distribution of goods. - To provide for uses which derive direct benefit from co-establishing with a commercial trading port. - To provide for the ongoing use and development of ports consistent with the relevant port development strategy.
Industrial 2 (INZZ)	<ul style="list-style-type: none"> - To provide for manufacturing industry in a manner which does not affect the safety and amenity of local communities. - To promote manufacturing industries that require a substantial threshold distance.
Transport (TRZ2)	<ul style="list-style-type: none"> - To provide for the use and development of land that complements, or is consistent with, the transport system or public land reservation. - To ensure the efficient and safe use of transport infrastructure and land comprising the transport system.
Zones	
Design and Development Overlay Schedule 20 (DDO20)	<ul style="list-style-type: none"> - To improve the appearance and image of industrial areas. - To facilitate economic development through efficient and functional industrial development. - To provide a high level of amenity for workers and visitors. - To minimise the potential for negative off-site effects. - To promote best practise storm water quality and reuse measures.

Control	Purposes
Land Subject to Inundation Overlay Schedule 2 (LSIO2)	<ul style="list-style-type: none"> - To protect water quality, water protection and flood plain health. - To protect land vulnerable to coastal inundation from inappropriate development. - To plan for projected sea level rises associated with climate change. - To ensure new development is suitably designed to ensure that it is compatible with the identified flood hazard and local drainage characteristics.

Source: IAC using information sourced from EES Attachment VII

(x) Amendment VC221

Amendment VC221 was gazetted on 4 August 2022, during the Hearing. The Amendment makes changes to all Victorian planning schemes to facilitate all-electric developments, to support implementation of Victoria’s Climate Change Strategy 2021 and Gas Substitution Roadmap 2022.

The Explanatory Report for the Amendment notes that one of the priorities in the Gas Substitution Roadmap is all-electric precincts, and that planning provisions that mandate connections to reticulated gas services are limiting opportunities for developers to choose to develop all-electric developments. It states:

Changes ... are required to help ensure the [planning scheme] facilitates transition towards electrification and supports achievement of the Victorian Government’s emission reduction targets. This has been achieved through targeted reforms that remove barriers to all-electric developments while not prohibiting connection to reticulated gas where it is proposed by a proponent.

Pipelines Act

The *Pipelines Act 2006* governs the construction and operation of pipelines in Victoria. The objectives of the Act include to:

- facilitate the development of pipelines for the benefit of Victoria
- establish sound consultative processes relating to the construction and operation of pipelines
- establish processes to determine the most efficient and suitable route for each pipeline
- protect the public from environmental, health and safety risks resulting from the construction and operation of pipelines
- ensure that pipelines are constructed and operated in a way that minimises adverse environmental impacts and has regard for the need for sustainable development.

The pipeline (above ground and underground sections) will require a Pipeline Licence. The Act requires licensed pipelines to be constructed and operated in accordance with AS2885. The Act requires a licensee to prepare Environment Management Plans for both construction and operation of the pipeline, as well as a Safety Management Plan and a Consultation Plan. Construction and operation of the pipeline cannot commence until the plans are approved. The Environment Management Plan and Safety Management Plan must be approved by Energy Safe Victoria (ESV) and the Minister for Energy, Environment and Climate Change.

Port Management Act

The *Port Management Act 1995* provides for the establishment, management and operation of commercial trading ports and local ports within Victoria. GeelongPort is responsible for safety,

environment and hazard management within the Port of Geelong. This requires GeelongPort to prepare a Safety and Environment Management Plan and Health, Safety and Environment system. Project activities within the defined port boundary would need to comply with the Safety and Environment Management Plan.

Key decision-making principles

The precautionary principle

The precautionary principle is well recognised in environmental law, and is embodied in (among others) the EP Act. It states that if there are threats of series or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. The precautionary principle is given legislative force through a number of the Acts discussed above.

Integrated decision-making

Clause 71.02-3 (Integrated decision-making) of the Greater Geelong Planning Scheme (which is repeated in all other Victorian planning schemes) guides all planning decisions. It states:

Society has various needs and expectations such as land for settlement, protection of the environment, economic wellbeing, various social needs, proper management of resources and infrastructure. Planning aims to meet these needs and expectations by addressing aspects of economic, environmental and social wellbeing affected by land use and development.

Planning and responsible authorities should endeavour to integrate the range of planning policies relevant to the issues to be determined and balance conflicting objectives in favour of net community benefit and sustainable development for the benefit of present and future generations. However, in bushfire affected areas, planning and responsible authorities must prioritise the protection of human life over all other policy considerations.

Planning authorities should identify the potential for regional impacts in their decision making and coordinate strategic planning with their neighbours and other public bodies to achieve sustainable development and effective and efficient use of resources.

Ecologically sustainable development

The IAC's Terms of Reference (at clause 43) require it to have regard to the principles and objectives of ecologically sustainable development. Ecologically sustainable development is defined in section 4 of the *Commissioner for Environmental Sustainability Act 2003* and adopted in the EES Guidelines:

What is ecologically sustainable development?

- (1) Ecologically sustainable development is development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends.
- (2) The objectives of ecological sustainable development are –
 - (a) to enhance individual and community well-being and welfare by following a path of economic development that safeguards the welfare of future generations;
 - (b) to provide for equity within and between generations;
 - (c) to protect biological diversity and maintain essential ecological processes and life-support systems.
- (3) The following are to be considered as guiding principles of ecologically sustainable development –
 - (a) that decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equity considerations;

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- (b) if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation;
 - (c) the need to consider the global dimension of environmental impacts of actions and policies;
 - (d) the need to develop a strong, growing and diversified economy which can enhance the capacity for environment protection;
 - (e) the need to maintain and enhance international competitiveness in an environmentally sound manner;
 - (f) the need to adopt cost effective and flexible policy instruments such as improved valuation, pricing and incentive mechanisms;
 - (g) the need to facilitate community involvement in decisions and actions on issues that affect the community.

The Pipelines Act sets out sustainability principles in section 4 that are broadly consistent with the above.

Appendix G Recommended mitigation and contingency measures

IAC recommended version of the mitigation measures

Tracked against the Proponent's Part C version (D456)

Table 14-4 Mitigation measures

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
<p>Aboriginal cultural heritage</p> <p>EES evaluation objective: To avoid or minimise adverse effects on Aboriginal and historic cultural heritage</p>					
<p>MM-AH01</p>	<p>CHMP 17816 Conditions</p> <p>CHMP 17816 will be updated (as necessary) following the undertaking of a cultural values assessment to identify intangible values relevant to the Project (both onshore and offshore in Corio Bay) and an underwater Aboriginal cultural archaeological assessment for the proposed dredging areas.</p> <p>The project will be delivered in accordance with conditions set out in CHMP 17816 to manage any potential harm to known Aboriginal places and values. Typical management conditions include, but are not limited to:</p> <ul style="list-style-type: none"> • Conditions for harm avoidance and/or harm minimisation measures • Conditions for harm mitigation measures where appropriate, including requirements for surface artefact collection and/or salvage excavations and appropriate analysis and reporting • Conditions for the removal, custody, curation and management of Aboriginal cultural heritage (artefacts) identified during the CHMP. <p>The CHMP will also provide necessary and appropriate mechanisms and processes to manage any potential harm to unknown Aboriginal places and values. Typical management of unknown Aboriginal places and cultural heritage values will include, but not limited to:</p> <ul style="list-style-type: none"> • Contingency plans for the management of Aboriginal cultural heritage, including Aboriginal ancestral remains, unexpectedly identified during the construction phase of the project 	<p>All</p>	<p>CHMP</p>	<p>Construction</p>	<p>Known or unknown Aboriginal cultural heritage values</p>

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<ul style="list-style-type: none"> Contingency plans for the removal, custody, curation and management of Aboriginal cultural heritage (artefacts) identified during the project Review and compliance with the CHMP. 				
Air quality EES evaluation objective: To minimise potential adverse social, economic, amenity and land use effects at local and regional scales					
MM-AQ01	Dust suppression Dust suppression will be used at construction areas as required using water sprays, water carts or other devices on: <ul style="list-style-type: none"> unpaved work areas sand, spoil and aggregate stockpiles during the loading and unloading of dust generating materials. 	Pipeline Treatment facility	Incorporated document Pipeline Licence	Construction	Airborne dust
MM-AQ02	Restricted vehicle movements After arrival at the project site, vehicles, plant and equipment will remain within the construction footprint and on public roads and designated tracks.	Pipeline Treatment facility	Incorporated document Pipeline Licence	Construction	Airborne dust
MM-AQ03	Crushed rock on access tracks Crushed rock will be placed on existing unsealed access tracks if required and as agreed with relevant stakeholders to prevent vehicle movements raising dust. Crushed rock will also be placed on access tracks subject to mud / slippery conditions.	Pipeline Treatment facility	Pipeline Licence	Construction	Airborne dust
MM-AQ04	Speed restrictions Vehicle speed will be restricted to 40 km/h on the construction right of way (ROW) and unsealed access tracks / work areas.	Pipeline Treatment facility	Pipeline Licence	Construction	Airborne dust

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
MM-AQ05	<p>Covering vehicle loads</p> <p>Construction vehicles with potential for loss of loads (such as dust or litter) will be covered when using public roads.</p>	Pipeline Treatment facility	Incorporated document Pipeline Licence	Construction	Airborne dust Offensive odours
MM-AQ06	<p>Weather monitoring</p> <p>Weather conditions will be monitored for extreme heat and/or wind events using systems such as the Bureau of Meteorology forecasts. Where conditions give rise to risks of air quality impacts at sensitive receptors, construction works will be stopped, or will not start, until the work can be done without such risk arising. Measures in MM-AQ01 will continue as required. The project will use existing refinery weather monitoring processes where appropriate.</p>	Pipeline Treatment facility	Incorporated document Pipeline Licence	Construction	Airborne dust Offensive odours
MM-AQ07	<p>Dust monitoring</p> <p>Observational monitoring of dust along the construction right of way (ROW) and at the treatment facility will be undertaken.</p> <p>A proactive approach to control or eliminate dust will be followed. If a dust source is observed to be causing a hazard, then MM-AQ01 will be implemented. If dust levels cannot be contained with MM-AQ01 works will be modified or stopped until the conditions are attained in which the work can resume without causing a dust hazard.</p>	Pipeline Treatment facility	Incorporated document Pipeline Licence	Construction	Airborne dust
MM-AQ08	<p>Odorous soils management</p> <p>In the event that odorous soils are uncovered during construction, the following measures will be undertaken:</p> <ul style="list-style-type: none"> • Cessation of ground disturbance at the location and within the immediate vicinity. • Assessment of site contamination and determination of appropriate management actions in consultation with suitably qualified personnel. <p>If odorous material is found to be contaminated, EPA will be notified if required in accordance with the requirements of the <i>Environment Protection Act 2017</i>.</p>	Pipeline Treatment facility	Incorporated document Pipeline Licence	Construction	Offensive odours

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
MM-AQ09	<p>Equipment maintenance</p> <p>Plant and equipment will be maintained in good condition to minimise spills and air emissions that may cause nuisance.</p>	All	<p>Incorporated document</p> <p>Consent under the <i>Marine and Coastal Act 2018</i></p> <p>Pipeline Licence</p>	Construction	Exhaust emissions
MM-AQ10	<p>Maintenance of the FSRU burners</p> <p>Maintenance of the burners in the boilers and engines will be undertaken regularly as per manufacturer's specifications.</p>	FSRU	EPA Development Licence and Operating Licence	Operation	Pollutant emissions
MM-AQ11	<p>Monitoring FSRU emissions</p> <p>An air quality monitoring program will be designed and implemented to confirm FSRU emission rates comply with design specifications.</p>	FSRU	EPA Development Licence and Operating Licence	Operation	Pollutant emissions
MM-AQ12	<p><u>Minimisation of odorant emissions</u></p> <p><u>The treatment facility will be designed and operated to minimise the risk of odorant releases as far as reasonably practicable.</u></p> <p><u>Arrangements will be put in place to monitor, record and publicly report all odorant releases, with a view to assessing and if necessary improving the performance of the odorant management arrangements</u></p>	<u>Treatment facility</u>	<u>EPA Development Licence and Operating Licence</u>	<u>Design Operation</u>	<u>Pollutant emissions</u>

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
Climate change EES evaluation objective: To provide for safe and cost-effective augmentation of Victoria's natural gas supply having regard to projected demand and supply in context of the State's energy needs and climate policy.					
MM-CC01	Implement adaptation measures <ul style="list-style-type: none"> Climate projections will be factored into the basis of design, particularly the mooring analysis (alignment of FSRU and other vessels with the pier), materials and coatings choices and site hydrological modelling. This will be done using a risk-based design approach that, rather than simply picking a projection, considers the range of projections, the likely exposure of an asset (considering design life and projection timeframes), its criticality, sensitivity and adaptive capacity, in determining the appropriate design factors. Safety procedures and protocols will be updated to take into consideration severe weather conditions such as storm events and heatwaves 	Refinery Pier extension FSRU Pipeline Treatment facility	Incorporated document EPA Development Licence and Operating Licence Pipeline Licence	Operation	Risks to the project from climate change (storm weather, extreme rainfall events, sea level rise and extreme heat events)
Contamination and acid sulfate soils (onshore) EES evaluation objective: To minimise adverse effects on water (in particular wetland, estuarine, intertidal and marine) quality and movement, and to the ecological character of the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar site. To minimise generation of wastes by or resulting from the project during construction and operation, including dredging and accounting for direct and indirect greenhouse gas emissions.					
MM-CO01	Contaminated soils <ul style="list-style-type: none"> Contaminated soils (as identified within Zone 1 – the refinery) will be managed in accordance with: <ul style="list-style-type: none"> <i>Environment Protection Act 2017</i> ERS 2021 PFAS National Environmental Management Plan 2.0 (2020) EPA Victoria Publication: 1669.4: Interim Position Statement on PFAS (as amended or replaced from time to time) 	Pipeline Treatment facility	Incorporated document Pipeline Licence	Construction	Mobilisation of contaminants Human health and environment impacts Offensive odours

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<ul style="list-style-type: none"> ● Stockpiles of trench spoil will be managed in accordance with APGA Code of Environmental Practice – Onshore Pipelines. ● Excess soils and HDD screened cuttings for off-site disposal will be sampled and classified in accordance with: <ul style="list-style-type: none"> ○ EPA Victoria Publication IWRG702: Soil Sampling (as amended or replaced from time to time) ○ EPA Victoria Publication 1828.2: Waste Disposal Categories - Characteristics and Thresholds (as amended or replaced from time to time) ● Contaminated spoil for off-site treatment/disposal will be managed in accordance with: <ul style="list-style-type: none"> ○ Environment Protection Act 2017 and Environment Protection Regulations 2021 (as amended or replaced from time to time). ● Any material imported for use as backfill will comply with the EPA Victoria Publication 1828.2 Waste Disposal Categories - Characteristics and Thresholds for 'Fill Material' (as amended or replaced from time to time) and the fill material determination. The backfill will be accompanied by relevant documentation confirming its compliance to the 'Fill Material' criteria 				
MM-CO02	<p>Contaminated groundwater</p> <ul style="list-style-type: none"> ● Management strategies will be incorporated into the CEMP to manage contaminated groundwater in accordance with: <ul style="list-style-type: none"> ○ <i>Environment Protection Act 2017</i> ○ <i>Environment Reference Standard 2021</i> ○ PFAS National Environmental Management Plan 2.0 (2020). 	Pipeline Treatment facility	Incorporated document Pipeline Licence	Construction	Mobilisation of contaminants Human health and environment impacts

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<ul style="list-style-type: none"> • A procedure which details the monitoring and management for any impact to the aquifer, human health and environment where groundwater is intercepted will be developed. • Management strategies to manage potential contaminated groundwater will be incorporated into the CEMP: <ul style="list-style-type: none"> ○ Disturbance of saturated soil and groundwater within the PFAS affected areas will be minimised (refinery and in vicinity of GW05) and the migration of PFAS into the surrounding soil or surface water will be prevented. Disturbance may be minimised by design of the infrastructure not to extend into the water table or to be bypassed by using HDD techniques. ○ Water from areas that have been identified as contaminated will not be discharged to the environment (land, waterways, sewer). ○ Where a wet-trench installation approach is not undertaken contaminated water will be sampled and either treated onsite, depending on contaminant encountered (this may require approval from the EPA Victoria) or disposed offsite to an EPA Victoria licensed facility. 				
MM-CO03	<p>Contaminant migration</p> <p>Trench dewatering of groundwater or perched water will be avoided. In the unlikely event that dewatering of groundwater or perched water inflow is unavoidable, the trench will be dewatered prior to lowering the pipes.</p>	Pipeline	Pipeline Licence	Design Construction	Mobilisation of contaminants Human health and environment impacts
MM-CO04	<p>Unknown contamination</p> <p>In the event that unknown contamination (including asbestos containing material) is encountered during construction:</p>	Pipeline Treatment facility	Incorporated document Pipeline Licence	Construction	Mobilisation of contaminants Human health and

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<ul style="list-style-type: none"> • Ground disturbance at the unknown contamination location and within the immediate vicinity will be ceased. • Site contamination will be assessed, and the appropriate remedial action will be identified. • The required remediation will be undertaken. • Such material may be identified by visual or olfactory observations, the presence of asbestos and/or other anthropogenic material. 				environment impacts
MM-CO05	<p>Acid sulfate soils</p> <p>Where acid sulfate soil has been identified, or is encountered during construction:</p> <ul style="list-style-type: none"> • Management strategies will be incorporated within the Construction Environmental Management Plan (CEMP) to manage potential ASS risk for a 'Medium' ASS hazard (CASS BPMG, 2010) in accordance with: <ul style="list-style-type: none"> ○ Industrial Waste Management Policy (Waste Acid Sulfate Soils) 1999 (as amended or replaced from time to time) ○ EPA Victoria Publication IWRG655.1: Acid Sulfate Soil and Rock (as amended or replaced from time to time) ○ Victorian Best Practice Guidelines for Assessing and Managing Coastal Acid Sulfate Soils (CASS BPMG, 2010) ○ National Acid Sulfate Soils Guidance (series of documents) 2018 	Pipeline Treatment facility	Pipeline Licence	Construction	Mobilisation of contaminants Human health and environment impacts
	<ul style="list-style-type: none"> • The CEMP must be approved by the Pipeline regulator in consultation with EPA Victoria. • Construction works will not occur during wet months unless conditions are such that land degradation and surface water management problems can be avoided, or appropriate mitigation measures implemented. 				

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<ul style="list-style-type: none"> • Relevant training will be provided to site-based personnel on the requirements of the ASS management procedure including the recommended time period over which soils may be temporarily stockpiled before treatment commences as recommended by the CASS BPMG (2010). • The duration of stockpiling will be minimised in accordance with the CASS BPMG (2010). • A procedure for managing the unexpected discovery of ASS/PASS will be included in the CEMP. • If ASSs are to be stockpiled for an extended time period (exceeding the CASS BPMG (2010) recommended short-term stockpiling durations), the potential generation of acidic leachate will be managed by treating the stockpile and or spreading a guard layer before stockpiling and/or covering the stockpile. The CEMP will include details for when or if the requirements for containment with bund and a leachate collection system is necessary. • Capture and manage run-off that has the potential to be impacted by stockpile material in accordance with the CASS BPMG (2010). • A procedure for management of abstracted groundwater including potentially acidic groundwater will be included in the CEMP. • Develop and implement a monitoring program as part of the CEMP in accordance with the CASS BPMG (2010) to measure the effectiveness of the management strategy and to provide an early warning of any environmental degradation or impact to surface water, groundwater and soils. • Include management procedure for trench dewatering that will limit PASS activation in accordance with the Victorian Best Practice Guidelines for Assessing and Managing Coastal Acid Sulfate Soils (CASS BPMG, 2010) and the National ASS Guidance 'Guidance for the dewatering of acid sulfate soils in shallow groundwater environments', in the CEMP. 				

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<ul style="list-style-type: none"> A procedure for management of the impact of potentially acidic groundwater on underground infrastructure and the environment will be included in the CEMP. 				
MM-CO06	<p>Drilling mud disposal</p> <p>Drilling muds will be disposed in accordance:</p> <ul style="list-style-type: none"> The <i>Environment Protection Act 2017</i> and the Environment Protection Regulations 2021 - Schedule 5 of the Regulations will be used to classify drilling mud for appropriate disposal. Requirements for disposal of drilling mud will be confirmed at the time of construction. APGA Code of Environmental Practice – Onshore Pipelines. 	Pipeline	Pipeline Licence	Construction	<p>Mobilisation of contaminants</p> <p>Human health and environment impacts</p>
MM-CO07	<p>Hydrotest water</p> <ul style="list-style-type: none"> Hydrostatic test water will be managed in accordance with ERS 2021 (Water) and APGA Code of Environmental Practice – Onshore Pipelines. Water will be reused where practicable to conserve water and minimise the volume of water to be disposed of. If water is unable to be reused or recycled, hydrotest water will be treated and disposed within the existing refinery or disposed of in accordance with Environment Protection Regulations 2021. 	Pipeline	Pipeline Licence	Construction	<p>Mobilisation of contaminants</p> <p>Human health and environment impacts</p>
MM-CO08	<p>Fuel and chemical leaks and spills</p> <ul style="list-style-type: none"> Bulk fuel will be stored (if required) in self-bunded tanks in accordance with relevant Australian standards (AS1940-2017 and AS1692-2006). Refuelling or maintenance of equipment, machinery and vehicles will be conducted at least 20 metres or as far away as is reasonably practical from any 	All	<p>Consent under the <i>Marine and Coastal Act 2018</i></p> <p>Incorporated document</p>	<p>Construction</p> <p>Operation</p>	<p>Mobilisation of contaminants</p> <p>Human health and environment impacts</p>

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<p>waterway with appropriate measures to contain spills. For sensitive sites (i.e., wetlands), refuelling or maintenance of equipment will be conducted no closer than 50 metres.</p> <ul style="list-style-type: none"> • Hazardous materials will be stored in ventilated, self-bunded and secured containers in accordance with the <i>Occupational Health and Safety Act 2004</i> (OHS Act) and <i>Occupational Health and Safety Regulations 2007</i> (OHS Regulations). • Dangerous goods will be stored in accordance with the <i>Dangerous Goods (Storage and Handling) Regulations 2012</i> and the code of practice for the storage and handling of dangerous goods. • Routine and scheduled maintenance of vehicles and plant/machinery/equipment will be undertaken to minimise the potential for leaks/spills to occur. • Spill kits and firefighting equipment will be supplied with the chemicals required by legislation. • Dangerous goods and hazardous materials register will be maintained with current SDSs. • If a chemical leak or spill has occurred, the duty to respond to harm as per, Section 31 of the Environment Protection Act 2017, may be required. 		<p>Pipeline Licence Safety cases</p>		<p>Occupational hazard</p>
<p>MM-CO09</p>	<p>Waste management</p> <ul style="list-style-type: none"> • Waste will be managed in accordance with Environment Protection Regulations 2021 and the APGA Code of Environmental Practice – Onshore Pipelines, including establishment of appropriate and secured waste storage locations on-site, as required. • Waste management procedures will be developed and implemented. • Waste materials will be reused or recycled where practicable. • Wastes will be collected and transported by licensed contractors for disposal at appropriately licensed facilities. 	<p>All</p>	<p>Consent under the <i>Marine and Coastal Act 2018</i> Incorporated document Pipeline Licence</p>	<p>Construction Operation</p>	<p>Mobilisation of contaminants Human health and environment impacts Offensive odours</p>

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<ul style="list-style-type: none"> Waste containers will be provided for different types of waste generated onsite. Refuse containers will be lidded to mitigate fauna access. 				
Greenhouse gas EES evaluation objective: To minimise generation of wastes by or resulting from the project during construction and operation, including dredging, and accounting for direct and indirect greenhouse gas emissions.					
MM-GG01	<p>Minimise embodied and transport emissions of materials</p> <p>Low embodied energy and locally sourced materials will be considered and used where practicable to minimise embodied and transport emissions. This includes preference for cargoes with lowest net embodied emissions, so far as reasonably practicable.</p> <p>The proponent will develop criteria for a minimum proportion of supplementary cementitious material content in concrete, recycled steel, and recycled aggregates. The criteria will consider the location where materials are being sourced from to minimise associated transport emissions.</p>	All	<p>Incorporated document</p> <p>Pipeline Licence</p>	<p>Construction</p> <p>Operation</p>	<p>Embodied carbon</p> <p>Transport emissions</p>
MM-GG02	<p>Managing quality of materials</p> <p>Materials that are low maintenance and durable will be selected to avoid unnecessary replacement.</p> <p>The quality of key materials (i.e., pipe and mooring infrastructure) will be inspected before supplying to site to avoid additional transport and handling of materials.</p>	All	<p>Incorporated document</p> <p>Pipeline Licence</p>	<p>Construction</p>	<p>Transport emissions</p>
MM-GG03	<p>Source local plant and equipment</p> <p>Locally sourced plant and equipment (i.e., within Victoria) will be considered and used where practicable to reduce emissions associated with transport.</p> <p>Sourcing local plant and equipment where practicable will be included in the selection criteria for tendering of works associated with plant and equipment.</p>	All	<p>Incorporated document</p> <p>Pipeline Licence</p>	<p>Construction</p>	<p>Transport emissions</p>

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
MM-GG04	<p>Coordination of construction activities</p> <p>Construction activities will be coordinated to reduce unnecessarily extending the construction period and to avoid inefficient use of equipment.</p>	All	<p>Incorporated document</p> <p>Pipeline Licence</p>	Construction	Direct greenhouse gas emissions
MM-GG05	<p>Sustainable procurement and resource management practices</p> <p>Sustainable procurement and resource management practices will be adopted to avoid the inefficient use of materials, fossil fuels, and electricity.</p> <p>The proponent will refer to ISO 20400:2017 Sustainable procurement which provides guidance on integrating sustainability within procurement.</p>	All	<p>Incorporated document</p> <p>Pipeline Licence</p>	Construction	Direct and indirect greenhouse gas emissions
MM-GG06	<p>Local workforce</p> <p>Local workforce will be engaged where possible. Interstate and international travel will be minimised and where appropriate replaced by virtual engagement.</p> <p>The proponent will complete a transport plan to detail how fuel emissions from employee transport would be minimised.</p>	All	<p>Incorporated document</p> <p>Pipeline Licence</p>	<p>Construction</p> <p>Operation</p>	Transport emissions
MM-GG07	<p>Plant and equipment fuel efficiency</p> <p>Selection of plant and equipment will incorporate consideration of fuel efficiency to reduce the consumption of fossil fuels.</p>	All	<p>Incorporated document</p> <p>Pipeline Licence</p>	<p>Construction</p> <p>Operation</p>	Direct greenhouse gas emissions
MM-GG08	<p>Waste – avoid, reduce, reuse</p> <p>Design will reduce the total quantum of materials required through design refinement and incorporate reuse materials during construction and operation of the project.</p> <p>The proponent will develop a waste management plan that considers waste reduction, segregation of waste, and disposal of waste to ensure that waste is correctly separated and diverted from landfill where appropriate.</p>	All	<p>Incorporated document</p> <p>Pipeline Licence</p>	<p>Design</p> <p>Construction</p> <p>Operation</p>	<p>Direct and indirect greenhouse gas emissions</p> <p>Waste emissions</p>

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
MM-GG09	<p>Implementation of Energy Management Systems</p> <p>An energy management system will be implemented in accordance with the International Organisation for Standardisation (ISO) 50001 <i>Energy Management Systems</i> (ISO 50001) for the operation of the FSRU. The ISO 50001 provides a framework for organisations to take a systematic approach to achieve continual improvement of energy performance and efficiency and reductions in greenhouse gas emissions. This framework is considered global best practice, and involves:</p> <ul style="list-style-type: none"> • developing energy use baselines • developing energy management plans • identifying performance indicators • setting targets for improvement. <p>Progress will be regularly monitored, reported, and reviewed. Greenhouse gas emissions reporting will include public reporting under the NGER scheme and Viva Energy's corporate Sustainability reporting. Implementation of this system will also involve external certification by ISO-accredited auditors (typically on a three year cycle) in which both compliance with the ISO standard and performance improvement will need to be demonstrated to maintain certification.</p>	FSRU	EPA Development Licence and Operating Licence	Operation	Direct greenhouse gas emissions
MM-GG10	<p>Emergency management procedures</p> <p>Safety controls and emergency management practices will be put in place in the case of unplanned activities, incidents, and emergencies (i.e., unplanned maintenance or venting) to minimise the release of fugitive greenhouse gas emissions. Refer to MM-SHR07.</p>	Pipeline Treatment facility FSRU	Pipeline Licence Incorporated document EPA Development Licence and Operating Licence	Operation	Direct greenhouse gas emissions

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
MM-GG11	<p>Certified carbon offsets</p> <p>Scope 1, and 2 <u>and 3 greenhouse gas emissions within the operational boundary of emissions associated with</u> the project will be quantified and offset to compensate for emissions produced during construction and annual emissions produced during operation.</p> <p><u>Project emissions must first be avoided or minimised as far as reasonably practicable, with remaining, actual emissions offset annually as above.</u></p> <p>Note that offsets will only be considered for project emissions after measures that aim to avoid or minimise emissions have been adopted.</p>	FSRU	Incorporated document	Construction Operation	Scope 1, and 2 <u>and 3</u> greenhouse gas emissions <u>within the operational boundary of the project</u>
<p>Groundwater</p> <p>EES evaluation objective: To minimise adverse effects on water (in particular wetland, estuarine, intertidal and marine) quality and movement, and to the ecological character of the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar site</p>					
MM-GW01	<p>Loss of registered bores</p> <p>Through continued liaison with landholders the location of potentially affected bores (due to damage, destruction or loss of access) will be confirmed prior to construction and make-good arrangements agreed if required.</p>	Pipeline	Pipeline Licence	Construction	Impact on local groundwater users
<p>Historical heritage</p> <p>EES evaluation objective: To avoid or minimise adverse effects on Aboriginal and historic cultural heritage.</p>					
MM-HH01	<p>Onshore unexpected finds protocol</p> <p>An onshore unexpected finds protocol will be adopted and implemented if an unknown historic heritage site, value or object is discovered onshore during construction. The protocol will be incorporated into the Construction Environmental Management Plan (CEMP).</p> <p>An archaeology induction will be given by a historical archaeologist to all staff and contractors involved in ground disturbance works prior to their commencement. This</p>	Pipeline Treatment facility	Incorporated document Consent under the <i>Marine and Coastal Act 2018</i> Pipeline Licence	Construction	Impact or destruction to historical heritage places

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	protocol will include measures to be implemented if an unexpected find is encountered at any stage during construction.				
MM-HH02	<p>Offshore unexpected finds protocol</p> <p>An offshore unexpected finds protocol will be adopted and implemented if an unknown historic heritage site, value or object is discovered offshore during construction. The protocol will be incorporated into the Construction Environmental Management Plan (CEMP).</p> <p>A maritime archaeology induction will be given by a maritime archaeologist to all staff and contractors involved in seabed disturbance works prior to their commencement. This protocol will include measures to be implemented if suspected maritime heritage material is encountered at any stage during construction.</p>	<p>Dredging</p> <p>Temporary loadout facility</p> <p>Refinery Pier extension</p> <p>Seawater transfer pipe</p>	<p>Incorporated document</p> <p>Consent under the <i>Marine and Coastal Act 2018</i></p>	Construction	Impact or destruction to historical heritage places
<p>Landscape and visual</p> <p>EES evaluation objective: To avoid, minimise or offset potential adverse effects on native flora and fauna and their habitats, especially listed threatened or migratory species and listed threatened communities as well as on the marine environment, including intertidal and marine species and habitat values.</p> <p>To minimise potential adverse social, economic, amenity and land use effects at local and regional scales</p>					
MM-LV01	<p>School Road screen planting</p> <p>Large native Eucalyptus trees will be planted along the School Road boundary to screen the treatment facility from the road. Lower level understorey plantings of shrubs, groundcovers and grasses comprising primarily evergreen species will also be provided to ensure a layered screening effect on School Road. A copy of the landscape plan documenting the proposed screen planting must be reviewed by the relevant health and safety expert so as to assess potential gas safety impacts. The tree and shrub plantings should be indigenous species.</p>	Treatment facility	Incorporated document	Operation	Impacts on visual amenity of road users
MM-LV02	<p>Colour of FSRU</p> <p>The FSRU must be in muted colours, to reduce its visual impact as far as reasonably practicable, provided this is acceptable from a marine safety perspective.</p>	FSRU	Incorporated Document	Design Construction	Impacts on visual amenity of community

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
			Consent under the Marine and Coastal Act 2018	Operation	
<p>Light spill</p> <p>EES evaluation objective: To avoid, minimise or offset potential adverse effects on native flora and fauna and their habitats, especially listed threatened or migratory species and listed threatened communities as well as on the marine environment, including intertidal and marine species and habitat values.</p> <p>To minimise potential adverse social, economic, amenity and land use effects at local and regional scales</p>					
MM-LS01	<p>AS 4282: 2019 Control of the Obtrusive Effects of Outdoor Lighting and AS/NZS 1680.5 Interior and workplace lighting: Outdoor workplace lighting</p> <p>Lighting within outdoor workspaces will be in accordance with requirements set out in standards and guidelines including AS 4282: 2019 and AS/NZS 1680.5.</p>	Dredging Pipeline Treatment facility	Consent under the <i>Marine and Coastal Act 2018</i> Pipeline licence Incorporated document	Design Construction Operation	Impacts on light sensitive wildlife and species due to night-time construction activities and the treatment facility
MM-LS03	<p>National Light Pollution Guidelines for Wildlife Including marine turtles, seabirds and migratory shorebirds January 2020 Version 1.0</p> <p>The <i>National Light Pollution Guidelines for Wildlife</i> describes best practice for wildlife sensitive lighting design. Lighting on the extension to Refinery Pier will be in accordance with the design principles outlined in the guidelines which would result in reduced material requirements and energy use, minimise potential impacts to light sensitive species and lead to a reduction in greenhouse gas emissions.</p> <p>A Lighting Report will be commissioned at the detailed design stage to demonstrate that lighting for the Project is consistent with the National Light Pollution Guidelines for Wildlife and AS 4282: 2019 Control of the Obtrusive Effects of Outdoor Lighting.</p>	Refinery Pier	Incorporated document	Design Operation	Impacts on light sensitive wildlife and species due to light spill from the extension to Refinery Pier

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
<p>Marine ecology and water quality</p> <p>EES evaluation objective: To avoid, minimise or offset potential adverse effects on native flora and fauna and their habitats, especially listed threatened or migratory species and listed threatened communities as well as on the marine environment, including intertidal and marine species and habitat values.</p> <p>To minimise adverse effects on water (in particular wetland, estuarine, intertidal and marine) quality and movement, and the ecological character of the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar site.</p>					
MM-ME01	<p>Reuse of discharge from the FSRU in the refinery</p> <p>The reuse of discharge from the FSRU in the refinery for cooling water purposes will be maximised to ensure that:</p> <ul style="list-style-type: none"> the volume of seawater withdrawn from Corio Bay is minimised as far as reasonably practicable the seawater discharge volume to Corio Bay is minimised as far as reasonably practicable the residual chlorine discharge to Corio Bay is minimised as far as reasonably practicable there is a reduction in temperature plume from existing refinery discharge 	FSRU Refinery	EPA Development Licences and Operating Licences Consent under the <i>Marine and Coastal Act 2018</i>	Design Operation	Temperature, chlorine and entrainment impacts related to use and discharge of seawater
MM-ME02	<p>Avoid dredging in spring growth season <u>spring, summer and early autumn</u>.</p> <p>The 8-week dredging program will avoid the spring, summer and early autumn seasons (September, October and November <u>to March</u>). as it This is the period of the year where <u>when:</u></p> <ul style="list-style-type: none"> there is a high growth of seagrass and phytoplankton and, key species of fish are in larval or juvenile stage <u>it is an important time for migratory birds and intertidal feeding.</u> 	Dredging	Consent under the <i>Marine and Coastal Act 2018</i>	Construction	Impacts to primary productivity and <u>fishery replenishment, shorebirds and Ramsar site</u> from dredging
MM-ME03	<p>Limit duration of overflow from barges</p> <p>To limit the extent of the turbidity plume in Corio Bay during dredging, the overflow period for barges associated with a small or medium-size backhoe dredge will be limited to 20 minutes while the overflow period for barges associated with a large size backhoe dredge</p>	Dredging	Consent under the <i>Marine and Coastal Act 2018</i>	Construction	Impacts to primary productivity and seagrass

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<p>will be limited to 14 minutes. This will limit the sediment spill rate to below 9 kg/sec and the extent of the turbidity plume.</p> <p><u>When conditions result in dredge plumes moving toward westward through to northwards (ie towards the seagrass beds and Ramsar site), there must be no overflow from barges.</u></p>				communities from dredging
MM-ME04	<p>Install <u>a silt curtain between dredging and refinery intake and seagrass enclosing the dredge.</u></p> <p>A temporary silt curtain will be installed between the dredging site and the existing refinery seawater intake and seagrass bed <u>enclosing the dredge</u> to minimise the number of days with mitigate the dispersal of elevated suspended solids <u>from dredging</u> concentration.</p>	Dredging	Consent under the <i>Marine and Coastal Act 2018</i>	Design Construction	Impacts to primary productivity and seagrass communities from dredging
MM-ME05	<p>Monitor turbidity and light attenuation during dredging, with threshold limits</p> <p><u>Manage dredging program to minimise ecological risks associated with elevated turbidity as far as reasonably practicable.</u></p> <p><i>Turbidity monitoring at edges of seagrass</i></p> <p>Turbidity will be monitored during the dredging program continuously in north Corio Bay, with a minimum of three sites along the 3 m depth contour at the offshore boundary of the seagrass beds proximate to dredging activity which may be affected by turbidity, including seagrass in the Ramsar site.</p> <p>The following limits apply as thresholds for action to restrict turbidity releases:</p> <ul style="list-style-type: none"> • 12-hour mean concentration above 15<u>5</u> NTU (trigger warning) • 24-hour mean concentration above 12<u>5</u> NTU (action required) <p>The above limits only apply insofar as turbidity is materially contributed to at the monitoring location by dredging activity (as compared with natural spikes in turbidity caused by storms, wave action and the like).</p> <p><i>Turbidity monitoring at disposal ground</i></p>	Dredging	Consent under the <i>Marine and Coastal Act 2018</i>	Construction	Impacts to primary productivity and seagrass communities from dredging

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<p>Turbidity will be monitored continuously at two sites 600 m inshore of the Point Wilson dredged material ground (DMG) to confirm that there is not regular transport of turbidity from barge disposal into shallow water near Point Wilson.</p> <p><i>Concurrent light attenuation monitoring</i></p> <p>Light attenuation will be monitored at the same sites where turbidity is recorded.</p> <p><i>Contingency measures - trigger actions</i></p> <p>Where action is required to reduce turbidity these may include, without limitation, reducing the period of overflow from barges to zero, slowing the dredging cycle of the backhoe, changes to use of silt curtains and dredging during current flows favourable to reduced dispersion of sediment towards seagrasses. Such actions will continue until turbidity drops below the trigger warning level.</p>				
MM-ME06	<p><u>Seagrass and seabed biota monitoring in dredged area and Point Wilson dredged material ground (DMG)</u></p> <p><u>Monitoring will be undertaken to assess the effects of dredging on:</u></p> <ul style="list-style-type: none"> <u>seagrass in the vicinity of the dredged area, including the Ramsar wetland and north-western Corio Bay</u> <u>benthic fauna abundance, diversity and composition in the dredged area and the Point Wilson DMG (to detect any significant changes to infauna communities in the dredged area and the recovery of the Point Wilson DMG)</u> <p><u>The monitoring of effects on seagrass will include surveys before, during and after dredging to assess impacts on seagrass. Consideration should be given to the use of monitoring indicators developed by the Western Australian Marine Science Institution (WAMSI).</u></p> <p><u>A minimum of two</u> baseline surveys will be made with a 3-month gap prior to dredging, and four <u>eight</u> post-commissioning surveys in the same locations every 3 months for 2 years of benthic fauna abundance, diversity and composition to detect any significant changes to infauna communities in the dredged area and the recovery of the Point Wilson DMG.</p>	Dredging	Consent under the <i>Marine and Coastal Act 2018</i>	Construction and operation	Impacts to primary productivity <u>(seagrass)</u> and seabed biota from dredging

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
MM-ME07	<p>Monitoring of plankton during and after dredging</p> <p>Plankton populations will be monitored at four sites in north Corio Bay (as used in the 2020-2021 plankton surveys) before, during and after the dredging period, at two weekly intervals. The purpose is to identify if there is a bloom of toxic phytoplankton as a result of release of nitrogen or toxic algal spores during dredging.</p> <p>Data on relevant water quality parameters will be collected in conjunction with the biological monitoring to assist in the interpretation of results.</p> <p>The phytoplankton surveys will commence 48 weeks before dredging and will continue for 8 weeks after dredging has been completed. The standard notifications to EPA and aquaculture will be made in the event that there is a bloom.</p>	Dredging	Consent under the <i>Marine and Coastal Act 2018</i>	Construction	Impacts to primary productivity and plankton populations from dredging
MM-ME08	<p>Design seawater intake to minimise entrapment</p> <p>The seawater intake will be designed to keep the intake velocity in the horizontal plane at a speed below 0.15 m/s at the intake screen to minimise capture of small and large fish and other free-swimming biota and provide the same level of protection as the existing refinery intake. The intake will also be provided with a screen with apertures less than 100mm to prevent large objects and seagrass from being carried into the seawater cooling system.</p> <p>When the Refinery is not operating, the FSRU intake volume will be limited to minimise entrainment during late spring/early summer, so far as reasonably practicable.</p>	FSRU	EPA Development Licence and Operating Licence Consent under the <i>Marine and Coastal Act 2018</i>	Design Operation	Entrapment impacts related to use and discharge of seawater
MM-ME09	<p>Locate seawater intake to minimise entrainment</p> <p>To ensure that a very low percentage of fish larvae are entrained in spring and summer, the seawater intake on the FSRU will be located so that it is at least 2 m below the water surface (to avoid entraining biota from near the surface) and at least 2 m above the seabed (to avoid entraining biota from near the seabed).</p>	FSRU	EPA Development Licence and Operating Licence Consent under the <i>Marine and Coastal Act 2018</i>	Design Operation	Entrainment impacts related to use and discharge of seawater

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
MM-ME10	<p>Design diffuser to achieve high dilution</p> <p>The diffuser for cool water discharge from the FSRU will be designed to achieve a minimum initial dilution of 20:1 to ensure that the chlorine concentration in the diluted discharge is minimised and a temperature change from ambient of less than 0.4°C.</p>	FSRU	<p>EPA Development Licence and Operating Licence</p> <p>Consent under the <i>Marine and Coastal Act 2018</i></p>	<p>Design</p> <p>Operation</p>	<p>Temperature impacts related to use and discharge of seawater from the FSRU through the diffuser</p>
MM-ME11	<p>Design lighting to minimise adverse overspill</p> <p>Best practice will be used in the design of the lights on the pier extension and will meet the requirements of AS 4282: 2019 <i>Control of the Obtrusive Effects of Outdoor Lighting and the National Light Pollution Guidelines for Wildlife</i> (Jan 2020).</p>	Refinery Pier	<p>Incorporated document</p> <p>Consent under the <i>Marine and Coastal Act 2018</i></p>	<p>Design</p> <p>Operation</p>	<p>Impacts to fauna from light spill</p>
MM-ME12	<p>Implement biosecurity measures on all vessels</p> <p>There are well-established measures to control and minimise the introduction of marine pests in Corio Bay and all applicable measures will be implemented, including:</p> <p>Antifoul coating to prevent the encrusting of biota on the hull;</p> <p>Vessels from certain ports will be cleaned before entry;</p> <p>Manage ballast water in accordance with the Australian Ballast Water Management Requirements (DAWR, 2017);</p> <p>Manage vessel activities in accordance with the National System for the Prevention and Management of Marine Pest Incursions.</p>	<p>FSRU</p> <p>LNG carriers</p>	<p>Consent under the <i>Marine and Coastal Act 2018</i></p> <p>EPA Development Licence and Operating Licence</p>	<p>Operation</p>	<p>Impacts to the marine environment of Corio Bay through the introduction of marine pests</p>
MM-ME13	<p>Manage cleaning and antifouling system on FSRU to avoid contamination</p> <p>The anti-foul coating on the FSRU will be cleaned and maintained periodically. There are established procedures to collect scrapings from the hull and prevent them from accumulating on the seabed. Only approved antifoul coatings will be used for maintenance.</p>	FSRU	<p>Consent under the <i>Marine and Coastal Act 2018</i></p>	<p>Operation</p>	<p>Potential impacts to the marine environment</p>

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
			EPA Development Licence and Operating Licence		from chemicals used on board the FSRU
MM-ME14	<p>Continue to use and upgrade spill management procedures</p> <p>Viva Energy and Ports Victoria have a well-established spill management plan. The existing plan will be updated as required and implemented. Where new and improved monitoring procedures are identified these will be implemented.</p> <p>The EPA will be consulted in relation to the spill management plan.</p> <p>Key stakeholders, including Geelong Grammar School and local resident groups, consistent with MM-SB01, and the EPA will be will be informed when spills occur.</p>	Refinery Pier FSRU	<p>Incorporated document</p> <p>Consent under the <i>Marine and Coastal Act 2018</i></p> <p>EPA Development Licence and Operating Licence</p>	Operation	Potential impacts to the marine environment from chemicals used
MM-ME15	<p>Use pilots, tugs and comply with vessel speed restrictions</p> <p>All vessels will be under the control of experienced and qualified captains and pilots and will only be operated in the dredged channel or for smaller vessels, within the defined operation area. The dredge spoil transport barges and LNG carriers will adhere to Ports Victoria's vessel speed requirements to limit the risk of whale marine mammal (including whale and dolphin) strikes. All vessels and tugs will slow down or stop where necessary if notified of a whale sighting or if a whale is sighted. If a whale is known to be present in the shipping channels, transit will cease until the channel is clear.</p>	Refinery Pier FSRU LNG carriers	<p>Incorporated document</p> <p>Consent under the <i>Marine and Coastal Act 2018</i></p> <p>EPA Development Licence and Operating Licence</p>	Construction Operation	<p>Grounding of vessels leading to a spill into the marine environment</p> <p>Whale strikes</p>
MM-ME16	Minimise chlorine concentration at the discharge points	FSRU Refinery	Consent under the <i>Marine and Coastal Act 2018</i>	Operation	Chlorine impacts related to use

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	The seawater chlorination process at the FSRU and the Refinery will be managed to minimise the concentration of chlorine in the seawater discharges, while also achieving the purpose of chlorination (which is to avoid internal biofouling).		EPA Development Licences and Operating Licences		and discharge of seawater
MM-ME17	<p>Monitor rates and characteristics of all FSRU wastewater discharges</p> <p>The flow rate, temperature and residual chlorine concentration of all discharges from the FSRU (excluding fire water, water curtain and ballast water) either from the refinery or directly from the FSRU into Corio Bay will be monitored and recorded.</p> <p>Monitoring will be conducted to keep a record of all discharges, confirm that the discharge rate, temperature and chlorine concentration are within the values stipulated in the licence conditions of the refinery EPA Licence and FSRU EPA Licence and, if not, provide the trigger for remedial action.</p>	FSRU Refinery	EPA Development Licences and Operating Licences	Operation	Chlorine and temperature impacts related to use and discharge of seawater
MM-ME18	<p>Avoid backflow between FSRU transfer pipe and refinery inlet</p> <p>To avoid backflow at the refinery seawater intake, the discharge of seawater from the FSRU to the refinery inlet via the seawater transfer pipe must not exceed the refinery's intake of cooling water.</p> <p>The design of the connection between the seawater transfer pipe and the refinery seawater inlet channel will avoid backflow.</p>	FSRU Refinery	EPA Development Licences and Operating Licences	Construction Operation	Chlorine and temperature impacts related to use and discharge of seawater
MM-ME19	<p><u>Monitoring of the effects of wastewater discharges on the marine environment</u></p> <p><u>Monitoring will be undertaken to determine the effects of wastewater discharges from the FSRU (whether via the Refinery or directly from the FSRU into Corio Bay) on marine biota and communities. The monitoring will include but not necessarily be limited to seagrasses, macroalgae and marine fauna (such as mussels and sea squirts). Temperature profiles and chlorine concentrations will be recorded at the ecological monitoring sites. The monitoring will map impacts on the ecosystem including seasonal variations, using the baseline monitoring of the impacts of existing discharges from the refinery undertaken pursuant to</u></p>	<u>FSRU</u>	<u>EPA Development Licences and Operating Licences</u>	<u>Construction</u> <u>Operation</u>	<u>Chlorine and temperature impacts related to use and discharge of seawater</u>

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	the recommendations of the Viva Geelong LNG Import Terminal Inquiry and Advisory Committee in Chapter 7.4 of its Report dated 5 October 2022.				
<p>Noise and vibration</p> <p>EES evaluation objective: To minimise potential adverse social, economic, amenity and land use effects at local and regional scale</p>					
MM-NV01	<p>Managing noise from construction activities</p> <p>Construction noise and vibration will be managed consistent with Chapter 4 (Noise and vibration) of EPA Publication 1834 – Civil construction, building and demolition guide (November 2020) (as amended or replaced from time to time). This includes the development, prior to the start of any construction works, of a documented construction noise and vibration management plan (CNVMP) to manage noise and vibration during construction in consultation with the relevant stakeholders including occupants of noise sensitive areas potentially affected by the construction activities</p> <p>The CNVMP must:</p> <ul style="list-style-type: none"> ○ be prepared based on a documented review of the construction activities considered, of the sensitive receivers at risk of noise exposure, and of the local topography of the sites; ○ demonstrate how construction noise and vibration (including from dredging) and their impact will be minimised so far as reasonably practicable, supported by evidence of iterative considerations of works practices, equipment selection and mitigation measures; include contingency measures to address, wherever relevant, the risk of impact from noise that could not be sufficiently mitigated at source or during propagation; and ○ include a requirement for verifying, via inspections or audits, that all practices and actions to minimise impacts are well adhered-to and that continual improvement is effectively in place. <p>The CNVMP will include as a minimum the following:</p>	All	<p>Incorporated document</p> <p>Consent under the <i>Marine and Coastal Act 2018</i></p> <p>Pipeline Licence</p>	Construction	<p>Temporary amenity impacts on surrounding land uses from construction noise and vibration</p>

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<ul style="list-style-type: none"> ○ Avoid the generation of noise and vibration and adopt all mitigation measures to minimise the impact on sensitive receivers, so far as reasonably practicable. ○ All dredging activities to comply with MM-NV01a. ○ For construction activities other than dredging: <ul style="list-style-type: none"> ○ Conduct construction only during EPA normal construction hours (i.e., Monday to Friday 07:00 am to 6:00 pm, and Saturday 07:00 am to 1:00 pm) unless the works are justified and approved to be low noise impact works, managed impact works or unavoidable works, as required under MM-NV02. ○ Adherence with the mitigation and management requirements of Appendix C of the NSW Roads and Maritime Services Construction Noise and Vibration Guidelines for all unavoidable works and works carried out during normal working hours. ○ When assessing construction noise, the risk of increased impacts due to intrusive characteristics such as tonality, impulse, intermittency or high energy in the low frequency range must be considered. This includes (but is not limited to) applying adjustments to measured or predicted construction noise levels for tonality, impulse and intermittency determined using the same procedures as those of Part I.B; 3.4 of EPA Publication 1826.4 (Noise Protocol) (as amended or replaced from time to time). ○ Compliance with the noise requirements of Table 4.3 of EPA Publication 1834 (as amended or replaced from time to time) for all low-impact and managed-impact works scheduled outside normal working hours. Noise criteria for weekend/evening work hours must be determined from background measurements that represent the background at the location and time of impact, in the absence of industrial, commercial and trade noise, and are more stringent by 5 dB(A) where the construction programme exceeds 18-months. 				

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<ul style="list-style-type: none"> ○ Construction noise levels not to exceed an external noise level of 55 dB(A) for educational buildings (with internal teaching spaces). <p>While the actions to avoid or otherwise mitigate noise and vibration and their impacts must include, as a minimum, the measures in MM-NV06 and the following common practice techniques, the CNVMP should also consider alternative, quieter processes and equipment, wherever they are reasonably practicable.</p> <p>Common practice techniques include <u>include</u> (but are not limited to):</p> <ul style="list-style-type: none"> ○ Informing potentially noise-affected neighbours about the nature of construction stages and noise reduction measures. ○ Giving notice as early as possible for periods of noisier works such as excavation. Describing the activities and how long they are expected to take. Keeping affected neighbours informed of progress. ○ Appointing a principal contact person for community queries. ○ Providing 24-hour contact details through letters and site signage. Recording complaints and following a complaint response procedure suitable to the scale of works. ○ Within normal working hours, wherever it is reasonably practicable to do so: <ul style="list-style-type: none"> ○ scheduling noisy activities for less sensitive times, (for example, delay a rock-breaking task to the later morning or afternoon) ○ providing periods of respite from noisier works (for example, periodic breaks from jackhammer noise). ○ Using the lowest-noise work practices and equipment that meet the requirements of the job. ○ Maintaining equipment and vehicles according to manufacturer instructions <u>specifications</u> 				

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<ul style="list-style-type: none"> ○ Locating site buildings, access roads and plant such that the minimum disturbance occurs to the locality. ○ Limiting times of operation of noisy equipment, vehicles and operations to reduce noise and vibration impacts. ○ Installing broadband reversing alarms on construction vehicles and machinery in preference to ‘beeper’ reversing alarms. The site will also be planned to minimise the need for reversing of vehicles. ○ Turning off plant and vehicles when not being used. ○ Taking care not to drop spoil, and construction materials and construction equipment that causes peak noise events. ○ All mechanical plant is to be silenced by the best practical means using current technology. ○ Mechanical plant, including noise-suppression devices, will be maintained to the manufacturer’s specifications. Internal combustion engines are to be fitted with a suitable muffler in good repair. ○ Fit all pneumatic tools operated near a residential area with an effective silencer on their air exhaust port. ○ Testing of emergency equipment such as warning sirens will be scheduled during day-time hours wherever possible. ○ For works approved outside of normal working hours: <ul style="list-style-type: none"> ○ Plan quieter unavoidable work activities outside normal working hours. ○ Adopt low-noise or managed impact works. Avoid high noise impact works such as piling, concrete pours. ○ Schedule noisy unavoidable work when it is less likely to affect residents’ sleep and for shorter periods, wherever possible. 				

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<ul style="list-style-type: none"> ○ Schedule respite periods if unavoidable work is near residents. Consult with residents who may be most affected about restricting the number of nights per week and/or per calendar month when works are being undertaken. ○ Stockpile material from unavoidable work activities that occur outside normal hours in, for example, an acoustic enclosure. Also restrict load-out to occur during normal working hours. ○ Train all workers regarding unavoidable work activities that occur outside normal working hours. 				
MM-NV01a	<p>Managing and assessing dredging noise</p> <p>Dredging noise should<u>must</u> be managed and assessed consistent with EPA Publication 691 (Guidelines for dredging) (as amended or replaced from time to time), assess noise from dredging activities as constituting noise from commercial, industrial and trade premises.</p> <p>A dredging noise management plan (<u>DNMP</u>) should<u>will</u> be prepared and implemented that will inform how actions will be taken to:</p> <ul style="list-style-type: none"> ● manage emissions of noise and vibration and minimise their impacts, so far as reasonably practicable, and ● prevent the emission of unreasonable noise (as defined In the Environment Protection Act 2017) by: <ul style="list-style-type: none"> ○ maintaining dredging noise levels within the Project Noise Criteria determined in MM-NV05, to ensure the noise limits set in Part 5.3, Division 3 of the Environment Protection Regulations 2021 are not exceeded; and ○ having regard to the factors in part (a) of the definition of unreasonable noise; and 	Dredging	<p>Incorporated document</p> <p>Consent under the <i>Marine and Coastal Act 2018</i></p> <p>Pipeline Licence</p>	Construction	<p>Temporary amenity impacts <u>on</u> surrounding land uses from construction noise and vibratione18</p>

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<ul style="list-style-type: none"> ○ managing low frequency noise, in accordance with EPA Publication 1996 (Noise guidelines: assessing low frequency noise) (as amended or replaced from time to time). 				
MM-NV02	<p>Out-of-hours construction</p> <ul style="list-style-type: none"> ● The CNVMP should<u>will</u> include a framework for justification and approval of out-of-hours works that are planned to be undertaken, established in consultation with the relevant stakeholders including occupants of noise sensitive areas potentially affected by out of hours construction activities. ● This framework should include a clear rationale for both unavoidable works and managed impact works, and response strategies with mitigation measures to reduce noise and vibration and their impacts, so far as reasonably practicable, consistent with EPA publications 1834 (Civil construction, building and demolition guide) and 1820.1 (Construction – Guide to preventing harm to people and the environment) (as amended or replaced from time to time). ● Assessment and approval of out-of-hours works must be conducted by an Independent Environmental Auditor, or by someone who has no prior involvement in planning or delivery of the Project and is able to make decisions free from influence or pressure related to the delivery of the project. ● In respect of unavoidable works <ul style="list-style-type: none"> ○ the necessity for such works to be carried out outside of normal working hours must be assessed and documented by an independent person with skills and expertise in risk/safety assessments; ○ the mitigation measures to reduce noise and vibration must be assessed and documented by a an independent person with skills and expertise in noise and vibration control. ● In respect of managed-impact<u>works</u> <ul style="list-style-type: none"> ○ the net benefit in terms of the project's environmental impacts, of conducting managed impact works out-of-hours must be assessed and documented<u>ed</u> by an Independent Environmental Auditor; ○ a person with skills and expertise in noise and vibration control must assess that managed-impact works are <u>consistent</u> with the definition from EPA 	All	<p>Incorporated document</p> <p>Consent under the <i>Marine and Coastal Act 2018</i></p> <p>Pipeline Licence</p>	Construction	<p>Temporary amenity impacts on surrounding land uses from construction noise and vibration</p> <p>Discomfort and reduced quality of sleep from work outside of normal hours</p>

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<p>publication 1834 (as amended or replaced from time to time), including that</p> <ul style="list-style-type: none"> ▪ the noise does not have intrusive characteristics such as impulsiveness, tonality, intermittency or high energy in the low frequency range; and ▪ the risk of impacts is addressed adequately by limiting the emergence of construction noise levels LAeq above the background noise level LA90 at the time of noise impact. <ul style="list-style-type: none"> • Unavoidable works should<u>will</u> be assessed for approval by a person with skills and expertise in risk/safety assessment such as a Health Safety and Environment (HSE) specialist, who has no prior involvement in either planning or delivery of the Project and who can make decisions free from influence or pressure related to the delivery of the Project. This Includes: <ul style="list-style-type: none"> ○ Appointing a suitably qualified HSE representative to manage and approve unavoidable night work (10:00 pm to 7:00 am) applications by the Independent Environmental AuditorIEA. ○ Appointing a suitably qualified Independent Environmental Auditor to review and approve the implementation of noise and vibration mitigation and management during unavoidable night work (10:00 pm to 7:00 am) applications. • Justification of managed impact works is to include <ul style="list-style-type: none"> ○ an assessment that conducting these works out-of-hours will have a net benefit in terms on environmental impacts of the project, and ○ appointing a suitably qualified Independent Environmental Auditor to review and approve the implementation of and vibration mitigation and management during managed-impact works. • Noise requirements for managed-impact works must be consistent with the definition of managed-impact works from of EPA publication 1834 (as amended or replaced from time to time), and including that <ul style="list-style-type: none"> ○ the noise does not have intrusive characteristics such as impulsiveness, tonality, intermittency or high energy in the low frequency range; and 				

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<ul style="list-style-type: none"> ○ address adequately the risk of impacts by limiting the emergence of construction noise levels LAeq above the background noise level LA90 at the time of noise impact. <p>Common construction noise mitigation measures for out-of-hours works</p> <p>Where the construction works are justified and approved to occur outside of EPA normal working hours, mitigation measures will be implemented to minimise the impact on receivers, so far as reasonably practicable, including (but not limited to) the measures in MM-NV06 and the following onsite mitigation measures:</p> <ul style="list-style-type: none"> ● Limiting works in proximity to receivers to the arrival of staff on site and toolbox meetings between 6 am and 7 am. The use of plant equipment, generation of unnecessary noise and the movement of vehicles on the construction footprint will be avoided. ● Providing respite periods by restricting the hours that very noisy activities can occur. ● -On Sundays, works at Lascelles Wharf will be limited to low noise impact works, as defined in EPA Publication 1834 (as amended or replaced from time to time). ● Adopting engineering noise controls at the source (e.g., silencer, mufflers, enclosures) by the best practical means using current technology – rReduction is typically in the range of 10 to 15 dB. ● Installing onsite barriers such as hoardings or temporary enclosures to provide a noise barrier between any particularly noisy construction works and the residences - Rreduction is typically in the range of 5 to 10 dB. 				
MM-NV03	<p>Vibration safe working distances</p> <p>Additional management measures will be undertaken where occupancies, structures and assets are within the safe working distances derived using the values in the following standards:</p>	All	<p>Incorporated document</p> <p>Consent under the <i>Marine and Coastal Act 2018</i></p>	Construction	<p>Temporary amenity impacts on surrounding land uses from construction noise and vibration</p>

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<ul style="list-style-type: none"> British Standard BS 6472-1:2008 Guide to evaluation of human exposure to vibration in buildings. Vibration sources other than blasting – Table 1 Vibration dose value ranges which might result in various probabilities of adverse comment within residential buildings German Standard DIN4150-3:2016-12: Table 1 – Guideline values for vibration velocity for evaluating the effects of short-term vibration on structures German Standard DIN4150-3:2016-12: Table 3 – Guideline values for vibration velocity for evaluating the effects of short-term vibration on buried pipework An asset owner’s utility standards. 		Pipeline Licence		<p>Discomfort caused by vibration</p> <p>Changes to the natural behaviour of animals</p>
MM-NV04	<p>Construction noise and vibration monitoring</p> <p>Noise and vibration monitoring will be undertaken during construction at:</p> <ul style="list-style-type: none"> The nearest noise sensitive residential property or properties impacted by out-of-hours works to confirm the effective implementation of noise mitigation measures, per their design, and verify that levels set as criteria In the CNVMP are not exceeded. The nearest building or assets that are within derived set back distances for human response or in response to a complaint Where an asset owner’s utility standards are at risk of being exceeded. <p>Frequency and duration:</p> <ul style="list-style-type: none"> Attended measurements will be undertaken at the earliest stage (within the first 24 hours) for each construction activity identified to impact sensitive receiver locations during out of hours works. The measurement duration will be adequate to represent a typical 15-minute period for the applicable evening or night period. Continuous monitoring will be undertaken for any works scheduled outside of normal working hours (including unavoidable works) modelled or previously 	All	<p>Incorporated document</p> <p>Consent under the <i>Marine and Coastal Act 2018</i></p> <p>Pipeline Licence</p>	Construction	<p>Temporary amenity impacts on surrounding land uses from construction noise</p> <p>Discomfort and reduced quality of sleep from work outside of normal hours</p> <p>Discomfort caused by vibration</p> <p>Changes to the natural behaviour of animals</p>

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<p>measured to be within 3dB or exceeding the low-impact and managed-impact noise levels.</p> <ul style="list-style-type: none"> For onshore pipeline construction, where the noise sources will be transient, measurements will be required for works at representative sensitive receivers where noise has been identified as a risk. Where noise levels modelled or measured at Geelong Grammar School or at other sensitive receivers, exceed the levels set in the CNVMP (as required in MM-NV01 and MM-NV02) these works will not be carried out other than during normal working hours, unless mitigation measures are applied to meet the requirements of MM-NV01 and MM-NV02. Measurements shall be undertaken at the commencement of dredging and during meteorological conditions suitable to favourable noise propagation at Geelong Grammar School or <u>and</u> other sensitive receivers. Where assessments conducted in accordance with EPA Publication 1826.4 (Noise Protocol) (as amended or replaced from time to time) indicate cumulative noise impacts (including the contributions from dredging, from the Viva Refinery and from other commercial, Industrial or trade premises) will exceed the night period noise limits determined in accordance with the Noise Protocol, dredging operations shall cease between the hours of 10pm and 7am until the night period limits are met. Measurements will be undertaken in response to any community complaints, where noise emissions need to be verified to resolve the issue i.e., where the activity cannot simply be stopped or mitigated to avoid the risk due to noise. <p>A response plan will be developed to manage potential impacts if construction noise requirements <u>criteria</u> are not met, including:</p> <ul style="list-style-type: none"> Actions taken to rectify exceedance of nominated criteria e.g., stop works until noise monitoring confirms the exceedance is resolved or implement mitigation measures to manage impacts. Actions to minimise risk of reoccurrence e.g., provide mitigation measures or alternative methods. 				

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<ul style="list-style-type: none"> Name of person(s) responsible for undertaking the required actions. 				
MM-NV05	<p><i>Establishing and implementing operational noise controls</i></p> <p>An operational noise management framework will be prepared that will inform, through all stages of the project, including design, equipment selection, construction, and installation, and operation, how actions will be taken to:</p> <ul style="list-style-type: none"> manage emissions of noise and vibration and minimise their impacts, so far as reasonably practicable, and prevent the cumulative emission of unreasonable noise (as defined In the Environment Protection Act 2017), by <ul style="list-style-type: none"> not exceeding the noise limits set In Part 5.3, Division 3 of the Environment Protection Regulations 2021 taking into consideration cumulative noise impacts from existing and approved industrial, commercial and trade premises; and having regard to the factors in part (a) of the definition of unreasonable noise; and managing low frequency noise, in accordance with the Noise guidelines: assessing low frequency noise (EPA Publication 1996) (as amended or replaced from time to time). <p><i>Regulatory noise limits, pre-existing industry noise and Project Noise Criteria</i></p> <p>To inform the design, construction and operation of the project:</p> <ul style="list-style-type: none"> Background noise levels shall be measured and verified without the inclusion of noise from Viva Refinery and from other commercial, Industrial and trade premises, with noise limits of Part 5.3, Division 3 of the Environment Protection Regulations 2021 established accordingly. Further assessment of the pre-existing noise from commercial, industrial and trade premises (from the Viva Refinery and from other commercial, industrial and trade premises) shall be carried out based on measurements taken over a period of at least 1-week to determine existing $L_{Aeq,30-min}$ noise impacts and the likely 	Treatment facility FSRU Dredging	Incorporated document EPA Development Licence and Operating Licence	Operation Dredging	Amenity impacts_ on surrounding land uses Discomfort and reduced quality of sleep from work outside of normal hours

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<p>cumulative noise impacts at Geelong Grammar School and at other noise sensitive areas. If background noise cannot be measured without impacts from the Viva Refinery, it will be measured during a period of plant shut down.</p> <ul style="list-style-type: none"> Establish and justify, supported by documented evidence, Project Noise Criteria to ensure that the noise from the Project, when combined with the pre-existing and approved noise from commercial, industrial and trade premises will not lead to an exceedance of the regulatory noise limits. <p><i>Plant design and selection</i></p> <ul style="list-style-type: none"> Ensure, via iterative reviews, that all reasonably practicable opportunities to reduce the emission of operational noise have been considered across the design, construction and operation of the project. Engage a suitably qualified acoustic consultant to review detailed plant designs and noise emission data for plant and vessels, and provide noise mitigation advice. Operational plant selection process must ensure that manufacturers' data or noise measurement data to be verified for all operational equipment to ensure that tonality is not present. Low frequency noise emissions from operational plants, including (but not limited to) the following items, which must be assessed and managed in accordance with EPA Publication 1996 (as amended or replaced from time to time): <ul style="list-style-type: none"> LNG carriers FSRU vessels Tugboat exhausts Regasification boilers <p><i>Operational management plan</i></p> <ul style="list-style-type: none"> Noise from the Project will be managed in accordance with the Environment Protection Regulations 2021, EPA Publication 1826 (as amended or replaced from 				

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<p>time to time) and the General Environmental Duty, including cumulative noise impacts from any other industrial, commercial or trade premises.</p> <ul style="list-style-type: none"> • Prepare an operational management plan, supported by documented evidence that details the approach that will be taken to meet the Project Noise Criteria. This plan should include<u>will include</u>: <ul style="list-style-type: none"> ○ how the noise from LNG carriers will be taken into account and managed: ○ details of equipment selections and mitigation measures adopted; and ○ scheduling to ensure all activities minimise noise emissions. For example, during the night period, limit the number of activities operating concurrently. • Review and update the operational management plan wherever necessary and relevant, including on the basis of any noise monitoring carried out to assess noise emissions from the Project, cumulative noise impacts or adverse noise character identified. • Additional cumulative impact management strategies will be developed in consultation with the relevant stakeholders. <p><i>Operational noise monitoring</i></p> <p>Operational noise monitoring will be undertaken to confirm operational noise levels and verify cumulative noise impacts.</p> <ul style="list-style-type: none"> • Within the first 3 months of operation, conduct long-term noise monitoring (over a minimum of 1 month) in accordance with the Noise Protocol and the provisions of EPA Publication 1997 (as amended or replaced from time to time), to verify that the Project Noise Criteria and/or regulatory noise limits are not exceeded at Geelong Grammar School and other noise sensitive areas. The measurements shall be undertaken for all operating scenarios to verify the noise emissions. 				

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<ul style="list-style-type: none"> Where operational compliance relies on the ongoing scheduling or managed hours of sources, permanent real-time noise monitoring shall be installed and carried out at any impacted receptors identified during the monitoring undertaken within the first 3 months of operation. Real-time monitoring data shall be made available to those relevant stakeholders. Measurements will also be undertaken as part of the Environmental Management Plan in response to any community complaints. Operational noise monitoring will inform ongoing updates to the operational management plan including potential scheduling of activities and mitigation measures if required. Wherever the noise emissions from the Project are measured to exceed the Project Noise Criteria, or the cumulative Industry noise is measured to exceed the regulatory noise limits, additional attenuation and/or management controls shall be implemented and measurements repeated until compliance is demonstrated. Further noise monitoring should be conducted at least every 6 months to verify the effectiveness of the attenuation and/or management controls to prevent exceedances of the Project Noise Criteria and the regulatory noise limits. Where management and scheduling for the operational activities is changed, the risk of exceedance of the Project Noise Criteria and the regulatory limits must be assessed, and wherever relevant further noise monitoring- must also be conducted to verify compliance. 				
MM-NV06	<p>Construction noise mitigation measures – normal working hours</p> <p>During normal working hours, mitigation measures must include, as a minimum:</p> <ul style="list-style-type: none"> A noise barrier will be installed to along the site boundary of the horizontal directional drilling HDD site compounds at a minimum height of 2.4 m provided that modelling has confirmed this height to be sufficient to reduce construction noise impacts by at least 10dB-. The noise barrier may include For example, the use of shipping containers or alternative solid acoustic screen to reduce noise emissions at the closest noise sensitive receivers. 	All	<p>Incorporated document</p> <p>Consent under the <i>Marine and Coastal Act 2018</i></p> <p>Pipeline Licence</p>	Construction	<p>Temporary amenity impacts on-surrounding land uses</p> <p>Discomfort and reduced quality of sleep from work outside of normal hours</p>

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<ul style="list-style-type: none"> • Installation of enclosures or localised noise barriers around the construction equipment to provide a noise barrier between any particularly noisy construction works and the closest noise sensitive receivers. • Stationary equipment such as generators and pumps will be stored within shipping containers or suitable acoustic enclosures. • Where the construction works would occur for a number of consecutive days, consult with the affected residences and offer alternative accommodation or onsite noise mitigation measures for people that may require to work or study from home. <p>Construction noise mitigation measures - outside of normal working hours</p> <p>Where the construction works are justified and approved to occur outside of EPA normal working hours, all reasonably practicable mitigation measures will be implemented to minimise the impact on receivers as per MM-NV01 and MM-NV02, including the following additional onsite mitigation measures where ver relevant:</p> <ul style="list-style-type: none"> • When works are linear, schedule works to avoid the closest noise sensitive receiver locations during out of normal hours or avoid works during this period (e.g., avoid works on Saturday afternoons 1pm to 6pm at Geelong Grammar School and Macgregor Court, Lara). • Schedule noisy unavoidable work when it is less likely to affect residents' amenity (e.g., avoid weekends) and for shorter periods, wherever possible. • Where the construction works would <u>will</u> occur for a number of consecutive days, consult with the affected resident<u>ees</u> and offer alternative accommodation or onsite noise mitigation measures for people <u>who are</u> that may require to working <u>ing</u> or study<u>ing</u> from home. 				
MM-NV07	<p>Unavoidable works, Horizontal Directional Drilling – noise control</p> <p>Horizontal Directional Drilling (HDD) may be conducted outside of hours if approved as unavoidable works, in accordance with MM-NV02.</p>	Pipeline	Pipeline Licence	Construction	Temporary amenity impacts

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<p>Onsite mitigation to reduce the noise from HDD, and mitigate its impacts, so far as reasonably practicable will require the implementation of work practices, equipment selection and noise and vibration mitigation measures consistent with the process set out in MM-NV01.</p> <p>Actions to reduce noise from the HDD entry and exit sites are to include, as a minimum, the following:</p> <ul style="list-style-type: none"> • A noise barrier will be installed to provide an envelope between the compound and the site boundary at a minimum height of 2.4 m provided that modelling has confirmed this height to be sufficient to reduce construction noise impacts by at least 10dB. • Any access gates will be solid and generally kept closed, especially at night. • Installation of enclosures or localised noise barriers around the HDD construction equipment to provide a noise barrier between any particularly noisy construction works and the residences. • Provide respite periods by restricting the hours that the very noisy activities can occur. • Stationary equipment such as bentonite treatment, generators and pumps will be stored within shipping containers or suitable acoustic enclosures. • Where the construction works will occur for a number of consecutive days, and particularly during the night period, consult with the affected residents see and offer alternative accommodation or onsite noise mitigation measures for people who are that may require to working or studying from home. <p>The impacts and the design of site-specific mitigation will be determined prior to construction, and confirmed during construction via onsite monitoring.</p>				<p>on surrounding land uses</p> <p>Discomfort and reduced quality of sleep from work outside of normal hours</p>
MM-NV08	<p>Unavoidable works, Hydrotesting – noise control</p> <p>Hydrotesting may be conducted outside of hours if justified and approved as unavoidable works, in accordance with MM-NV02.</p>	All	Incorporated document	Construction	Temporary amenity impacts

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<p>Mitigation to reduce the noise from Hydrotesting and minimise its impacts, so far as reasonably practicable, will require the implementation of works practices, equipment selection and mitigation measures consistent with the process set out in MM-NV01.</p> <p>Mitigation measures are to include, as a minimum, the following:</p> <ul style="list-style-type: none"> • A noise barrier is advised to provide an envelope around the hydrotesting site at a minimum height of 2.4 m provided that modelling has confirmed this height to be sufficient to reduce construction noise impacts by at least 10dB. • Any access gates will be solid and generally kept closed, especially at night. • Adopting engineering noise controls for ancillary equipment (e.g., silencer, mufflers, enclosures) by all practical means using current technology. • Selection of quieter equipment. • Stationary equipment such as bentonite treatment, generators and pumps will be stored within shipping containers or suitable acoustic enclosures. <p>The impacts and the design of site-specific mitigation to reduce the noise emissions at source will be determined prior to construction and confirmed during construction via onsite monitoring.</p>		<p>Consent under the <i>Marine and Coastal Act 2018</i></p> <p>Pipeline Licence</p>		<p>on surrounding land uses</p> <p>Discomfort and reduced quality of sleep from work outside of normal hours</p>
<p>Safety, hazard and risk</p> <p>EES evaluation objective: To provide for safe and cost-effective augmentation of Victoria's natural gas supply having regard to projected demand and supply in context of the State's energy needs and climate policy.</p>					
<p>MM-SHR01</p>	<p>FSRU safety standards</p> <p>The Floating Storage and Regasification Unit (FSRU) will be designed, constructed and operated to meet relevant safety standards. The FSRU will be designed, operated and maintained under the purview of DNV GL (or equivalent classification agency). It will comply with the Rules for Classification as required to retain its Class Notation. This will include requirements for inspection, maintenance and functionality of all on-board safety systems.</p>	<p>FSRU</p>	<p>MHF safety case for FSRU</p> <p>EPA Development Licence and Operating Licence</p>	<p>Design</p> <p>Construction</p> <p>Operation</p>	<p>Fire and explosions</p> <p>Cryogenic exposure</p> <p>Asphyxiation</p>

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
MM-SHR02	<p>Pipeline design and standards</p> <p>The pipeline will be designed, constructed and operated in accordance with AS2885 and consistent with a T1 (Residential) environment. This will include completion of a Safety Management Study with the identification of threats and appropriate mitigation measures including increased depth of burial, heavier duty piping and protective slabs.</p>	Pipeline works	<p>Pipeline Licence</p> <p>Gas safety case</p>	<p>Design</p> <p>Construction</p> <p>Operation</p>	Fire and explosion
MM-SHR03	<p>Facility standards</p> <p>The Refinery Pier No. 5 extension, the equipment installed on Refinery Pier No. 5, and the Treatment Facility will be designed, operated and maintained in accordance with relevant Australian and international standards.</p>	<p>Refinery Pier</p> <p>Treatment facility</p>	<p>Pipeline Licence</p> <p>Gas safety case</p> <p>Amendment to Refinery MHF safety case</p>	<p>Design</p> <p>Construction</p> <p>Operation</p>	<p>Fire and explosions</p> <p>Cryogenic exposure</p> <p>Asphyxiation</p>
MM-SHR04	<p>Automated systems – safety and process control</p> <p>The operation of the FSRU, pipeline and Treatment Facility will be monitored using appropriately SIL rated process automation and shutdown systems.</p> <p>Abnormal conditions will alarm locally and remotely to fully attended control rooms.</p> <p>Operation out of the design / operation envelope has the potential to result in imminent loss of containment, which will result in an automatic shutdown of gas operations via closing of emergency shutdown valves with depressuring of inventory through vent stacks if and when required will to be initiated remotely by an operator in the control room to ensure safe release. The control, monitoring and shutdown systems will be fail-safe and be designed to best industry practices with redundancy.</p>	<p>Pipeline</p> <p>Treatment facility</p> <p>FSRU</p>	<p>Pipeline Licence</p> <p>Gas safety case</p> <p>Amendment to Refinery MHF safety case</p> <p>MHF safety case for FSRU</p> <p>EPA Development Licence and Operating Licence</p>	<p>Design</p> <p>Construction</p> <p>Operation</p>	<p>Fire and explosions</p> <p>Cryogenic exposure</p> <p>Asphyxiation</p>
MM-SHR05	<p>Dangerous goods – storage and handling</p> <p>Dangerous goods, as defined by the Australian Dangerous Goods Code, and flammable and combustible liquids will be stored and handled in accordance regulatory requirements (refer Table 31), EPA Victoria Publication 1698 – Liquid Storage and Handling Guidelines (as</p>	<p>Treatment facility</p> <p>FSRU</p>	<p>Gas safety case</p> <p>Amendment to Refinery MHF safety case</p>	<p>Design</p> <p>Construction</p> <p>Operation</p>	<p>Fire and explosions</p> <p>Cryogenic exposure</p>

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<p>amended or replaced from time to time) and all relevant Australian Standards – including but not limited to the requirements of:</p> <ul style="list-style-type: none"> AS1940 – The storage and handling of flammable and combustible liquids AS1210 – Pressure vessels AS4343 – Pressure equipment – hazard levels AS3846 – The handling and transport of dangerous cargoes in port areas AS2941 – Fixed fire protection installations – pumpset systems AS/NZS60079 – Explosive atmospheres. 		<p>MHF safety case for FSRU</p> <p>EPA Development Licence and Operating Licence</p>		Asphyxiation
MM-SHR06	<p>Monitoring of chemical and fuel storage facilities</p> <p>Routine visual monitoring and recording of chemicals and fuel storage facilities will occur as part of routine operational practices.</p>	<p>Treatment facility</p> <p>FSRU</p>	<p>Gas safety case</p> <p>Amendment to Refinery MHF safety case</p> <p>MHF safety case for FSRU</p> <p>EPA Development Licence and Operating Licence</p>	<p>Construction</p> <p>Operation</p>	<p>Fire and explosions</p> <p>Cryogenic exposure</p> <p>Asphyxiation</p>
MM-SHR07	<p>Emergency response plans</p> <p>Emergency response plans, such as for spills, will be developed and implemented for both the construction and operations phases of the Project.</p>	<p>Pipeline</p> <p>Treatment facility</p> <p>FSRU</p>	<p>Pipeline Licence</p> <p>Gas safety case</p> <p>Amendment to Refinery MHF safety case</p>	<p>Construction</p> <p>Operation</p>	<p>Fire and explosions</p> <p>Cryogenic exposure</p> <p>Asphyxiation</p>

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
			<p>MHF safety case for FSRU</p> <p>EPA Development Licence and Operating Licence</p>		
MM-SHR08	<p>Fire and gas protection</p> <p>The FSRU or LNG carrier will be provided with their own onboard fire protection and suppression systems. This is a requirement of the DNVB GL (or other equivalent classification society) class notation.</p> <p>Active fire protection and suppression will be provided for liquid fires and gas fires on Refinery Pier in compliance with Australian Standards.</p> <p>The design fire case for fire systems is a jet fire in the MLA area. The required firewater cooling rate is for the ship/shore manifold area, which is defined as the MLAs and associated piping and valves as well as for FSRU hull cooling.</p> <p>The diesel fuel supply will be designed for six hours of firewater per pump. The existing refinery current design will be upgraded to provide 2×100% or 3×50% capacity fire water pumps to provide 50% of the required firewater with the remaining firewater to be provided by firefighting tugs located with the Port of Geelong.</p> <p>Fire and gas detection will be provided in key locations piping on Refinery Pier and within the Treatment Facility.</p> <p>The storage vessel and pipework for the odorant at the Treatment Facility must have a fire rating coating of FRL240/240/240. It must be double contained with monitoring equipment in the intermediate space to monitor for leaks in the primary containment.</p>	<p>Pipeline</p> <p>Treatment facility</p> <p>Refinery Pier FSRU</p>	<p>Pipeline Licence</p> <p>Gas safety case</p> <p>Amendment to Refinery MHF safety case</p> <p>MHF safety case for FSRU</p> <p>EPA Development Licence and Operating Licence</p>	<p>Design</p> <p>Construction</p> <p>Operation</p>	<p>Fire and explosions</p>

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
MM-SHR09	<p>Separation distance</p> <p>The location of the FSRU provides sufficient separation distance from sensitive receptors (North Shore, Geelong Grammar School) to be outside impact zones for significant breach events. The refinery process area is located over 600m from the FSRU to minimise the potential for escalation of an incident from one facility to the other.</p>	FSRU	<p>MHF safety case for FSRU</p> <p>EPA Development Licence and Operating Licence</p>	<p>Design</p> <p>Operation</p>	Potential offsite impacts and escalation risk
MM-SHR10	<p>Site safety advisor</p> <p>A suitably competent person will be appointed as Site Safety Advisor during construction and will have on-site a set of the relevant safety data sheets (SDS) for hazardous and dangerous materials.</p>	<p>Pipeline works</p> <p>Treatment facility</p> <p>Refinery Pier</p>	<p>Pipeline Licence</p> <p>Gas safety case</p> <p>Amendment to Refinery MHF safety case</p>	Construction	<p>Public safety</p> <p>Workforce safety</p>
MM-SHR11-	<p>Consideration of expert advice</p> <p>Issues raised and recommendations made in the written expert evidence of Mr Martin Mannion and Dr Anand Pillay in the IAC hearings (Documents 70 and 69) must be explicitly considered and responded to in the further detailed design stages of the Project.</p>	<p>LNG carriers</p> <p>FSRU</p> <p>Refinery pier</p> <p>Pipeline</p>	<p>Pipeline Licence</p> <p>Amendment to Refinery MHF safety case</p> <p>MHF safety case for FSRU</p>	<p>Design</p> <p>Construction</p> <p>Operation</p>	<p>Fire and explosions</p> <p>Cryogenic exposure</p> <p>Asphyxiation</p> <p>Navigation and berthing</p>
<p>Social and business</p> <p>EES evaluation objective: To minimise potential adverse social, economic, amenity and land use effects at local and regional scales</p>					
MM-SB01	<p>Consultative mechanism for information and enquiries</p> <p>A consultative mechanism will be developed:</p>	All	<p>Incorporated document</p> <p>Pipeline Licence</p>	<p>Construction</p> <p>Operation</p>	<p>Social impacts related to reduced access to areas near Refinery Pier for</p>

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<ul style="list-style-type: none"> to make information on changes to the waterside exclusion zone available to the community and stakeholders (in particular recreational fishing and boating clubs and Geelong Grammar School) to make details of construction schedule (in particular disruptions to the road network) available to the community and stakeholders including Geelong Grammar School) to make the results of environmental monitoring available to the community and Geelong Grammar School to make information relating to potential risks to human health and safety available to the community and stakeholders, including Geelong Grammar School as required for residents and businesses to make enquires, lodge complaints etc. during construction and operation. 		Consent under the <i>Marine and Coastal Act 2018</i>		<p>recreational activities such as fishing and boating</p> <p>Social and business impacts related to temporary disruptions to access points and the road network, temporary amenity impacts on sensitive receptors, and perceived safety risks</p>
MM-SB02	<p>Consultation and arrangements with Quantem</p> <p>'Business as Usual' arrangement between Viva Energy and Quantem will continue to minimise potential scheduling conflicts between the LNG carrier and ships at Berth 1 through clear communication, advanced notification and scheduling.</p>	Refinery Pier	<p>Incorporated document</p> <p>Consent under the <i>Marine and Coastal Act 2018</i></p>	Operation	Business impacts related to disruption to access to Berth 1
MM-SB03	<p>Employment plan</p> <p>An employment plan will be prepared and implemented with a commitment to prioritise employing locals from northern Geelong suburbs, Indigenous groups and individuals from disadvantaged or low socio-economic backgrounds to enhance the employment benefits to the local community, as appropriate.</p>	All	<p>Pipeline Licence</p> <p>Incorporated document</p>	<p>Construction</p> <p>Operation</p>	Creation of employment opportunities

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
MM-SB04	<p>Social procurement plan</p> <p>A social procurement plan will be prepared and implemented to focus on utilising local businesses as much as possible. Viva Energy will partner with local not-for-profit community groups to assist with social procurement and employment of locals (i.e., Northern Futures, Give Where you Live).</p>	All	Pipeline Licence Incorporated document	Construction Operation	Creation of employment opportunities
MM-SB05	<p>Community program</p> <p>To Continue to work with the local community (e.g., Norlane Community Initiatives, Northern Futures, Give Where You LiveLive) and provide ongoing support that is aligned with their needs and delivers positive impact and social benefit consistent with Viva Energy's existing Community Program.</p>	All	Pipeline Licence Incorporated document	Construction Operation	Social benefit to the local community
MM-SB06	<p><u>Community Reference Group</u></p> <p><u>Establish and resource a dedicated Community Reference Group that includes representation from the Proponent and local community leaders and representative organisations with an agreed Terms of Reference to define the scope and methodology for, and oversee the implementation of, tasks associated with mitigations measures MM-SB01, MM-SB03, MM-SB04 and MM-SB05.</u></p>	<u>All</u>	<u>Pipeline Licence Incorporated document</u>	<u>Construction Operation</u>	<u>Social benefit to the local community</u>

Surface water

EES evaluation objective: To minimise adverse effects on water (in particular wetland, estuarine, intertidal and marine) quality and movement, and to the ecological character of the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar site.

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
MM-SW01	<p>Discharge water</p> <p>Depending on rainfall, soil condition and the groundwater table, dewatering may be required particularly during pipeline trenching activities. The following mitigation measures are recommended for management of water from trenching activities:</p> <ul style="list-style-type: none"> • Water collected from excavated areas will be recycled and reused for construction activities such as dust suppression. • Where discharge to waterbodies is unavoidable, water will be collected and treated if turbidity exceeds turbidity objectives prior to discharging. • Discharge to land will not occur within 50 metres of watercourses or be discharged directly into stormwater drains. • Construction activities to be in accordance with EPA Publication 1834 (as amended or replaced from time to time), and the requirements of the <i>Environment Protection Act 2017</i> • Site management mitigation measures will include appropriate placement of material stockpiles and chemical storages, covered loads, street sweeping and water quality monitoring, where required. • Discharge of water to land will avoid soil erosion or sedimentation of land or water. Sediment control devices such as silt fence to remove suspended solids and dissipate flow will be used where required. • Water will not be discharged to waterways, wetlands or into stormwater drains without approval from relevant authorities. • Water will be tested for pH and salinity prior to discharge to land. pH and salinity should not exceed acceptable limits in EPA guideline. • Water that cannot be treated to meet the relevant discharge criteria will be disposed to an EPA Victoria licensed facility. 	Pipeline	Pipeline Licence	Construction	Water quality impacts from dewatering

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<ul style="list-style-type: none"> Relevant landholder(s) and water authorities will be consulted, and permission obtained prior to discharge to land. Discharge will be to low gradient, stable, grassed areas and be undertaken in accordance with landholder requirements and through “irrigation type” systems to prevent scour or erosion. Visual monitoring during land discharge will be undertaken to ensure water does not enter existing waterways and/or wetlands. Groundwater encountered during construction of the pipeline will be managed in accordance with the groundwater mitigation measures. 				
MM-SW02	<p>Managing runoff</p> <p>Obstructions to flow will be removed.</p> <ul style="list-style-type: none"> Flow diversion banks will be placed upstream of spoil material if required. An overflow spillway will be constructed to allow runoff from external catchments to pass over the spoil material at a controlled location without causing erosion. During the works, sediment control devices such as bunding or silt fences will be set around stockpiled material, earthworks and disturbed areas to minimise loss of sediment to the receiving environment. Temporary diversions will be provided to allow flow around the excavation area. 	All	Pipeline Licence Incorporated document	Construction	Runoff from disturbed areas impacting water quality of receiving waterbodies
MM-SW03	<p>Watercourse trenching</p> <p>Where trenching is undertaken over a watercourse the following mitigation measures will be undertaken:</p> <ul style="list-style-type: none"> Undertake works in accordance with APGA guidelines. Where practicable, the trenched watercourse crossing will be constructed during no flow conditions and reinstated as soon as possible. 	Pipeline	Pipeline Licence	Construction	Water quality impacts from watercourse trenching

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<ul style="list-style-type: none"> • Weather forecasts will be monitored to avoid having open trenches at the waterway when high rainfall events are expected. • Where the watercourse is trenched, all obstructions to flow will be removed as soon as practicable after the pipe is laid and backfilled. • Trenching on both sides of the waterway will be fully excavated and prepared prior to undertaking the final section of trenching over the waterway. • Waterway reinstatement will be carried out in consultation with the CCMA. • The exposed trench within the watercourse will be reinstated immediately following the installation of the pipeline, including providing suitable compaction and revegetation. • Waterway reinstatement will be designed to avoid future erosion. This may include the use of riprap made of stones and fabric mesh to stabilise the waterway. • If necessary, a geofabric will be provided to prevent erosion and scour until the vegetation has established. • Visual monitoring will be undertaken downstream of the trench during flow events if the trench has not been reinstated. • Sediment control devices such as silt fences will be used to remove suspended solids and dissipate flow where required. 				
MM-SW04	<p>Capture and treat runoff from treatment facility</p> <p>Runoff from the treatment facility after a rain event will be captured and managed by the controlled discharge facilities (CDF) in place at the refinery.</p>	Treatment facility	Incorporated document	Operation	Runoff from the treatment facility impacting water quality of receiving waterbodies

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
<p>Terrestrial ecology impact assessment</p> <p>EES evaluation objective: To avoid, minimise or offset potential adverse effects on native flora and fauna and their habitats, especially listed threatened or migratory species and listed threatened communities as well as on the marine environment, including intertidal and marine species and habitat values.</p> <p>To minimise adverse effects on water (in particular wetland, estuarine, intertidal and marine) quality and movement, and to the ecological character of the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar site.</p>					
MM-TE01	<p>Complete works within construction right of way</p> <p>Construction works will be completed within the 15-20 m construction right of way and additional designated works areas to restrict impacts on retained native vegetation and habitat.</p>	Pipeline	Pipeline Licence	Design Construction	Vegetation loss as a result of the underground pipeline construction
MM-TE02	<p>Establish No-Go Zones</p> <ul style="list-style-type: none"> No-Go Zones (NGZs) will be established to protect retained areas of native vegetation and the area of NTGVVP beyond the construction footprint. NGZs will be fenced with highly visible fencing designed to last the duration of construction works. Fencing will be appropriately signed. NGZs and works are limits will be clearly marked on all maps and construction drawings prior to commencement of the works and no works will occur outside of the marked footprints. Fencing will be regularly inspected and maintained throughout the construction phase to ensure continued integrity. 	Pipeline	Pipeline Licence	Construction Operation	Native vegetation and NTGVVP loss as a result of the underground pipeline construction
MM-TE03	<p>Minimise soil erosion</p> <p>All earthworks will be undertaken in a manner that minimises soil erosion and adhere to the Construction Techniques for Sediment Pollution Control (EPA, 1991).</p>	Pipeline Treatment Facility	Pipeline Licence Incorporated document	Construction	Impacts to retained vegetation and habitat as well as aquatic

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
					environments as a result of erosion
MM-TE07	<p>Minimise impacts to trees</p> <p>Large-scale excavation at the margins of construction works will be minimised where trees occur within 15 m to avoid impacts on the root zones (e.g., Between School and Torresdale Roads)</p>	Pipeline	Pipeline Licence	Design Construction	Impacts to tree root zones during underground pipeline construction
MM-TE08	<p>Conduct an arborist assessment</p> <p>An arborist assessment will be conducted prior to construction to identify those trees that will not be adversely impacted by the works, those that may not be impacted if protection measures are implemented, and those where loss is unavoidable.</p> <p>Protection measures recommended by the arborist will be implemented as required to minimise impacts.</p>	Pipeline	Pipeline Licence	Construction	Impacts to trees during underground pipeline construction
MM-TE09	<p>Minimise disturbance, injury or death of wildlife</p> <ul style="list-style-type: none"> ● Any open pits or trenches will be managed to reduce potential for fauna entrapment. The following measures will be implemented, with regular inspections and maintenance to ensure ongoing effectiveness of the measures: <ul style="list-style-type: none"> ○ Minimise the period trenches and other excavations are open ○ Design excavations with slopes less than 45° to provide exit ramps for fauna ○ Create 'ladders' to enable fauna to exit the excavations (e.g. branches, ropes, planks) ○ Ensure fauna are discouraged from work areas by erecting barriers where practicable. ○ A protocol included in the site induction around the procedure for finding trapped fauna. 	Pipeline	Pipeline Licence	Design Construction	Injury to sensitive and native fauna Night lighting disturbing native fauna

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<ul style="list-style-type: none"> • Fencing required to define construction boundaries or to protect NGZs will be designed in accordance with relevant DELWP guidelines to limit fauna strike. • The number, type and layout of lights for lighting (if required) for night works or for security purposes will be selected and designed to minimise light spill and to only light up the construction area with reference to the National Light Pollution Guidelines for Wildlife including marine turtles, seabirds and migratory shorebirds (DoEE, 2020). The design will: <ul style="list-style-type: none"> ○ keep lights close to the ground ○ direct and shield lights to avoid light spill beyond the workspace ○ use lowest intensity lighting appropriate for the specific purpose ○ use lights with reduced or filtered blue, violet and ultra-violet wavelengths ○ avoid the use of LEDs if possible. • Night-time works will be minimised to reduce impacts of noise and light on nocturnal animals. • Pre-clearing survey will be conducted at all sites where trees and shrubs being removed to assess presence of fauna. • A suitably qualified wildlife handler ('wildlife spotter'), holding a relevant and current authorisation under the Wildlife Act 1975, will be engaged to salvage any wildlife encountered during the construction program. • <u>If construction is undertaken during the little eagle breeding season, undertake a search for nests in trees within 200 metres of the proposed works. If a nest is found, works must be avoided within 200 metres of the nest.</u> 				
MM-TE10	<p>Control spread and/or introduction of weeds and/or pathogens</p> <ul style="list-style-type: none"> • Hygiene measures will be implemented to ensure opportunities for the introduction and spread of weeds (importation of seeds and other vegetative 	Pipeline Treatment Facility	Pipeline Licence Incorporated document	Construction	Introduction and spread of weeds and disease during

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<p>material to the site) and pathogens are limited. This will include vehicle inspections and establishment of wash down facilities.</p> <ul style="list-style-type: none"> • Fill that is clean and certified weed and contaminant free will be used, where possible. • High risk weeds from construction areas will be treated prior to works commencing. • Regular monitoring for Outbreaks of noxious and/or Weeds or National Environmental Significance (WoNS) within construction areas <u>will be undertaken.</u> Outbreaks that that occurs due to construction activity will be managed. Spread into adjacent land will be prevented. • Weed management will be undertaken in accordance with the requirements of the Catchment and Land Protection Act 1994 • All contract staff inductions will include details about the requirement for vehicles and equipment to be free of mud and plant material prior to entering work sites. 				construction from vehicle movements
MM-TE11	Reduce erosion, sedimentation and contamination risk to retained vegetation and habitat Measures to manage erosion and sedimentation, address the management, handling, and storage of hazardous chemicals, and manage dust will be implemented to minimise impacts on retained vegetation and habitat and aquatic environments.	Pipeline Treatment Facility	Pipeline Licence Incorporated document	Construction	Impacts to retained vegetation and habitat as well as aquatic environments as a result of erosion
MM-TE12	Contractor/personnel awareness of ecological values All contract staff will be inducted on the presence and location of ecological values and informed of all relevant protective measures and obligations while undertaking construction activities.	Pipeline Treatment Facility	Pipeline Licence Incorporated document	Construction	Impacts to retained vegetation and habitat

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
Transport					
EES evaluation objective: To minimise potential adverse social, economic, amenity and land use effects at local and regional scales					
MM-TP01	<p>Ongoing stakeholder consultation</p> <p>A community, business and relevant authority stakeholder and communications plan will be developed for transport with ongoing stakeholder consultation to be undertaken during the lifecycle of the project. This will consider findings from the Technical Report K: <i>Transport Impact Assessment</i> and from the Traffic Management Plan developed for the project. Stakeholder consultation, including, but not limited to DoT, City of Greater Geelong, Geelong Grammar School, TT Line (operator of the Tasmanian ferry service) and GeelongPort will be undertaken.</p> <p>Key notifications and agreements may include:</p> <ul style="list-style-type: none"> • Pre-construction stage: <ul style="list-style-type: none"> ○ TMP agreement ○ Dilapidation surveys • Construction, operation and decommission or re-power stages <ul style="list-style-type: none"> ○ TMP measures and controls ○ Construction traffic monitoring ○ Road network monitoring, remediation protocols and maintenance requirements. • Prior to operation <ul style="list-style-type: none"> ○ Construction close-out meeting, infrastructure hand-back criteria 	All	Pipeline Licence Incorporated document	Pre-construction Construction Decommissioning	Intersection capacity Potential road closures Disruption to public transport Disruption to other road and site users General construction heavy vehicle road use Over-dimensional loads road use Site access points upgrades Amenity impacts on the road network Disruption to emergency vehicle access Road conditions and maintenance

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
					Road section upgrades
MM-TP02	<p>Traffic Management Plan</p> <p>Prior to the commencement of construction (excluding preparatory works), TMP(s) will be developed and implemented to minimise disruption (to the extent practicable) to affected local land uses, traffic, car parking, on-road public transport, pedestrian and bicycle movements and existing public facilities during all stages of construction. The TMP will be developed in consultation with the relevant road management authorities and be informed and supported by the Stakeholder Consultation under MM-TP01, an appropriate level of transport analysis including measures outlined in the Transport Impact Assessment.</p> <p>The TMP will include:</p> <ul style="list-style-type: none"> any required regulatory approvals conditions resulting from the EES process and other secondary approvals. A review of relevant policy, regulatory and protocol requirements which have informed the TMP. Existing conditions review undertaken at the time of TMP development to verify conditions. Those provided as part of the Transport Impact Assessment can be used as a baseline. Approved project scope as discussed in MM-TP01, including finalised details on construction extents, staging, vehicle types, final material sources, and peak construction impacts based on the refined detailed design and construction schedule Consideration of cumulative impacts of other major projects operating concurrently in the local area, such as the traffic movements associated with the proposed relocation of the TLine operations to Corio Quay and the construction of the Geelong Grammar junior school. 	All	Pipeline Licence Incorporated document	Pre-construction Construction Decommissioning	<p>Intersection capacity</p> <p>Potential road closures</p> <p>Disruption to public transport</p> <p>Disruption to other road and site users</p> <p>General construction heavy vehicle road use</p> <p>Over-dimensional loads road use</p> <p>Site access points upgrades</p> <p>Amenity impacts on the road network</p> <p>Disruption to emergency vehicle access</p> <p>Road conditions and maintenance</p>

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<ul style="list-style-type: none"> • Verification of final site access strategy, including access points and crossovers to the site. • Final nominated origins of any OD truck visitations for plant and equipment identified and final OD route assessments completed by the project transport contractor (see MM-TP08). • Mitigation measures outlined, including site access point requirements (e.g. vehicle size movements facilitated and Austroads intersection type requirements according to traffic demand warrants) and any requirements for OD delivery along derived transport routes. <p>This may need to consider road section upgrades.</p> <p>Design drawings would need to be prepared for the above and sent for review and agreement with the relevant road authority at concept, functional and detailed design stages.</p> <ul style="list-style-type: none"> • Following road condition and maintenance requirements considered: <ul style="list-style-type: none"> ○ Pre-condition (dilapidation survey) to provide an existing survey of public roads that may be used for access and designated for construction vehicle routes. ○ Consultation with road asset owners to agree on the extent of pre-condition (dilapidation survey) survey extents and survey requirements (specialist vehicle condition or photographic), road maintenance criteria, treatments and response timeframes, and post construction survey and asset hand-back agreements. • Depending on stakeholder requirements, other requirements may include specific traffic monitoring (maximum daily truck volumes), and specific bond payments for remedial works. 				Road section upgrades

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<ul style="list-style-type: none"> • TMP control measures outlined, covering the following aspects: <ul style="list-style-type: none"> ○ Roles and responsibilities, including project management, co-ordination, public consultation, advertising and complaint procedures. ○ Road authority notification requirements. ○ Training and site induction requirements. ○ Contractor liaison protocol. ○ Roadside native vegetation requirements, including identification protocols and approvals (if required). ○ Vehicle access measures • Access requirements by vehicle type, including any regulator or stakeholder permits. • Road closure requirements. Management of any temporary or partial closure of roads and traffic lanes to maintain existing connectivity for local access, pedestrians and cyclists, in accordance with relevant road design standards and in consultation with landholders and any other relevant third parties. Traffic counts may need to be conducted to investigate suitable times for road and lane closures. Road closures to occur in off-peak periods when demands are low where possible (notably for OD vehicle deliveries). Minimise the number and duration of road closures. • Development of suitable measures to ensure emergency service access is not inhibited due to project construction activities in consultation with emergency services, especially regarding any road closures on the public road network (see MM-TP05). • Construction staging and car parking requirements to ensure no car parking occurs outside of the project boundary and affects local land use or accessibility. If 				

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<p>required car share or shuttle bus provisions will be considered to reduce the need for single vehicle worker occupancy.</p> <ul style="list-style-type: none"> ● Signage requirements with reference to Australian Standard AS 1742. Notably for this project this would include notification of: <ul style="list-style-type: none"> ○ Movement of trucks from site access points to/from major road connections. ○ No-truck access signage to ensure vehicles do not access restricted areas and to aid with wayfinding ● Speed limits set for construction stage. Notably review of existing speeds along Shell Parade and near nominated site access points to consider safe system principles. ● Verify operating and working hours during construction. These will need to be agreed with key stakeholders with a remit for the construction contractor to verify local bus routes/timings to ensure no conflicts occur. ● Environmental measures considered such as (see also MM-TP07): <ul style="list-style-type: none"> ○ Management of dust / sedimentation ○ Noise and vibration. ● Monitoring, inspection and auditing requirements detailed with regards to the TMP, including: <ul style="list-style-type: none"> ○ Addendum TMP triggers ○ Monitoring and inspection protocols outlined to ensure the integrity of the TMP given it will be viewed as a live document for the duration of the projects construction period. Reviews are typically undertaken on monthly basis with relevant stakeholders informed of any significant changes. ○ Auditing can include compliance and road safety audits. 				

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<ul style="list-style-type: none"> The TMP would be an overarching document to inform subsequent specific work site TMPs developed by works contractors. In addition, there may be a need for other specific TMPs, such as for the delivery of components via OD vehicles. 				

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
MM-TP03	<p>Road safety audits</p> <p>Road safety audits (RSA), at various stages of project development, indicatively suggested at:</p> <p>Existing condition and site access audits</p> <p>Detailed design stage</p> <p>RSA's will be completed by a pre-qualified VicRoads RSA auditor and be independent to the project and notable the design team.</p>	All	<p>Pipeline Licence</p> <p>Incorporated document</p>	<p>Pre-construction</p> <p>Construction</p> <p>Decommissioning</p>	<p>Site access points upgrades</p>
MM-TP04	<p>Emergency access and evacuation plan</p> <p>A contractor emergency evacuation plan will be developed outside the TMP report but reference to its production and Viva emergency evacuation protocols to be made. It will be produced in tandem between the developer, works contractor, local business and CFA.</p>	All	<p>Pipeline Licence</p> <p>Incorporated document</p> <p>Refinery MHF safety case amendment</p>	<p>Pre-construction</p> <p>Construction</p> <p>Operational</p> <p>Decommissioning</p>	<p>Disruption to emergency vehicle access</p>
MM-TP05	<p>Sub TMPs</p> <p>Sub TMPs will be completed by the relevant contractors, including for specific work activities (Worksite Traffic Management Plans).</p> <p>These will all consider and reference back to the overarching project TMP outlined previously.</p> <p>The sub TMPs will also outline more specific protocols and works contacts, for example:</p> <ul style="list-style-type: none"> • Roles and responsibilities • Training • Incident and emergency procedures • Documentation and communication procedures 	All	<p>Pipeline Licence</p> <p>Incorporated document</p>	<p>Pre-construction</p> <p>Construction</p> <p>Decommissioning</p>	<p>Disruption to public transport</p> <p>Amenity impacts on the road network</p> <p>Disruption to emergency vehicle access</p>

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
MM-TP06	<p>OD transport route assessments</p> <p>Formal OD transport route assessments will be completed by the project transport contractor from the nominated origin(s) along with all necessary mitigation measures and stakeholder approvals.</p> <p>Following this assessment, final routes options will be verified, and any impacts identified along with relevant stakeholders who may need to be contacted to facilitate the safe delivery of materials to the project sites. Potential impacts include clearance to potential obstructions, such as wires, structures (bridges and culverts), trees, and rail crossing infrastructure for OD vehicles.</p>	All	Pipeline Licence Incorporated document	Pre-construction Construction	Over-dimensional loads road use
MM-TP07	<p>Operational transport plan</p> <p>An operational transport plan will be developed considering appropriate stakeholder consultation in accordance with the MM-TP01. This plan will include identifying the suitable route(s) to accommodate the projected heavy vehicle movements, management measures at key intersections and permit requirements for access to roads that are not approved B-Double routes along the anticipated routes from each facility to the Refinery. Consideration to the safety and amenity impacts of proposed heavy vehicle routes during operation will be given where possible.</p> <p>Relevant road authorities will be consulted during the development of the Operational Transport Plan. As required, the Operational Transport Plan may be used to assess impacts to road assets and assist in any potential compensation to relevant road authorities should impacts occur.</p>	Treatment facility	Incorporated document	Operation	Road network infrastructure Site access disruptions Safety impacts
<p>Underwater noise</p> <p>EES evaluation objective: To minimise adverse effects on water (in particular wetland, estuarine, intertidal, and marine) quality and movement, and to the ecological character of the Port Phillip Bay (Western Shoreline) and Bellarine Peninsula Ramsar site.</p>					
MM-UN01	<p>Minimise underwater noise impacts</p> <p><u>Underwater noise must be minimised as far as reasonably practicable during construction and operation</u></p>	Dredging Refinery Pier	Incorporated document	Construction Operation	Impacts on marine mammals during piling

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	<p>Choose the quietest operational technique possible and reduce the number or duration of sound exposure periods to the absolute minimum necessary to achieve the construction targets:</p> <ul style="list-style-type: none"> Reduce the rate of penetration and the number of piles installed per day (hammer strikes). 	FSRU	Consent under the <i>Marine and Coastal Act</i>		operations or other noisy aspects of jetty
	<ul style="list-style-type: none"> Use noise dampening technologies at the source to reduce the initial sound production (primary noise mitigation) or placed in the path of propagating sound to reduce intensity (secondary noise mitigation). 		2018		construction or FSRU operation
MM-UN02	<p>Deter marine animals mammals and fish from construction area</p> <p>Implement procedures to deter marine animals mammals and fish from the construction vicinity, including methods such as:</p> <ul style="list-style-type: none"> Using Acoustic Harassment Devices (AHDs) during (noise-) critical activities such as the onset of impact pile driving Implementing a safety zone around loud sound sources by visual monitoring of the surrounding area prior to commencing loud activities and implement activity delays of 20 minutes based on time of last sighting Using soft-start or ramp-up procedures. <p>Develop implementation protocols for deterring marine mammals and fish from the construction vicinity, including guidance on the extent of the monitoring zone and how the visual monitoring should be carried out. The protocols must be developed by a suitably qualified marine biologist.</p>	Dredging Refinery Pier	Incorporated document Consent under the <i>Marine and Coastal Act 2018</i>	Construction	Impacts on marine mammals_ and fish during piling operations or other noisy aspects of jetty construction

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
MM-UN03	<p>Noise awareness training</p> <p>Train construction workers to understand potential for underwater noise impacts and endorse measures to reduce emissions (e.g., switching off machinery or equipment not required on a vessel while moored).</p>	Dredging Refinery Pier FSRU	Incorporated document Consent under the <i>Marine and Coastal Act 2018</i>	Construction Operation	Impacts on marine mammals during piling operations or other noisy aspects of jetty construction or FSRU operation
MM-UN04	<p>Performance monitoring and contingency mitigations, if required</p> <p>After operation commences, commissioning underwater noise testing will be carried out to determine:</p> <ul style="list-style-type: none"> whether the noise emission levels are generally in accordance with, or lower than, these the inherent noise levels predicted in the EES technical work (Technical Report A Appendix A-2); and- to detect whether any excessive noise is being emitted (atypical levels) for the equipment and shipping activity in question. <p>If noise emissions levels meaningfully exceed <u>are not generally lower than</u> those presented in the EES, or atypical sound levels are detected, then all reasonably practicable mitigation measures must be applied to reduce noise such as, without limitation, isolating noise producing equipment from the ship structure through resilient mountings / vibration isolation.</p> <p>The commissioning monitoring:</p> <ul style="list-style-type: none"> will be conducted for a period of two months, or four LNG carrier offload events, after the commissioning of the project; and include testing/commissioning of the diffuser system, <u>and during the first operational use of the diffuser system.</u> 	FSRU	Incorporated document Consent under the <i>Marine and Coastal Act 2018</i>	Operation	Impacts on fish and marine mammals during FSRU operation

MM ID	Mitigation measure	Project component	Statutory implementation	Project timing	Potential impact
	Monitoring should be every 5 years, or such other period as approved by regulatory authorities, to ensure underwater noise emissions continue to be minimised for the life of the project.				

Appendix H Recommended Incorporated Document

Viva Energy Gas Terminal Project

IAC Recommended Version - Incorporated Document, September 2022 [\[Update as required\]](#)

The base document is the Proponent's Part C - Incorporated Document.

The IAC recommended changes are highlighted in Tracked Changes.

DRAFT

1.0 INTRODUCTION

- 1.1 This document is an Incorporated Document in the Greater Geelong Planning Scheme (the planning scheme) pursuant to section 6(2)(j) of the *Planning and Environment Act 1987* (the Act).
- 1.2 The control in Clause 4.0 prevails over any contrary or inconsistent provision in the planning scheme.

2.0 PURPOSE

- 2.1 The purpose of the control in Clause 4.0 is to permit and facilitate the use and development of land described in Clause 3.0 for those components of the Viva Energy Gas Terminal Project (Project) that are not otherwise authorised, in accordance with the requirements of Clause 4.0.
- 2.2 The Incorporated Document involves the use and development of a Gas Terminal, including continual mooring of a Floating Storage and Regasification Unit (FSRU), pier infrastructure including non-gas piping, a diffuser for discharge of water from the FSRU, a potential Boil Off Gas line along the existing Refinery Pier connecting into the Refinery and a seawater transfer pipe connecting seawater discharge points on the FSRU to the existing Refinery seawater intake, a gas treatment facility located within the Geelong Refinery site and temporary marine construction facilities, comprising a temporary loadout facility and associated construction compound and laydown area at Lascelles Wharf.

3.0 LAND TO WHICH THIS INCORPORATED DOCUMENT APPLIES

- 3.1 The control in Clause 4.0 applies to the land shown as SCO14 on the planning scheme map in the planning scheme (Project Land).

4.0 CONTROL

EXEMPTION FROM PLANNING SCHEME REQUIREMENTS

- 4.1 Despite any provision to the contrary, or any inconsistent provision in the planning scheme, no planning permit is required for, and no provision in the planning scheme operates to prohibit, restrict or regulate the use or development of the Project Land for the purposes of, or related to,

constructing, maintaining or operating the Project, [subject to compliance with this Incorporated Document](#).

4.2 The use and development of the Project Land for the purposes of, or related to, the Project includes, but is not limited to:

- a) A Gas Terminal, including:
 - i) continual mooring and use of a FSRU at a new berth adjacent to the Refinery Pier and the operation of the FSRU to store Liquefied Natural Gas (LNG) and convert LNG into natural gas;
 - ii) construction and use of pier infrastructure; and
 - iii) a treatment facility.
- b) Buildings and works or associated infrastructure or activities for the Project.
- c) Utility installation including substations, gas infrastructure, power upgrades and other associated utility infrastructure.
- d) Wharf including facilities for LNG carriers and the FSRU.
- e) Creation and alteration of access to roads.
- f) Other buildings or works or associated infrastructure or activities associated with the use for a Gas Terminal.
- g) Ancillary activities, to the use and development of the Project Land for the purposes of, or related to, the Project, including but not limited to:
 - i) Undertaking any preparatory works as defined in Clause 4.10
 - ii) Creating and using lay down areas and depots for construction purposes
 - iii) Stockpiling of excavation material.
 - iv) Constructing and using temporary site workshops and storage, staff car parking, administration and amenities buildings.
 - v) Removing, destroying and lopping of trees and removing vegetation, including native vegetation and dead native vegetation.
 - vi) Demolishing and removing buildings, structures, infrastructure and works.
 - vii) Relocating, modifying and upgrading services and utilities.
 - viii) Constructing fences, temporary site barriers and site security.
 - ix) Constructing or carrying out works to create or alter roads, car parking areas, bunds, mounds, landscaping, excavate land, salvage artefacts and alter drainage.
 - x) Constructing and using temporary access roads, diversion roads and vehicle parking areas, loading and unloading areas, access paths and pedestrian walkways.

- xi) Earthworks including cutting, stockpiling and removal of spoil, and formation of drainage works.
- xii) Displaying construction, directional and identification signs.
- xiii) Mooring and use of barges for construction purposes.

CONDITIONS

4.3 The use and development of the Project Land for the Project permitted by this document is subject to the following conditions. In these conditions, reference to 'a stage' includes any stage or part of the Project, whether for construction or operation or both.

4.4 The use and development of the Project must be undertaken in accordance with this document and the plans and documentation prepared to the satisfaction of the Minister for Planning.

4.5 Development Plans

4.5.1 Prior to the commencement of use and development (excluding preparatory buildings and works under Clause 4.10), Development Plans must be prepared generally in accordance with the plan at Attachment A and to the satisfaction of the Minister for Planning. The Development Plans must be prepared in consultation with City of Greater Geelong Council (the Council) and GeelongPort Pty Ltd (GeelongPort) as relevant. These plans must include:

- a) Site layout plan/s and elevation/s including external materials and finishes;
- b) Construction compound plan/s;
- c) A plan showing a designated area within which the FSRU will be moored;
- d) Site levels showing the full extent of any proposed cut and fill;
- e) Lighting details for the Project;
- f) Access and car parking details;
- g) An explanation demonstrating how the Development Plan is in accordance with the approved mitigation measures included within the Environmental Management Plan (EMP);
- h) An explanation demonstrating how the Development Plan, specifically for the treatment facility, is in accordance with the objectives of Design and Development Overlay – Schedule 20 and that the treatment facility is site responsive.

- 4.5.2 Development Plans may be prepared and approved in stages or parts to the satisfaction of the Minister for Planning.
- 4.5.3 The plans and documentation required under Clause 4.5.1 may be amended from time to time to the satisfaction of the Minister for Planning and in consultation with the Council and GeelongPort as relevant.

4.6 ENVIRONMENTAL MANAGEMENT PLANS

- 4.6.1 Prior to the commencement of use and development (excluding preparatory buildings and works under Clause 4.10.1), an EMP must be prepared to the satisfaction of the Minister for Planning. The EMP must be prepared in consultation with the Council.
- 4.6.2 The EMP must include mitigation measures generally in accordance with the Minister's Assessment dated [day month 2022] made pursuant to the *Environment Effects Act 1978* (EE Act) as applicable to the Gas Terminal unless otherwise approved by the Minister for Planning. The mitigation measures must address relevant matters as set out in the Environmental Management Framework of the Environmental Effects Statement dated [February 2022] and any other relevant matters.
- 4.6.3 The EMP must:
- a) set out the process (including approval) and timing for development of a Construction Environmental Management Plan (CEMP), Operations Environmental Management Plan (OEMP) and other plans and procedures required by the mitigation measures. Mitigation measures including the process and timing for consultation with relevant stakeholders, including Council, the Department of Environment, Land, Water and Planning, Energy Safe Victoria, the Roads Corporation, Melbourne Water, Heritage Victoria, First Peoples – State Relations, the Registered Aboriginal Party for the Project Land, WorkSafe Victoria, the Environment Protection Authority, Geelong Grammar School, Geelong Port and [local community representatives](#) as relevant;
 - b) be accompanied by a statement explaining any difference between the mitigation measures included in the EMP and the mitigation measures set out in the Minister's Assessment dated [day month 2022] made pursuant to the EE Act.
- 4.6.4 The CEMP must be prepared to the satisfaction of the Minister for Planning and in consultation with the Council, GeelongPort and [Geelong Grammar School](#) as relevant and must include:
- a) A summary of key construction methodologies.
 - b) An overarching framework for site works or specific measures to reduce and manage environmental and amenity effects during construction of the Project, including management plans in respect of:
 - i) Air quality
 - ii) Hazardous substances management, including contaminated land and waste management

- iii) Noise and vibration
 - iv) Sediment, erosion and water quality (including surface water and groundwater)
 - v) Traffic and transport
 - vi) Acid Sulfate Soil
 - vii) Marine and terrestrial ecology.
- c) A summary of the consultation that informed the preparation of the CEMP and a summary of the proposed ongoing engagement activities with Council, Geelong Grammar School, GeelongPort, the community and other stakeholders during construction of the Project and enquiries and complaints management.
- d) A summary of performance monitoring and reporting processes, including auditing, to ensure environmental and amenity effects are reduced and managed during construction of the Project.

4.6.5 The OEMP must be prepared to the satisfaction of the Minister for Planning and in consultation with the Council, GeelongPort and [Geelong Grammar School](#) as relevant and must include:

- e) An overarching framework for managing environmental and amenity effects during operation of the Project, including management plans in respect of:
- i) Air quality
 - ii) Hazardous substances management, including contaminated land and waste management
 - iii) Noise and vibration
 - iv) Sediment, erosion and water quality (including surface water and groundwater)
 - v) Marine monitoring
 - vi) Native vegetation offset management
 - vii) Traffic and transport
- f) A statement of anticipated annual LNG cargoes.
- g) A summary of the consultation that informed the preparation of the OEMP and a summary of the proposed ongoing engagement activities with Council, Geelong Grammar School, GeelongPort, the community and other stakeholders during operation of the Project and enquiries and complaints management.
- h) A summary of performance monitoring and reporting processes, including auditing, to ensure environmental and amenity effects are reduced and managed during operation of the Project. The summary of performance monitoring and reporting processes will include the monitoring and reporting frequencies and will identify the relevant agencies to which monitoring reports will be provided.

- 4.6.6 The EMP may be amended from time to time, to the satisfaction of the Minister for Planning.
- 4.6.7 The use and development of the Project must be carried out in accordance with the approved EMP including the mitigation measures and all plans and procedures required by them.

4.7 NATIVE VEGETATION

In this clause:

- Guidelines means the *Guidelines for removal, destruction or lopping of native vegetation* (Department of Environment, Land, Water and Planning, December 2017).
- Secretary means the Secretary to the Department of Environment, Land, Water and Planning (as constituted under Part 2 of the *Conservation, Forests and Lands Act 1987*).

4.7.1 Before the removal, destruction or lopping of native vegetation to enable a preparatory use or development, information about that native vegetation in accordance with application requirements 1, 5, 9, 10 and 11 in Tables 4 and 5 to the Guidelines must be prepared to the satisfaction of the Secretary.

4.7.2 Before the removal, destruction or lopping of native vegetation (other than to enable a preparatory use or development):

- a) Information about the native vegetation in accordance with the application requirements 1, 5, 9, 10, and 11 in Tables 4 and 5 of the Guidelines must be prepared to the satisfaction of the Secretary.
- b) The biodiversity impacts from the removal, destruction or lopping of that native vegetation must be offset in accordance with the Guidelines to the satisfaction of the Secretary. The biodiversity impacts from the removal, destruction or lopping of native vegetation to enable a preparatory use or development must be included in the total biodiversity impacts when determining the offset to the satisfaction of the Secretary.
- c) Evidence that the required offset has been secured must be provided to the satisfaction of the Secretary.

4.7.3 The timing of the offset requirement may be varied by the Secretary. The secured offset for a project may be reconciled at the completion of a project to the satisfaction of the Secretary.

4.7.4 The requirements of this clause may be satisfied in separate components or stages of a development, but each requirement must be satisfied before the removal, destruction or lopping of native vegetation for that component or stage.

4.8 FLOOD MANAGEMENT

4.8.1 Where, but for this document, a planning permit would be required for buildings and works on land within the Land Subject to Inundation Overlay,

the buildings and works must be undertaken to the satisfaction of the relevant floodplain management authority.

4.9 CREATING OR ALTERING ACCESS TO ROADS

4.9.1 Where, but for this document, a planning permit would be required to create or alter access to a road in a Transport Zone, the creation or alteration of access must be undertaken to the satisfaction of the Head, Transport for Victoria.

4.10 PREPARATORY BUILDINGS AND WORKS

4.10.1 Preparatory buildings and works may be undertaken for the Project on the Project Land before the requirements of sub-clauses 4.5 to 4.9 are satisfied.

4.10.2 Despite Clause 4.10.1, the removal, destruction or lopping of native vegetation may not be undertaken to enable preparatory buildings and works until the requirement of Clause 4.7 has been satisfied.

4.10.3 Preparatory use and development for the Project includes but is not limited to:

- a) Works, including vegetation removal, where but for this document a planning permit would not be required under the provisions of the planning scheme.
- b) Investigating, testing and preparatory works to determine the suitability of land, and property condition surveys.
- c) Creation and use of construction access points and working platforms.
- d) Site establishment works including temporary site fencing and hoarding, site offices, and hardstand and laydown areas.
- e) Construction, protection, modification, removal or relocation of utility services.
- f) Establishment of environment and traffic controls, including designation of 'no-go' zones.
- g) Establishment of temporary car parking.
- h) Demolition to the minimum extent necessary, to enable preparatory works.
- i) Salvage and relocation of Aboriginal cultural heritage material and other management actions required to be undertaken in compliance with a cultural heritage management plan approved under the Aboriginal Heritage Act 2006 and Regulations 2018 or otherwise in compliance with that Act.
- j) Removal, destruction or lopping of native vegetation to the minimum extent necessary to enable other preparatory buildings and works specified in Clause 4.10.3.

4.11 DECOMMISSIONING

- 4.11.1 Within 18 months of the cessation of the Project, unless the Minister for Planning agrees otherwise, decommissioning activities should be undertaken in accordance with a Decommissioning Plan which must be prepared to the satisfaction of the Minister for Planning and in consultation with GeelongPort as relevant.

5.0 EXPIRY

- 5.1 The control in this document expires if any of the following circumstances apply:
- a) The development allowed by the control is not started by 2 years of the approval date of this incorporated document.
 - b) The development allowed by the control is not completed by 2 years from the date of commencement of works.
 - c) The use allowed by the control is not started by 2 years of the approval date of this incorporated document.
 - d) The use allowed by the control will expire 20 years from the date of commencement of operation of the Project.
- 5.2 The Minister for Planning may extend these periods if a request is made in writing before the expiry date or within three months afterwards.

Attachment A – Project components

