
RAVENSDOWN RESOURCE CONSENT RENEWAL PROJECT
TECHNICAL FOCUS GROUP
MEETING 5 MINUTES - FINAL¹

DATE Friday 1 October 2021
TIME 9:00am - 1:00am
VENUE Ravensdown Ltd, Awatoto, LNI Upstairs Meeting Room and Video Conference

IN ATTENDANCE

Andrew Torrens - Ravensdown	Aki Paipper - Kohupātiki Marae (via teams)
Helen Hurring - Ravensdown	Margie McGuire - Kohupātiki Marae (via teams)
Stephen Daysh - Mitchell Daysh	Shade Smith - Ngati Kahungunu Iwi Inc
Anita Anderson - Mitchell Daysh	Chad Tareha - Ngāti Pārau Hapū (via teams)
Bruce Wills - Ravensdown (Director)	Sam Robinson - Ravensdown Customer
Jamie Thompson - Ravensdown	Reynold Ball - HBDHB
Marlane Harmer - Ravensdown	Nigel Haplin - BioRich
Sean Bevin - Economic Solutions	Andrew Gass - NCC
Richard Chilton - Tonkin + Taylor (via Teams)	Matthew Brady - DOC
Francesca Kelly - Environmental Medicine (via Teams)	Malcom Miller - HBRC (linked via teams)
Stephen Trolove - Plant and Food Research	Tania Diack - HBRC (linked via teams)
Ian Millner - Land Division	Andrew Curtis (PDP) - HBRC Technical Advisor (via Teams)
Ngairé Phillips - Streamlined Environment (via Teams)	Shane Kelly (Coast and Catchment) – HBRC Technical Advisor (via Teams)
Nikki Mather - Beca (via Teams)	Kyle Christensen (Kyle Christensen Consulting) - HBRC Technical Advisor (via Teams)

APOLOGIES

Ami Coughlan - Fish and Game	Fred Sugden - Taradale High School
Jack Blunden - HBRC	Madison Milley - Taradale High School
Jenny Mauger - Kahungunu ki Te Matau a Māui	Elliot Morell - Taradale High School

Confirmed via email on 25 Nov 2021. Moved - Chad Tareha, Seconded - Jamie Thompson.

1. Karakia and Introductions

2. Draft Minutes - TFG Meeting 4, 27 August 2021

- The minutes of the fourth meeting of the TFG, dated 27 August 2021, were confirmed as a true and correct record of the meeting.

Moved - Bruce Wills

Seconded - Sam Robinson

Carried unanimously

- The meeting minutes will be finalised and attached to the minutes of Meeting 5 (Attachment 1) and added to the project website.

3. Presentation of Effects Assessment Reports and Q & A

See presentations (project website).

Planning Assessment – Stephen Daysh

- Stephen D provided an overview of the consents required and the relevant planning instruments.
- The draft technical reports will be provided to the HBRC to identify any further information that is required prior to the applications being lodged.
- A sub-committee from the TFG has been set up to develop the Waitangi Estuary Habitat Abundance Restoration Project (HARP). Matt Brady suggested someone from the local DOC office could be interested in being part of this subcommittee. Stephen agreed and suggested Senitra who has been at previous TFG meetings.

Economic Assessment – Sean Bevin

- Sean provided an overview of the economic assessment undertaken in relation to the consent project.
- Stephen D advised that this assessment focuses on the local effects of the site and doesn't include any wider economic benefits that accrue from the use of the product which is addressed in other regulations and planning instruments. The consent application only relates to the direct effects of the operation of the plant and the specific air and water discharges and water take.

Air Discharge Dispersion Modelling and Air Quality Effects Report – Richard Chilton

- Richard provided an overview of the T+T air discharge assessment.
- Andrew Curtis asked whether the upgrades are likely to have an impact on SO₂ exceedances and what impact it would have on the manufacturing stack emissions.
Andrew Torrens responded that restarting of the Acid Plant has two phases, one the heating phase which brings the plant up to operating temperature. The second phase is the start-up phase where sulphur is reintroduced to the furnace. The operating procedures have changed to meet best practice – a report prepared by Chemetics (Worley) will be part of the application package that will discuss these matters.
- Stephen D advised that a Source Control Management plan is also being prepared and will be a key part of the application.
- There was some discussion on odour measurement and odour in the immediate environment. Andrew T noted that Ravensdown had not received any odour complaints.

Human Health Effects – Francesca Kelly

- Francesca provided an overview of the health effects assessment.

- Stephen D noted that Francesca had recommended the vegetation monitoring of fluoride undertaken by Stephen Trolove following questions at a previous TFG meeting.

Vegetation Effects – Stephen Trolove

- Stephen T provided an overview of the vegetation effects assessment based on monitoring undertaken as part of the current air discharge consent and summarised the recent fluoride vegetation sampling undertaken with the TFG members.
- Andrew T advised that fluoride in stack emissions and the discharge of water have been consistent for the last 8 to 10 years, and that the pH of the stack can be adjusted on a short term basis during fruit flowering or unfavourable weather conditions.

Land Discharge Effects and Management – Ian Milner

- Ian provided an overview of the work undertaken with the Ravensdown soil chemists and the hydrogeologist to understand the potential effect of the irrigation of treated water to the Ravensdown land across from the site.

Estuarine Ecology Assessment – Ngaire Phillips

- Ngaire provided an overview of the assessment of the treated water discharge on the estuarine environment.
- Matt Brady asked if sediment testing was included as part of the marine ecology. Ngaire responded that previous sediment testing had shown that there was no accumulation in the Ravensdown monitoring sites, however the reference sites in the previous studies on the southern side of the Ngaruroro River showed high metal concentrations. The reference site was then moved because the sediment was so different making it difficult to draw conclusions.
- Shane Kelly asked if there was any input from Ravensdown to the upstream waterways. Andrew Torrens advised there is no linkage from the site to the Waitangi drain.
- Shade Smith asked if the mixing zone length would be reviewed. Ngaire advised the dye study was undertaken and that this is something that should be looked at for any reconsenting. Stephen D confirmed it was important that we look at the mixing zone with our consent conditions together with the rationale.

DSI Hail Report – Nikki Mather and Mia Uys

- Nikki provided an overview of the detailed site contamination investigation undertaken by Beca at the site.
- No sampling was undertaken on the south eastern side of the site between the Acid Plant and existing Settling Pond and further sampling should be considered prior to any earthworks in that area.

Cultural Impact Assessments

- Chad provided an update on progress with the CIA for Ngāti Pārau Hapū.
- Aramanu has been in discussion with Margie to capture her knowledge of the area.
- Helen has been in contact with Tania Eden to confirm the preparation of a CIA for Te Taiwhenua O Te Whanganui A Orotu and is waiting for confirmation.

Meeting Closed at 12.05pm

Minutes prepared by Helen Hurring and Anita Anderson

Attachment 1: FINAL Minutes, TFG Meeting 4, 27 August 2021

RAVENSDOWN RESOURCE CONSENT RENEWAL PROJECT
TECHNICAL FOCUS GROUP
MEETING 4 MINUTES - FINAL¹

DATE Friday 27 August 2021
TIME 9:30am - 11:30am
VENUE Meeting held by Zoom

IN ATTENDANCE

Andrew Torrens - Ravensdown	Aki Paipper - Kohupātiki Marae
Helen Hurring - Ravensdown	Margie McGuire - Kohupātiki Marae
Stephen Daysh - Mitchell Daysh	Chad Tareha - Ngāti Pārau Hapū
Anita Anderson - Mitchell Daysh	Shade Smith - Ngati Kahungunu Iwi Inc
Bruce Wills - Ravensdown (Director)	Jenny Mauger - Kahungunu ki Te Matau a Māui
Stephen Esposito - Ravensdown	Sam Robinson - Ravensdown Customer
Jamie Thompson - Ravensdown	Fred Sugden - Taradale High School
Malcom Miller - HBRC	Madison Milley - Taradale High School
Tania Diack - HBRC	Elliot Morell - Taradale High School
Andrew Curtis (PDP) - HBRC Technical Advisor	Ami Coughlan - Fish and Game
Shane Kelly (Coast and Catchment) - HBRC Technical Advisor	Matthew Brady - DOC
Kyle Christensen (Kyle Christensen Consulting) - HBRC Technical Advisor	Bridget Wilton - Horticulture Ltd
Andrew Gass - NCC	

APOLOGIES

No apologies received

1. Introductions and Karakia

- Bruce Wills and Stephen Esposito introduced themselves to the group.

2. Draft Minutes - TFG Meeting 3, 16 July 2021

- The minutes of the third meeting of the TFG, dated 16 July 2021, were confirmed as a true and correct record of the meeting.

Moved - Chad Tareha
Seconded - Jamie Thompson
Carried unanimously

¹ Confirmed at TFG Meeting 5, 1 October 2021.

- The meeting minutes will be finalised and attached to the minutes of Meeting 4 (Attachment 1) and added to the project website.

3. Presentation of Draft Air and Water Discharge Strategies.

See presentation (project website).

- Andrew provided an overview of the air and water discharge strategies (provided to the TFG via email) for the resource consent renewal. These have been prepared with the project technical team - Aurecon (Water) and Tonkin+Taylor (Air).
- Stephen requested that the TFG members sent through any specific questions in writing by 3 September.
- The following matters were discussed. Responses from the project team are noted in italic font.
 - Proposed reduction of SO₂ emissions from 60kg to 40kg/hr.
The sites double absorption plant operates at greater than 99.5 % Sulphur recovery. Andrew Curtis noted that this was a significant reduction and would bring Ravensdown into line with best practice and other similar discharges from plants in New Zealand.
 - Will the converter upgrade project reduce the SO₃ emissions.
Ravensdown propose to retain the current SO₃ emission limit in the resource consent. The two absorbing towers installed in 2013 provided some improvements in the SO₃ emission levels, however the converter upgrade project will have no effect on SO₃ emissions, only the SO₂ emissions.
 - Scrubber upgrade project effect on SO₂ emissions from the manufacture plant.
Ravensdown are proposing an emission rate limit of 10kg/hr for SO₂ emissions from the manufacture plant. The final scrubber design and its effect on absorption is yet to be confirmed.
 - Site production and start ups in relation to bird roosting.
The site operates from August to May with planned shutdowns in winter and December.
 - Where does the fluoride from scrubbers go?
All fluoride absorbed in the scrubbers is reused in the process.
 - Encouragement for Ravensdown to reduce fugitive emissions.
 - How is the Source Protection Zone being considered with the proposal to discharge to land through irrigation?
Ravensdown are aware of concerns in relation to the Source Protection Zone and are undertaking further investigations with an expert team consisting of a Geo-hydrologist, Precision Irrigation and Soil Experts to assess the option and confirm the practicality of a land discharge. Their preliminary finding will be presented to the TFG at the next meeting on 1 October. This work will include recommendations on the most appropriate crop for the site.
 - The use of organic matter to minimise environmental impact and rejuvenate land and soils.
This is something that Ravensdown would need to research further.
 - Is the phosphate ethically sourced - both environmentally and socially?
Ravensdown have a Supplier Code of Conduct and only do business with companies that have been verified. The Ravensdown Integrated Report provides further detail.
 - Commitments outlined in the Water Discharge Strategy document.
Ravensdown is proposing to commit to discharge limits over an agreed period of time through an Adaptive Management Plan, with the company leadership being committed to the proposed approach detailed in the discharge strategy and the monitoring that will inform this.
 - Shane commented that the Water Discharge Strategy focuses on water quality however it should also include principles of water quantity design and a strategic view on how flow will be addressed on site.
The discharge strategy will be amended to include this.

- Chad presented on a proposal from Ngāti Pārau detailing the creation of a four-hectare wetland within the Waitangi Estuary at an estimated cost of \$100k. The project would aim to address the impacts of water discharges on the estuary and create a Whitebait spawning area, Mahinga Kai Habitat and Taonga Species Habitat.
 - Jenny suggested that it could be time to consider integrated management of the estuary and get the business and landowners in the Awatoto area to work together to develop an overall strategy.
 - Fred asked if there was any specific research around plants in the area and Stephen responded that any Habitat Abundance Restoration Programme that Ravensdown were proposing as part of the consent package would have a monitoring programme in place for habitat and species.
- Andrew noted that the comments from the TFG would be considered by Ravensdown and the technical team and the discharge strategies would be updated as appropriate and / or addressed in the technical effects assessments by each subject author.

Agreed Action 1: Ravensdown to include a section in the Water Discharge Strategy document in relation to water quantity.

Agreed Action 2: TFG members to provide any comments regarding the Air and Water Discharge Strategies by Friday 3 September 2021.

3. Presentation of draft scopes for Assessment Studies and Management Plans.

See presentation (project website).

- Chad let the group know that Ngāti Pārau were holding a hui to authorise the lead author for the Cultural Impact Assessment.
- Margi noted that Ngāti Hori, Ngāti Hawea and Ngāti Hinemoa would like to be involved in the reporting. Chad responded that Te Taiwhenua O Te Whanganui-a-Orutū have agreed to work with these hapū and he would discuss this with Aki and Margi.
- Stephen asked for TFG members who would be interested in being involved in the development of the Waitangi Estuary Habitat Abundance Restoration Plan. The members that expressed interest were Jenny Mauger, Margie McGuire, Aki Paipper, Fred Sugden, Madison Milley, Elliott Morrell, Chad Tareha, and Jamie Thompson.

Meeting Closed at 11:42am

Minutes prepared by Helen Hurring and Anita Anderson

Attachment 1: FINAL Minutes, TFG Meeting 3, 16 July 2021