IN THE MATTER of the Resource Management Act 1991 (RMA)

AND

IN THE MATTER Resource Consent Applications by Northport Ltd - Port

Expansion project at Marsden Point

Application numbers:

Whangarei District Council: LU2200107

Northland Regional Council: APP.040976.01.01

DIRECTION 17 (15 MARCH 2024) FROM THE HEARING PANEL

STORMWATER - DIRECTION FOR EXPERT CONFERENCING (FACILITATED).

- 1. The Hearing Panel in its Direction 15 requested, among other things, information/clarification on stormwater matters. The information the Hearing Panel sought is attached as **Attachment 1**.
- 2. The Applicant responded to this request by way of a Memorandum¹, attaching a letter from Reyburn & Bryant (21 February 2024) which included a technical memorandum from Mr Poynter (13 February 2024), a draft Stormwater Operation and Maintenance Plan prepared by SLR Consulting New Zealand (SLR) (7 February 2024), and a report from Mr Williamson Principal Hydrogeologist from Williamson Water & Land Advisory (12 February 2024).
- 3. The Hearing Panel has reviewed that additional information. While it has been helpful, there are still a number of outstanding issues that the Hearing Panel needs to understand prior to being satisfied it has sufficient information to make a decision on this aspect of the applications.
- 4. This matter is an important one. The Applicant is seeking stormwater consents for both riparian earthworks and associated stormwater diversions and discharges and operational stormwater discharges from use of the reclamation area. It is also seeking to surrender the existing stormwater discharge consent (CON20090505532) upon completion of the expanded port (Berth 5) pursuant to Section 138 of the RMA. If granted, the stormwater consent will cover both the existing and expanded port.
- 5. It is the Hearing Panel's view, that to better and fully understand the stormwater matters and ensure an efficient process, to direct an expert conferencing process between the Regional Council (the Council) and the Applicant (addressed in more detail below).

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¹ Dated 22 February 2024

- 6. Accordingly, the Hearing Panel directs expert conferencing for stormwater as set out below and as set out in the Hearing Panel's Direction 2 (7 August 2023) as is relevant.
- 7. The overarching matters that the Hearing Panel seeks the expert conferencing process to address are:
 - Water Quality/Toxicology specifically on the acute, chronic and cumulative effects of the types of contaminants generated from the site on both freshwater and marine systems;
 and
 - <u>Hydrogeology</u> specifically on the rates of infiltration from the bed of the canal/pond system and what implications (or effects) any stormwater might have in terms of its interaction with groundwater. If there is a lack of certainty as to the implications or effects of stormwater, what, if any, monitoring might address this so as to address this uncertainty.
 - <u>Proposed Consent Conditions</u> if consents are to be granted, what is the appropriate suite of proposed consent conditions to address the stormwater matters raised.
- 8. To assist the expert conferencing process, attached as **Attachment 2** is some background information as well as specific questions that the Hearing Panel has posed to help address the stormwater matters.
- 9. Ms Marlene Oliver is appointed as the independent facilitator for the ADR process. Ms Oliver is authorised to:
 - Act as independent facilitator;
 - In conjunction with the Regional Council (as administrator) invite the relevant people from the Council and Applicant's team to any meeting(s) and the experts to any expert conferencing sessions(s);
 - In conjunction with the Regional Council (as administrator) organise the sessions, including format, agendas, attendance and Joint Witness Statement (JWS)/reports), times and venues – in person or on-line as appropriate;
 - Liaise with the Applicant and Council and;
 - Report to the Chair of the Hearing Panel on an as required basis on progress with the
 conferencing sessions and progress on any JWS setting out the outcomes, including matters
 agreed and not agreed.
- 10. In light of the hearing adjournment extension until the 28 March 2024 (Direction 15), the Hearing Panel invites the Applicant and Council to liaise with each other to determine when the experts would be ready for expert conferencing and who the experts will be (technical and planning). The Hearing Panel requests that it be informed of the above no later than five working days from receipt of this Direction. This should also be forwarded to Ms Oliver.

11. Any enquiries regarding this Direction, or related matters, should be directed to Alissa Sluys -Consents and Hearing Administrator at alissas@nrc.govt.nz

Greg Hill Chairperson

Attachment 1 (Copied from the Hearing Panel's Direction 15)

Operational Stormwater management information request

The request below is for the Hearing Panel to better understand how stormwater quality is to be managed. We request this information be provided to us no later than **mid-February 2024** to give us time to review and understand it prior to the final Reply from Northport.

We note that the management of stormwater from the proposed port expansion's operational phase has been described by the Applicant's expert and reviewed by the Northland Regional Council's expert. The Applicant's evidence assesses the ability of the existing port stormwater treatment pond system to treat the quality of the stormwater arising from Northport's proposed expansion.

The Hearing Panel's questions have raised issues about the system's design parameters being founded on stormwater quality guidelines which are not intended for application to industrial sites. Further issues have been raised over the potential effects of untreated stormwater discharges to ground, and potentially groundwater, through the base of the system's canals and ponds.

To address these matters in a comprehensive manner further information is sought from the Applicant to demonstrate that the best practicable option is being proposed for the management of stormwater quality from the expanded site. The information sought is:

- 1. A **draft** Stormwater Operations and Maintenance Plan (draft SOMP) including the details set out in condition 219, Draft Proposed NRC Conditions: Northport Ltd (As at Hearing dated 20.11.23).
- 2. The draft SOMP is to be prepared by a suitably qualified and experienced practitioner with experience in the design and implementation of stormwater quality management practices and procedures for industrial sites. Ideally this person will have experience in managing stormwater quality from sites with similar contaminant treatment needs to the Northport site.
- 3. The primary objective of the draft SOMP is to describe the practices and procedures required to manage stormwater quality from the site in a manner that represents the "Best Practicable Option" (as defined in the RMA) for the discharge of stormwater to the CMA and/or groundwater.
- 4. Additional matters, beyond those required by condition 219, to be included in and/or addressed by this draft SOMP are:
 - a. A description of a "treatment train" approach which considers measures to reduce the entrainment of contaminants into stormwater including, but not limited to, source control measures such as sweeping, vacuuming and/or covering potential contaminant sources.
 - b. Methods to remove, as far as practicable, coarse sediment and debris, suspended sediment and adsorbed contaminants and dissolved contaminants.
 - c. Consideration of improving the performance of the existing stormwater treatment pond system which minimises velocities through the canals and ponds and maximises sedimentation and dissolved contaminant removal. This may include incorporating a wetland habitat into, or through enlargement of, the existing system. Reference should

- be made to the recommendation in Section 5 (iii) of the Northport report, "Stormwater Discharge Review". Ecological and Water Quality Report; prepared by 4 Sight, August 2015. This report is included in a suite of reports making up Appendix 29 of the Port expansion project's Assessment of Effects on the Environment (AEE).
- d. Consideration of a monitoring and reporting regime that includes continuous, real-time monitoring of the system's inflow and outflow which is triggered to stop discharging in the event of a trigger level being reached and before being discharged to the CMA and/ or groundwater. Parameters to be considered include flow, pH, turbidity, and conductivity.
- e. The practices and procedures required to meet the operational stormwater conditions (Condition 219 to 231 of the Draft Proposed NRC Conditions: Northport Ltd (As at Hearing dated 20.11.23).
- 5. Comment on the management of stormwater discharges to ground water through the base of the canals and ponds. The Applicant's stormwater hydraulic model estimates this exfiltration to be in the order of 20mm/hour. This assessment must include consideration of:
 - a. The practicality of lining the canals and ponds, or other measures to avoid seepage to groundwater.
 - b. A regime to monitor groundwater quality to assess the effects of discharges of untreated stormwater to ground water.
 - c. Options to address any adverse effects on groundwater quality arising from the discharge of contaminated stormwater.
- 6. Comment on the potential opportunity to incorporate the port's stormwater management systems with those being contemplated as part of Marsden Maritime Holdings Ltd (MMHL) broader development plans. Evidence presented to the hearing by Ms Mercer, CEO of MMHL identified that MMHL is currently assessing their development's stormwater management options and that this assessment is likely to be complete within the next year. Consideration of a comprehensive approach to stormwater across both sites may create opportunities to better manage the stormwater quality.

Attachment 2 (To the Hearing Panel's Direction 17)

Stormwater discharge background/considerations

- 1. Stormwater from the existing Northport operations area is managed via a canal and pond-based system established under an existing NRC discharge consent. Consent was granted in 1997 to discharge water treated by the canal / pond system through a diffuser to the Whangarei Harbour. The system which has been in use since mid-2002 consists of approximately 4ha of ponds and 2000m of canals². The pond was extended in 2016 to accommodate an extension of the hardstand area behind the port, and in 2018 further improvements were made.
- 2. The average base width of the canal system is 2.6m.³ The expansion proposes an additional 670m of canals to give a total of 2670m.⁴ The port area contributing to the stormwater system is currently 49ha and is proposed to increase by approximately 40% to 67.3ha.
- 3. Evidence given by the Applicant's stormwater expert is that the base of the pond system and canals is unsealed. This creates a potential pathway for stormwater to infiltrate into the ground, potentially reaching the site's underlying groundwater.
- 4. The Applicant used a hydrologic model to simulate the flow pathways for stormwater through the pond/ canal system. The model was calibrated based on a rainfall event in December 2018. An exfiltration rate of 20mm/hr from the pond and canal system was incorporated into the model to account for losses through the unlined pond in sand soils.⁵
- 5. Further evidence of infiltration through the base of the pond/canal system is provided in the Stormwater Discharge Review report prepared by 4Sight in 2015 (SDR 2015).⁶ This report cites a further report (J Palmer, January 2008) which states ..." the settlement pond has been dry or well below pump initiation levels for several months over summer. Observation has shown that there has to be significant rainfall for runoff to even reach the pond through the collection channel system and over the pond entry weir..."
- 6. SDR 2015 states that "... between 2003 and 2007 actual spill volumes were very much below predicted volumes. In two of these years (2004 and 2006) there was in fact no discharge from the

² Northport application, Appendix 29, Stormwater Discharge Review; 4Sight Consulting Ltd, August 2015, Section

³ Northport application, Appendix 20, Stormwater Assessment; Hawthorn Geddes Ltd, August 2022, Section 4.

⁴ Statement of evidence of Mr Blackburn, 24 August 2023, paragraph 8.19.

⁵ Northport application, Appendix 20, Stormwater Assessment; Hawthorn Geddes Ltd, August 2022, Section 6.1, paragraph 3.

⁶ Northport application, Appendix 29, Stormwater Discharge Review; 4Sight Consulting Ltd, August 2015, Section 2.2.

pond system. The Palmer report concluded that losses due to seepage and evapotranspiration over this period were very much higher than originally anticipated....".

- 7. SDR 2015 reports an analysis of the stormwater discharge quality for the period from 2003 to March 2015. However, the analysis appears to be for the discharge to a marine environment through the marine outfall and does not seem to account for the losses of untreated stormwater through the pond/canal system, potentially to groundwater and the subsequent potential effects on freshwater systems.
- 8. The Applicant has identified the resource consents required for the expansion project to include Rule C.6.4.6 of the Proposed Regional Plan (High Risk Industrial or Trade Premises). The application under this rule is for a Coastal Permit (discharge). The application cites boat maintenance and port activities as High Risk Industrial or Trade Premises. The application is for the discharge of stormwater from open cargo storage or handing areas, including wharves to the CMA via a stormwater treatment and disposal system.
- 9. The Interim closing legal submissions by the Applicant's counsel reiterates that the relevant rule in the Proposed Regional Plan is Rule C.6.4.6.9 However, contrary to the Applicant's resource consent application document, the Applicant's counsel proffers the view that "... the port is not an industrial site and therefore stormwater entering the system is "low risk/ low load....". Further, the Applicant's counsel submits that any discharges to the ground through the sand lined base are "ancillary discharges" which pass through the sand filtration at the base of the stormwater canal and have been considered by the experts for both Northport and Council and may be authorised as part of the suite of consents sought.
- 10. In response to the Hearing Panel's Direction 15, Operational Stormwater Management Information Request the Applicant provided further information including a draft Stormwater Operations and Maintenance Plan (draft SOMP) (dated 7 February 2024), a Technical Memorandum provided by Mr Poynter of SLR (13 February 2024) and a report by Mr Williamson of Williamson Water & Land Advisory (dated 12 February 2024) on the potential effects of untreated stormwater discharges to ground, and potentially groundwater through the base of the system of canals and ponds.
- 11. As a consequence of information provided by both the SLR Technical Memorandum and the Williamson Water & Land Advisory report further questions arise. These are:

⁷ Northport application, Appendix 29, Stormwater Discharge Review; 4Sight Consulting Ltd, August 2015, Section 3.5.

⁸ Application for resource consents for the expansion of Northport, 6 October 2022, page 16.

⁹ Closing Legal Submissions on behalf of Northport Limited, 20 November 2023, Section 7, Stormwater Discharges: Scope of Application

The Stormwater Discharge Review 2015 is included in Appendix 29 of the application. It does
not appear to have been referred to in the Applicant's stormwater evidence and was not
reviewed by the Councils' stormwater expert. Mr Poynter is an author to this SDR 2015
report. In the Technical Memorandum, Mr Poynter comments that the "....report is somewhat
dated".

Hearing Panel's Questions

- a. If the SDR 2015 report is outdated, to what extent can it be relied upon, or how relevant is it, in assessing the effects of stormwater for these applications?
- b. What are, or is there any implications of the port being described as boat maintenance and port activities being High Risk Industrial or Trade Premises (as it is in the application), rather than low risk/low load as submitted by the Applicant's Counsel?
- c. In relation to the above bullet point clarify the application(s) made, including in relation to Proposed Regional Plan Rule C.6.4.6?
- 2. SDR 2015 identifies that the predicted discharge volumes were "very much below predicted volumes".

Hearing Panel's Question

- a. Did this, or should it, trigger any consideration as to where the difference in volume between predicted vs actual might be going to and what effects may arise from this discharge?
- 3. According to SDR 2015 the stormwater treatment system in 2015 included 2,000m of canal and 4ha of pond system. Information from the expansion application proposes a further 670m of canal to be added. The base of the canal, assumed to be unlined, is reported as 2.6m wide. This equates to an area open for infiltration of approximately 4.7ha, being 4ha from the pond and 0.7ha from the canal system. The applicant's stormwater model assumes an infiltration rate of 20mm/hr through the base of the pond and canal system. This equates to 0.48m/day. The infiltration information provided in SDR 2015, complemented by the Applicant's model infiltration rate information over the pond/canal area suggests volumes in the order of 22,000 cubic metres per day may be discharged to the ground and ground water.

Hearing Panel's Questions

a. What is the likely range of volumes to be discharged to ground based on the best estimated infiltration rate?

- b. For the purpose of assessment under Rule C.6.4.6 of the Proposed Regional Plan, is it appropriate to consider a volume of discharge of this potential magnitude as "ancillary" to the discharge to the CMA outfall?
- c. What are the likely implications, or effects, of this discharge to ground/groundwater i.e. where will it most likely end up, and what effects may it generate?
- 4. SDR 2015 assesses the discharge of stormwater to the CMA against marine water quality criteria.
 - a. If the contaminants are discharging to a freshwater system via a groundwater pathway, how will the contaminant concentrations measure against freshwater criteria?
 - b. Are any dissolved contaminants likely to have an adverse effect, including any cumulative adverse effect?
- 5. Mr Williamson's report (12 February 2024) refers to a "skin effect" creating an effective barrier to infiltration within the canals. However, the canal maintenance regime includes the removal of the base of the canals and replacement with clean sand on an annual basis.

Hearing Panel's Questions

- a. How will this maintenance activity affect the infiltration rates, in particular the capturing of dissolved contaminants?
- 6. Mr Williamson's report (12 February 2024) concludes that groundwater quality monitoring is not required. He reaches this conclusion, in part on the basis that the stormwater system has been functional for approximately 20 years with no reported incidents to his knowledge.

Hearing Panel's Question

- a. Does this suggest that there is not an issue or rather that there has been no monitoring to identify whether or not there is an issue?
- 7. The Council's suite of draft consent conditions proposes the inclusion of conditions related to the monitoring of groundwater quality.

Hearing Panel's Questions

- a. Given an apparent lack of certainty as to where untreated stormwater infiltrating to ground/groundwater is going to, and what its effects may be, is it reasonable to undertake further monitoring to close this potential information gap?
- b. If so, what would be appropriate monitoring conditions to address this apparent lack of certainty and potential adverse effects?