# Wastewater discharges

Recommendations in response to submissions on the Proposed Regional Plan for Northland - Section 42A hearing report

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# Purpose and format of the report

- This report was prepared in accordance with section 42A of the Resource Management Act 1991 (RMA). It addresses submissions on provisions for wastewater discharges in the Proposed Regional Plan for Northland (Proposed Plan). The provisions cover:
  - Onsite domestic-type wastewater discharges;
  - Public wastewater network and treatment plan discharges;
  - Primary production discharges; and
  - Industrial and trade wastewater discharges.
- In most cases, the recommended changes to the Proposed Plan are not set out verbatim in this report. The specific changes (including scope for changes) are shown in the document 'Proposed Regional Plan for Northland – S42A recommended changes'.
- 3. If there is no recommendation to amend a provision in the Proposed Plan then the general presumption should be that it is retained as notified.
- 4. I have endeavoured to address every submission on the provisions, but there may be cases where inadvertently I have not. All references to submissions in this report are in relation to primary submissions only.
- 5. Further submitters are generally not referred to as they either support or oppose original submissions (they cannot go beyond the scope of the original submissions).
- 6. This report should be read in conjunction with chapters 4.6, 4.8 and 4.11 in the RMA section 32 report for the Proposed Plan.

# **Report author**

- 7. My name is Ben Michael Tait and I have overall responsibility for this report. I am employed as a policy analyst by Northland Regional Council (regional council). For further information about my qualifications and experience, see the RMA section 42A report titled 'General approach'.
- 8. The following people provided advice on some of the matters in this report:
  - Stuart Savill, Consents Manager, Northland Regional Council
  - Tess Dacre, Compliance Monitoring Manager, Northland Regional Council
  - Dennis Wright, Farm Monitoring Manager, Northland Regional Council (now retired)

- 9. I have read the Code of Conduct for Expert Witnesses contained in the Practice Note issued by the Environment Court December 2014, and have complied with the code when preparing this report and agree to comply with it at the hearings.
- 10. The recommendations that I make in this report are not binding on the hearing panel, and I understand that the hearing panel may not agree with my recommendations.
- I may change my recommendations in response to evidence presented to the hearing panel. I expect that the hearing panel will ask me to report any changes to my recommendations at the end of the hearing.

# About the wastewater discharge provisions

12. The relevant provisions in the Proposed Plan for wastewater discharges are listed below.

#### Definitions

- Domestic type
  wastewater
- Farm wastewater
- Farm wastewater storage facilities
- Greywater
- Primary treatment

Wastewater

Wastewater network

- Secondary treatment
- Tertiary treated wastewater

#### Rules

- C.6.1.1 Existing on-site domestic type wastewater discharge permitted activity
- C.6.1.2 Pit toilet permitted activity
- C.6.1.3 Other on-site treated domestic wastewater discharge permitted activity
- C.6.1.4 Replacement discharge permits controlled activity
- C.6.1.5 Other domestic wastewater discharges discretionary activity
- C.6.1.6 Discharge of untreated domestic type wastewater to water prohibited activity
- C.6.2.1 Wastewater discharge from a pump station or pipe network controlled activity
- C.6.2.2 Discharge from a pump station or pipe network discretionary activity
- C.6.2.3 Wastewater treatment plant discharge discretionary activity
- C.6.2.4 Wastewater discharge prohibited activity
- C.6.3.1 Farm wastewater discharge to land permitted activity
- C.6.3.2 Discharges associated with the making or storage of silage permitted activity
- C.6.3.3 Discharges associated with the disposal of dead animals or offal permitted activity
- C.6.3.4 Emergency discharge of milk to land permitted activity
- C.6.3.5 Agricultural waste discharges discretionary activity
- C.6.3.6 Farm wastewater discharges to water discretionary activity
- C.6.3.7 Farm wastewater discharges prohibited activity
- C.6.6.1 Discharge of cooling water permitted activity
- C.6.6.2 Discharge of industrial or trade wastewater permitted activity
- C.6.6.3 Industrial or trade discharges discretionary activity

Policies

• D.4.7 Wastewater discharges to water

#### Appendices

H.1 Wastewater network management plans

# **Onsite domestic-type wastewater system discharges**

## Background

13. Section C.6.1 of the proposed plan contains rules for discharges of contaminants from onsite domestic-type wastewater systems. The proposed rules are updated and rationalised versions of the rules for on-site domestic wastewater discharges in the Regional Water and Soil Plan.<sup>1</sup>

## Submissions and analysis

14. Kaipara District Council expressed several concerns about rules C.6.1.1 and C.6.1.3. First, it stated that the rules "will not enable NRC to monitor and record where onsite treatment systems have been installed [and there] is no requirement within the rule to submit information that demonstrates maintenance requirements have been complied with."<sup>2</sup> Whangarei District Council submitted along the same lines:<sup>3</sup>

The standards under this rule will not enable NRC to record where on-site treatments systems are installed or to monitor their performance on an ongoing basis. Where contamination is identified, the lack of records may make it difficult to pin point the source. WDC supports a high level monitoring framework under the Regional Plan to ensure permitted activity conditions are met through the provision of information to inform environmental reporting and monitoring.

15. Second, Kaipara District Council stated that rule C.6.1.1 and C.6.1.3 "are too permissive, and would prefer to see an approach that mirrors the risk management framework as adopted by KDC in its Wastewater Drainage Bylaw, requiring a 'warrant of fitness' scheme to provide proof that systems are being maintained."<sup>4</sup>

<sup>&</sup>lt;sup>1</sup> See Section 15, Regional Water and Soil Plan for Northland

<sup>&</sup>lt;sup>2</sup> Kaipara District Council. p.12

<sup>&</sup>lt;sup>3</sup> Whangarei District Council. p.20

<sup>&</sup>lt;sup>4</sup> Kaipara District Council p.12

- 16. I am not convinced that it is necessary to require people installing on-site systems to provide the regional council with information on the systems including their location. The district councils have the information because buildings consents are required for the design and installation of on-site wastewater disposal systems. It is also important to note that, to date, there have not been any widespread or significant environmental issues associated with on-site systems. Also, Rule C.6.1.3 requires people to maintain on-site systems in accordance with manufacture specifications so that they operate effectively at all times. I consider that it is not necessary to require maintenance records to be provided to the regional council.
- 17. Third, Kaipara District Council is concerned that rules C.6.1.1 and C.6.1.3 "allows for onsite wastewater systems where they are located within a reticulated wastewater catchment (i.e. Mangawhai)."<sup>5</sup> It considers that the Proposed Plan "require new onsite onsite treated domestic wastewater discharges, or replacement discharge permits, that are able to connect to core local infrastructure (i.e. a reticulated wastewater network) to be connected."
- 18. I understand that the regional council cannot require people to discharge domestic wastewater into public wastewater reticulation networks. This is because onsite systems, if appropriately designed, constructed and maintained, can achieve the same or better environmental outcomes as a wastewater treatment plant. In other words, I consider that that the amendment sought by Kaipara District Council want is not effects-based.
- 19. Andreas Kurmann, Ko Te Hua Marae and Parapara Marae consider that the Proposed Plan should require all discharges from existing on-site wastewater systems to meet the following effluent quality standards:
  - <500 E.coli per 100 millilitres
  - <0.05 milligrams of phosphorus per litre
  - <10 milligrams of nitrate per litre.
- 20. It is not clear what the effluent quality standards are based on.
- 21. Mikaera Miru and Tinopai RMU Ltd. consider that rules C.6.1.1 and C.6.1.3 should not permit discharges of domestic wastewater from on-site disposal systems if they occur within an area of significance to tangata whenua.

- 22. Similarly, Heritage New Zealand submitted that the discharge of contaminants from a pit toilet (provided for by rule C.6.1.2) should not be a permitted activity if it occurs within a sites of significance to tangata whenua, or a historic heritage site or historic heritage area.
- 23. I understand that the council does not have the jurisdiction under section 30 of the RMA to include rules in the Proposed Plan for the purposes of avoiding, remedying or mitigating adverse effects on historic heritage outside of the coastal marine area. Historic heritage is defined in the RMA to include sites of significance to Maori, including wahi tapu. See the third minute of the Hearing Panel for the Proposed Regional Plan.<sup>6</sup>
- 24. The setback distances in rules C.6.1.2 and C.6.1.3 also attracted some attention. Rowan Tautari and Patuharakeke Te Iwi Trust Board consider that the setback discharges from groundwater, rivers, lakes, streams, wetlands, the coastal marine area and neighbouring property boundaries should be increased, although they did not state by how much. In absence of any evidence that they are not appropriate with respect to managing adverse effects on water quality, I consider that they should not be changed.
- 25. The Royal Forest and Bird Protection Society of New Zealand submitted that rule C.6.1.3 should be amended to provide a setback from areas of indigenous vegetation and habitats. It is not clear if the Society are referring to indigenous vegetation and habitats on land or in water bodies and the coastal marine area. I note that the council does not have jurisdiction under the RMA to include rules to manage the adverse effects of activities on terrestrial ecosystems and indigenous biological diversity.
- 26. Whangarei District Council believes that the setback distances in rule C.6.1.2 are insufficient:<sup>7</sup>

The reference to 'property boundary that is not up-slope of the disposal area' authorises a discharge 1.5m away from the boundary, where the adjacent property is down slope. WDC's proposed Rural Production Environment requires any building to be setback by 8m from the boundary. It is questioned why such a small setback is proposed to neighbouring properties when rural properties are of ample scale to support internalisation of effects through sufficient setback to boundaries.

27. I agree with Whangarei District Council that it would be appropriate to require a setback distance from property boundaries, regardless of the slope of the land. This should apply

<sup>&</sup>lt;sup>6</sup> <u>https://www.nrc.govt.nz/contentassets/506f48db06744ab782c65e56acd19dde/minute-3-hearing-panel-for-the-proposed-regional-plan-for-northland.pdf</u>

<sup>&</sup>lt;sup>7</sup> Whangarei District Council. p.20

under rules C.6.1.2 and C.6.1.3. The New Zealand Standard *AS/NZS 1547:2012 – Onsite Domestic Wastewater Management* and the Auckland Regional Council Technical Publication No. 58<sup>8</sup> both recommend a minimum setback distance of 1.5 metres from property boundaries.

- 28. Haigh Workman Ltd submitted in detail on the setback distances in table 4 of rule C.6.1.3. Rather than summarise them here, I direct the panel to page two of Haigh Workman's submission. I agree with the company's request for the table to be reordered and that the sought changes to the flood plain criterion. I also agree with the request to change the requirement for setbacks from identified stormwater flow paths. The company also requested allowance for climate change when determining the annual exceedance probability flooding events. The 1 in 20-year (5% AEP) event criterion for floodplains is from *AS/NZS 1547:2012* and TP58. Climate change is not reference in relation to the criterion. It is also not clear how the allowance could be made in a permitted activity rule.
- 29. Condition 6(d) of rule C.6.1.3 states that for the discharge of wastewater onto the surface of slopes greater than 10 degrees a minimum 10 metre buffer areas down-slope of the lowest irrigation line is included as part of the disposal area. Haigh Workman Ltd. want the condition amended to "down-slope set-back distances specified in Table 4 are increased proportionally from 2 metres to 10 metres as the slope increases from 10 to 25 degrees."<sup>9</sup>
- 30. It is important to note that AS/NZS 1547:1547 (the standard) does not recommend the "surface" discharge of wastewater via drippers onto slopes greater than 10%, which is 5.7 degrees. The standard instead recommends the subsurface discharge of wastewater using a DIR reduction of 50% for slopes between 10 and 14 degrees and then requires advice from a "suitably qualified and experienced person" for steeper slopes. The reduction in DIR in effect would double the required disposal area. This recommendation in the standard is to minimise the risk of surface wastewater run off from slopes during rain events.
- 31. The 10 metre buffer distance in condition 6(d) of rule C.6.1.3 is from the Auckland Regional Council Technical Publication 58 "On-site Wastewater Systems: Design and Management Manual" (TP 58). Again, the buffer is to mitigate the potential for contaminant runoff from slopes. TP 58 however has a proportionate approach of between

<sup>&</sup>lt;sup>8</sup> Auckland Regional Council. Technical Publication No. 58. On-site Wastewater Systems: Design and Management Manual. Third Edition ARC Technical Publication 2004.

<sup>&</sup>lt;sup>9</sup> Haigh Workman Ltd. p.2

2 and 10 m for slopes between 10 and 25 degrees. This essentially means a minimum of 2m buffer area for 10 degree slopes then 0.5 m increase for every degree of slope up to 25 degrees. To have this inserted in a permitted activity rule makes it complex. The use of a 10 m buffer makes it simple to comply with and achieves the purpose of avoiding any run off of wastewater from the disposal area

- 32. Haigh Workman Ltd also wants rule C.6.1.3 to provide for the discharge of primary or secondary treated wastewater to land via a trench or bed designed in accordance with AS/NZS 1547:2012. The minimum separation distances to water were included in the rule for the purposes of preventing and minimising groundwater contamination from surface irrigation lines. They are not appropriate for trench or bed disposal systems.
- 33. Northland District Health Board "is concerned about the cumulative effect of on-site wastewater discharges from large non-reticulated subdivisions on groundwater drinking water supplies." It points out that:<sup>10</sup>

Current rule C.6.1.3 requires little in the way of cumulative effects assessment and relies on the compliance of each individual discharge having no more than minor adverse effects in order to be a permitted activity. The relevant New Zealand Standard AS/NZS 1547:2012 – On-Site Domestic Wastewater Management provides for site by site provision and was not designed for wide spread application in situations where infrastructure lags behind housing growth requirements.

- 34. I am not aware of any evidence that on-site wastewater discharges are compromising groundwater drinking water supplies.
- 35. Northland District Health Board considers that Rule C.6.1.3 should be amended so that discharges from on-site wastewater systems are not permitted within the catchment of any registered drinking-water supply or bore water user. It is important to note that surface water taken for public drinking water supplies is treated. I do not know how many of the other drinking water supplies from groundwater and surface waters are treated. I am also not aware of any contamination issues caused by on-site wastewater systems.
- 36. Landcorp Farming Ltd want the maximum discharge volumes permitted by rule C.6.1.3 to be increased from two cubic metres to three cubic metres per day. Likewise, MLP LLC

<sup>&</sup>lt;sup>10</sup> Northland District Health Board. p.31

and Waiaua Bay Farm Ltd submitted that it should be increased to three cubic metres per day when averaged over the month of greatest discharge.

- 37. The Landowners Coalition considers that rule C.6.1.1 should be amended by increasing the permitted discharge volumes from three cubic metres averaged over the month of greatest discharge to 30 cubic metres, and six cubic metres per day over any 24-hour period to 60 cubic metres.
- 38. The reason rule C.6.1.3 only permits up to two cubic metres per day to be discharged is because of the direction in the *Australian/New Zealand Standard On-site domestic wastewater management 1547:2012*, which on-site systems must be designed and constructed in accordance with to be permitted by the rule. The Standard states:<sup>11</sup>

The systems covered in this Standard are normally designed for domestic wastewater flows up to 14 000 L/week, from a population equivalent of up to 10 persons.

. . .

The flow limit of up to 14 000 L/week...represents a maximum flow for design purposes. This represents a flow of approximately 2000 L/day from up to 10 persons in a single residence, or from an institutional or commercial facility, which may have a varying 7-day or 5-day operation, the daily flow averaged over a full week. The criteria outlined in this clause may be applied to systems exceeding this flow limit, in which case a suitably qualified and experienced person needs to undertake the design.

- 39. The approach is also consistent with the Auckland Unitary Plan (operative in part).
- 40. Tegel Foods Ltd submitted that rule C.6.1.3 should require irrigation lines to be attached below, rather than to, the surface of the disposal area and that the requirement for a 10 metre buffer area down-slope of the lowest irrigation line should be deleted.<sup>12</sup> It is not clear why the company wants the amendments.
- 41. Northland Fish and Game and the Royal Forest and Bird Protection Society of New Zealand submitted that the rule C.6.1.4 should be amended to include effects on indigenous biodiversity as a matter of control. It is not clear to me how the discharge of domestic-type wastewater into or land will affect indigenous biological diversity. I consider that the existing matters of control are adequate.

<sup>&</sup>lt;sup>11</sup> Australian/New Zealand Standard 1547:2012 On-site domestic wastewater management. pp.5 and 45

<sup>&</sup>lt;sup>12</sup> Tegel Foods Ltd. p.14

- 42. Kaipara District Council and Whangarei District Council are concerned that rule C.6.1.4 enables the discharge of domestic-type wastewater into council stormwater networks, which could in turn compromise the ability of the district councils to comply with receiving water quality standards. They want the matters of control amended "to ensure the matters over which control is reserved provide sufficient consideration that water quality standards will not be adversely affected."<sup>13</sup> It is not clear why they are concerned because rule C.6.1.4 clearly does not enable the discharge of domestic-type wastewater into stormwater networks.
- 43. Bay of Islands Planning Ltd and Carrington Resort Jade LP consider that the plan should be amended to clarify the distinction between public and private treatment plant discharges. I do not think that it is necessary.
- 44. Lastly, table 7 in rule C.6.1.3 states that wastewater must not be discharged within a dedicated secondary overland flow paths for constructed stormwater systems designed for the 1% AEP rainfall event. I consider that this condition should be deleted as a clarification because the table requires wastewater discharges to be setback from identified stormwater flow paths.

## Recommendation

- 45. I recommend that the Proposed Plan is amended as follows:
  - Reorder table 7 in rule C.6.1.3, and also table 6 in rule C.6.1.2;
  - Delete the term 'up-slope' from tables 6 and 7;
  - Amend condition 6(b) of rule C.6.1.3 by requiring irrigation lines to be attached to the disposal area, but not the surface of the area;
  - Amend condition 7 of rule C.6.1.3 so that it refers to disposal areas and reserve disposal areas; and
  - Make some minor changes to rules C.6.1.2, C.6.1.3 and C.6.1.4 to improve their readability and address minor errors.

# **Evaluation of recommended changes**

46. Section 32AA of the RMA requires an evaluation of proposed changes to the Plan. I consider that the recommended amendments within the scope of the preferred

<sup>&</sup>lt;sup>13</sup> Whangarei District Council. p.20., Kaipara District Council. p.13

management option as set out in chapter 4.6.4 of the RMA section 32 report and therefore do not require further evaluation. Other changes are of minor effect.

# Community wastewater network and treatment plant discharges

# Background

- 47. Rule C.6.2.1 provides for the discharge (overflow) of wastewater from a wastewater pump station or reticulation network as a controlled activity, subject to conditions. Otherwise the activity is a discretionary activity (C.6.2.2). The approach is similar to the approach of Regional Water and Soil Plan.
- 48. Rule C.6.2.3 provides for the discharge of wastewater from a wastewater treatment plant as a discretionary activity rule. Policy D.4.7 provides direction on wastewater discharges to water. That is, applications to do so will generally not be granted unless: (1) discharging wastewater from a farm, domestic or municipal source to water is the best practicable option, or (2) there is no trade waste connection available to receive industrial or trade wastewater or the network operator is unable or unwilling to accept the discharge.

## Submissions and analysis

#### Wastewater network discharges (rules C.6.2.1 and C.6.2.2)

- 49. Far North District Council, Kaipara District Council and Whangarei District Council stated in their submissions that they should have five years rather than two years to lodge applications for resource consents after the rule has become operative. This is because they consider that they need more time to prepare wastewater network management plans, which are required by rule C.6.2.1. That is, they need to align the requirements with with Long Term Plan cycles and funding programmes.<sup>14</sup>
- 50. Kaipara District Council and Whangarei District Council also raised concerns about conditions (3) and (4), which specify design standards for wastewater pump stations and constructed overflow structures. Whangarei District Council stated:<sup>15</sup>

<sup>&</sup>lt;sup>14</sup> Kaipara District Council. p.13., Whangarei District Council. p.21

<sup>&</sup>lt;sup>15</sup> Whangarei District Council. p.21

Under condition 3, WDC requests specific consideration to the operational requirements of pressure sewer pump stations and welcomes further discussion on this matter. WDC operates over 600 domestic pump stations as part of its pressure sewer system in Ruakaka. They have local alarms but no standby pumps or power supply backup, therefore will not satisfy condition 3)a) and b). Due to their design and volumes, the consequences of overflows from these household pump stations are orders of magnitude lower than from a reticulation pump station. Accordingly, WDC submits that condition 3 should not apply to pressure sewer pump stations.

WDC does not consider the conditions to be necessary. In particular, Condition 3(b) effectively requires emergency backup power for every pump station. The need for such elements will be considered as part of the network management plan required by condition 2.

Under Condition 3(a) (i), clarification on the definition of 'immediate' is required. There should be some timebased allowance recognising these overflows should only be for a short duration until maintenance teams can contain them (for example, 4 hrs).

Condition 4) effectively requires a treatment system at every pump station and overflow point. This is not reasonably practicable. WDC supports conditions that will address the effects of scouring and erosion from wastewater discharges, however the full prevention of all suspended floating materials is not reasonably practicable. As currently worded, this requirement is impossible to achieve with any overflows.

- 51. It is difficult to specify uniform network performance standards because: wastewater reticulations networks differ in design; the receiving environments for discharges have different sensitivities to wastewater; and communities that the networks service have different abilities to fund infrastructure upgrades.
- 52. Northland Fish and Game want wastewater discharges from reticulation networks to be classified as a restricted discretionary activity. Northland Fish and Game (and the Royal Forest and Bird Protection Society of New Zealand) also consider that discharges of wastewater to outstanding freshwater bodies be classed as a non-complying activity.
- 53. The Royal Forest and Bird Protection Society of New Zealand considers that wastewater discharges can adversely affect significant indigenous biodiversity values and that the regional council should retain the option to decline applications for resource consent (that is, by way of a discretion or non-complying activity status). Forest and Bird also wants the

discharge of wastewater to "significant areas of indigenous biodiversity and outstanding freshwater bodies"<sup>16</sup> to be classified as a non-complying.

- 54. The Minister of Conservation and Haitaimarangai Marae 339 Trust submitted that wastewater discharges from pump stations and pipe networks be classed as discretionary activities to "ensure that the adverse effects of wastewater discharges on Outstanding Natural Features and Landscapes, Areas of Outstanding Natural Character and Outstanding Water Bodies identified in the RPS can be appropriately avoided, remedied or mitigated."<sup>17</sup>
- 55. I consider that rule C.6.2.1 should be replaced with a discretionary rule for the discharge of wastewater from a public wastewater reticulation network (pipes and pump stations). This would mean that the actual and potential adverse effects of wastewater discharges and other considerations such as costs of upgrading or construction networks be considered on a case-by-case basis. I also consider that the regional council should have the ability to decline an application for a discharge permit if the adverse effects were unable to be appropriately avoided, remedied or mitigated. Deleting rule C.6.4.1 will mean that district councils will not be required to prepare network management plans, however similar requirements may result from resource consenting processes.

#### Wastewater treatment plant discharges (rule C.6.2.3)

- 56. Andreas Kurmann, Ko Te Hua Marae, and Parapara Marae submitted that the plan should specify that the effluent from all existing wastewater treatment plants should meet the following discharge quality standards:
  - <500 *E.coli*/100 mL
  - <0.05 mg phosphorus/L
  - <0.5 mg ammonium/L
  - <10 mg nitrate/L</p>
- 57. The basis for these standards is unclear.

#### Prohibited discharges (rule C.6.2.4)

58. Far North District Council and Kaipara District Council share concerns about Rule C.6.2.4, which classes the discharge of wastewater from a municipal wastewater reticulation

<sup>&</sup>lt;sup>16</sup> Royal Forest and Bird Protection Society of New Zealand. p.51

<sup>&</sup>lt;sup>17</sup> Minister of Conservation. p.26

network or treatment plant into water or onto land as a prohibited activity where it is not regulated under a controlled or discretionary activity rule. That is, they consider that there may be circumstances beyond their control, for example, a "natural disaster or illegal earthworks, that damage wastewater infrastructure and result in a discharge."<sup>18</sup>

- 59. I understand that section 330 of the RMA provides for the potential events described by Far North and Kaipara district councils.
- 60. Fonterra also considers that a prohibited activity status of wastewater discharges not covered by another rule "is overly restrictive [and] that a [n]on-complying activity status is more appropriate.
- 61. It important to note that rule C.6.2.4 applies to discharges from public wastewater networks and treatment plants. It does not apply to discharges from industrial or trade premises. However, I think that it would be useful to amend the rule to clarify that it applies to discharges of untreated wastewater to water from a public wastewater treatment plant.

## Recommendation

- 62. I recommend that the Proposed Plan is amended as follows:
  - Delete rule C.6.2.1 and amend rule C.6.2.2 so that it applies to any discharge of wastewater from a wastewater network (as defined), and delete appendix H.1 which is referenced in rule C.6.2.1; and
  - Amend rule C.6.2.4 to make it clear that it applies to untreated discharges of wastewater from wastewater treatment plants.

# **Evaluation of recommended changes**

63. Section 32AA of the RMA requires an evaluation of proposed changes to the Plan. The changes, while potentially more than minor in effect, are considered to be within the scope of the preferred management option as set out in part 4.6 of the RMA section 32 evaluation report for the Proposed Plan and therefore do not require further evaluation. However, I consider that the costs of classifying discharges of wastewater from wastewater reticulation networks as a discretionary activity may be lower than classifying them as a controlled activity because the network performance standards in rule C.6.2.1

<sup>&</sup>lt;sup>18</sup> Far North District Council. p.12

no longer apply. In other words, the costs of designing, managing and potentially upgrading wastewater reticulation networks for the purposes of

# **Primary production discharges**

## Background

64. The rules in section C.6.3 of the proposed plan for primary production discharges are similar to rules in the Regional Water and Soil Plan for animal effluent discharges and other agricultural waste discharges. However, there are notable differences in the proposed rules, mainly in rule C.6.3.1 for farm wastewater discharges (C.6.3.1).

### Submissions and analysis

#### Farm wastewater discharges to land and water (Rules C.6.3.1, C.6.3.5, C.6.3.6 and C.6.3.7)

- 65. Rue C.6.3.1, which permits the discharge of farm wastewater to land (for example, farm dairy effluent) attracted a lot of attention, particularly in relation to four matters.
  - Distances that discharges must be setback from water bodies, artificial water courses, the coastal marine area, drinking water supply bores, and other properties (condition 2);
  - Stormwater diversion requirements (conditions 4, 5 and 6);
  - The requirement to have storage facilities (effluent ponds) that can contain all wastewater generated between 1 May and 30 September (condition 7(a)); and
  - The requirement to have at least 90% working storage available in the facilities at 1 May (condition 7(b))

#### Setbacks

- 66. The Minister of Conservation, Billy Leonard, Northland District Health Board, Northland Fish and Game, the Royal Forest and Bird Protection Society of New Zealand, Vicki Stevens disagree with the setback distances in condition 2 of the rule.
- 67. The Minister of Conservation stated that farm wastewater should not be discharged to land within 50 metres of a water body, the coastal marine area, an artificial watercourse (when containing water) a neighbouring property, or a drinking water supply bore "to ensure that wastewater discharges do not cause negative issues on freshwater

ecosystems and biodiversity."<sup>19</sup> The Minister, however, did not provide any research to support the request.

- 68. Northland District Health Board is concerned that "there is potential for loading of pathogens into waterways, particularly those which are drinking water sources" and submitted that the an additional condition should be added to Rule C.6.3.1 that specifies that farm wastewater must not be discharged to land or flow overland within 50 metres of a waterway within the catchment of a registered drinking water supply.<sup>20</sup> Again, the submitter did not provide any research to support its request.
- 69. Northland Fish and Game and the Royal Forest and Bird Protection Society of New Zealand have several concerns with Rule C.6.3.1, including that it permits the discharge of farm wastewater to land within 20 metres of an artificial watercourse when it does not contain water. They submitted that farm wastewater should not be discharged to land within 20 metres of an artificial watercourse regardless of whether it does or does not contains water.
- 70. I agree with them because it can be difficult to accurately predict rainfall events and discharging effluent to land to the edge of an artificial watercourse risks contaminating water.
- 71. Billy Leonard considers that the setback distances in conditions 2(a) (e) should be increased to 100 metres and condition 2(f) be increased to 250 metres to reduce "reliance on neighbours' courage to complain" and to assist with monitoring and compliance. The submitter did not state why the setback distances should be increased.
- 72. On the other hand, Vicki Stevens believes that condition 2 of Rule C.6.3.1 is unnecessary:<sup>21</sup>

The rest of the provision outlines the rules that apply to ensure the protection of the environment and public. To add on top of this an aribitrary [sic] rule stating a distance from things that takes no consideration of soil type, wind conditions, and any other factors is over zealaous [sic]. Other sections of C.6.3 clearly outline the impact (or lack thereoff) that is able to occur from the practise of discharge to land. To add in an offhand 20 or 50 meter buffer zone is not protecting

<sup>&</sup>lt;sup>19</sup> Minister of Conservation. p.26

<sup>&</sup>lt;sup>20</sup> Northland District Health Board. p.16

<sup>&</sup>lt;sup>21</sup> Vicki Stevens. p.5

the environment – it is just adding another barrier to comply with the rules that already ensure that the environment and public health is protected.

73. The setback distances are the same as the setbacks in rule 16.1 of the Regional Water Soil Plan for Northland. The collection and discharge of farm dairy effluent and other types of agricultural wastewater pose significant risks to water quality if not done well. I believe that it is important that, as a permitted activity, farm wastewater is discharged to land away from fresh and coastal waters to minimise contamination risks.

#### Stormwater diversion requirements

74. Conditions 4, 5 and 6 of Rule C.6.3.1 require stormwater from certain areas to be diverted away from wastewater storage facilities. The purpose of the conditions is to minimise effluent volumes, which is consistent with DairyNZ's good practice guidance on managing farm dairy effluent,<sup>22</sup> which states that stormwater diversion:

... is an effective way to reduce the volume of water that can be added to the pond in rainfall events, especially if you are not milking. This has savings via decreased pumping costs, less time staff are irrigating diluted effluent, and **less risk of having to irrigate when soils are wet**.

There are a huge number of stormwater diversion designs available, including manual and mechanical. Regardless of design, care needs to be taken to manage the stormwater diversion correctly. Installing an automatic facility or warning devices is advised.

Farms located in high rainfall areas would benefit from a stormwater diversion. Farmers may choose to only use stormwater diversion at times of the year when not milking. If using regularly during the milking season it is essential that robust systems are in place to ensure mistakes are not made.

[My emphasis]

75. DairyNZ's guide also recommends minimising effluent volumes by, among other things, "guttering and downpipes to direct roof water away from the effluent collection system" and using "a stormwater diversion system to take clean rainwater off the year into stormwater drains and not into the ponds"<sup>23</sup>.

 <sup>&</sup>lt;sup>22</sup> A farmer's guide to managing farm dairy effluent: A good practice guide for land application systems.
 2015. DairyNZ. p.7

<sup>&</sup>lt;sup>23</sup> A farmer's guide to managing farm dairy effluent: A good practice guide for land application systems. 2015. DairyNZ. p.33

- 76. Returning to submissions, several people consider that the stormwater diversion requirements are unnecessary or unreasonable. For example, Aaron and Julianne Bainbridge would like the ability to use a feedpad to harvest rain and store it in their farm dairy effluent pond for the purposes of irrigating pasture.
- 77. DairyNZ submitted that conditions 4 and 5 of Rule C.6.3.1 should be amended to provide for water from roofs and yards to be stored in effluent ponds if they are sized to accommodate the water. DairyNZ stated "[d]uring drier months of the year some farmers may wish to capture this water and irrigate it with their effluent."<sup>24</sup> That may be so, but it is clearly at odds with DairyNZ's good practice guidance to farmers, particularly with respect to minimising environmental risks. While I accept that effluent ponds can be designed to accommodate roof water it comes with the associated risk of having more effluent to dispose particularly during wet years. On balance, I disagree with DairyNZ's request.
- 78. The same relief is sought be Federated Farmers of New Zealand on the grounds that:<sup>25</sup>

The permanent diversion of roof water (C.6.3.1.4), yards (C.6.3.1.5) and catchment water (C.6.3.1.6) in dry conditions can be counterproductive for summer effluent irrigation on some farms, particularly if adequate storage is available. There is concern that not using a stormwater diverter in dry conditions could be the basis of a prosecution.

#### Effluent pond storage

- 79. Condition 7(a) of Rule C.6.3.1 was included in the proposed plan to reduce the risk of farmers having to discharge farm wastewater to land when soils are at their field capacity (that is, when there is insufficient soil water deficit). The condition was recommended by the council's farm dairy effluent monitoring and compliance team given that most of Northland's soils are clay or clay loams, or poorly structured silt or sandy loams, or gumland, with compaction issues. It is often common that soil moisture levels are at or in excess of field capacity between May and September.
- 80. DairyNZ stated in its submission that:

Clause 7)a) of this rule is somewhat incongruous with Policy D.2.1, as it does not use good management practice in terms of requirements for storage. Industry-accepted GMP is to use the

<sup>&</sup>lt;sup>24</sup> DairyNZ. p.14

<sup>&</sup>lt;sup>25</sup> Federated Farmers of New Zealand. p.20

Dairy Effluent Storage Calculator (DESC) to calculate the appropriate amount of storage based on factors including soils, climate data (over the last 36 years) and irrigation rates.

There may be some farms that will require five months' storage to be available when calculated by the DESC. However, a number of farms may not, and five months' storage is therefore unnecessarily onerous for these farmers.

81. Fonterra have a similar view:

The storage days number and dates appear to be arbitrary (150 days May to September). There is a nationally recognised science based tool available for calculating the appropriate effluent storage volumes that considers the ability of a soil to take up applied effluent throughout the year and the volume of effluent produced through a year (Dairy Effluent Storage Calculator DESC). Referencing this tool as the method without the arbitrary overlay of "150 days" would allow for certainty for users and is an efficient way to manage the risks of effluent irrigation as the storage volume required matches the property specific risks as informed by best available science. A storage volume recommendation based on the DESC is based on farm specific risk and management practice overlaid with NIWA 30 year climate datasets and the effluent soil risk output from the Landcare research S – map dataset

- 82. Fonterra also considers that requiring five months of storage will have significant cost implications for farmers who want to operate under rule C.6.3.1. I note that farmers have the option of applying for resource consents.
- 83. Andrew Booth, Terrence Brocx, Bryan Clements, Federated Farmers of New Zealand, Arran Simpson and Penny Smart also consider that the five-month compulsory storage requirement is inappropriate and that rule C.6.3.1 should require storage volumes to be calculated in accordance with the Dairy Effluent Storage Calculator.
- 84. I accept submitters' argument; it would be more appropriate to require storage to be calculated in accordance with the Dairy Effluent Storage Calculator. The calculator is based on transparent methodology and people can use it without relying on regional council staff. It is also a nationally accepted tool referenced in most regional plans.
- 85. Bob Cathcart stated that condition 7(a) in rule C.6.3.1 should be amended by commencing the condition with "where it cannot be demonstrated that there will be times when effluent can be safely sprayed onto land during that period...". I do not think that this is necessary if the condition is amended to refer to the Dairy Effluent Storage Calculator.

#### Working storage volume

- 86. Condition 7(b) of Rule C.6.3.1 states that farm wastewater storage must have at least 90% working storage volume available at 1 May each year, and that wastewater should be discharged to land after that date when there is sufficient soil moisture deficit.
- 87. DairyNZ stated in its submission that 1 May "is too late and farmers need to empty their ponds earlier than this date." <sup>26</sup> It wants the condition to require at least 75% of the storage to be available between 1 March and 1 May. This appears to be consistent with DairyNZ's good practice guide for land application systems, which states that: <sup>27</sup>

Having an empty pond will give you the capacity you need when you can't irrigate because of unsuitable conditions, or if you have factored in extra storage for times of year such as calving.

#### Seasonal targets

**Spring** – the pond is filling with effluent, particularly during wet weather, or when the farm team are too busy to manage the effluent system. Small volumes of effluent can be irrigated as soil water deficits allow.

*Summer* – the pond should be kept empty as possible.

**Autumn** – the pond should be maintained at a low level through autumn. It is important to try and get the pond as empty as possible while conditions still permit.

*Winter* – the pond should be kept as empty as possible. Where possible prevent stormwater entering the pond, off unused yard areas etc. Any areas contaminated with dairy effluent cannot be diverted. Consider using the safety escape ladder for your pond level marking system.

- 88. Federated Farmers of New Zealand and Penny Smart also consider that the condition should require 75% of storage to be available between 1 March and 1 April each year.<sup>28</sup>
- 89. While Fonterra generally supports the intent of condition 7(b) it considers that it should be worded differently because:

...it does not seem to recognise and allow for the possibility of soil conditions in April that would make compliance impossible without breaching over rules. This could be addressed by explicit recognition that where soil conditions preclude effluent irrigation leading up to 1 May (and

<sup>&</sup>lt;sup>26</sup> DairyNZ. p.17

 <sup>&</sup>lt;sup>27</sup> A farmer's guide to managing farm dairy effluent: A good practice guide for land application systems.
 2015. DairyNZ. p.32

<sup>&</sup>lt;sup>28</sup> Federated Farmers of New Zealand. p.21., and Penny Smart. p.1

recent climate data, soil moisture data supports that), all reasonable efforts must be made to get pond volumes to the 90% working storage volume as soon as possible after 1 May.

- 90. Terence Broxc and Bryan Clements want condition 7(b) to require storage facilities to have at least 90% working storage capacity from 1 March and maintain close to this level as is practically possible throughout the autumn.
- 91. I consider that condition 7(b) should, as requested by DairyNZ's, require at least 75% of the storage to be available between 1 March and 1 May because it is consistent with their good practice guidance to farmers.<sup>29</sup>

#### Wastewater discharges from other farming types (not dairy)

92. The Egg Producers Federation of New Zealand stated:<sup>30</sup>

...condition 7 [of Rule 6.3.1] regarding requirements for waste water storage facilities is considered to be excessive and unnecessary for the egg layer industry which has much less frequent waste water discharges than other farming types such as dairy farming. This condition is also very uncertain as no information is provided regarding circumstances when actual wastewater storage is required and whether it is required for all farming types or is targeted to the dairy industry. Different conditions are considered to be appropriate for the poultry industry.

- 93. The Federation submitted that the farm wastewater storage facility requirements in Rule C.6.3.1 should be reviewed and reduced and it should differentiate between different industry types. I consider that the minimum storage requirements, to be determined using the Dairy Effluent Storage Calculator, should only apply to dairy farms. I believe that the other requirements in condition 7 are appropriate for effluent systems for other farming systems (for example, piggeries and poultry).
- 94. Similarly, Tegel Foods Ltd points out that washdown water from poultry sheds contains "very small amounts of residual effluent and is not similar in any way to the effluent that results from dairy shed wash down activities."<sup>31</sup>

<sup>&</sup>lt;sup>29</sup> Dairy NZ. 2015

<sup>&</sup>lt;sup>30</sup> Egg Producers Federation of New Zealand. p.3

<sup>&</sup>lt;sup>31</sup> Tegel Food Ltd. p.16

#### Proposed restricted discretionary activity rule

95. The Egg Producers Federation of New Zealand also consider that a restricted discretionary activity rule should be included in the plan for discharges of farm wastewater to land that are not permitted by Rule C.6.3.1:<sup>32</sup>

The EPFNZ does not support farm wastewater discharges as a discretionary activity as it is considered to be an essential component of farming operations and matters of discretion are readily identifiable. Matters of discretion would assist the egg layer industry to prepare resource consent applications which address key matters for discretion.

- 96. Tegel Food stated that "poultry shed washdown should not be subjected to the same level of scrutiny and assessment as other effluent as the level of effects are not comparable and can be managed through a restricted discretionary regime."<sup>33</sup>
- 97. I do not follow Tegel's argument poultry shed wastewater "should not be subjected to the same level of scrutiny and assessment" and because of this is restricted discretionary activity is warranted. Neither Tegel Food or Egg Producers Federation of New Zealand have suggested what the matters of discretion might be restricted to.
- 98. While Ravensdown Ltd generally supports Rule C.6.3.1, it "considers that the effects of non-compliance with the permitted activity conditions are known and can be determined, and a full discretionary activity is not warranted." It stated:

Ravensdown seeks for a new restricted activity rule for farm wastewater discharges than do not comply with one or more conditions of Rule C.6.3.1, with Council restricting its discretion to the permitted activity standard not met.

99. It is not clear to me how this would work because if the discharge does not comply with the one or more conditions of Rule C.6.3.1 then none of the conditions apply. In other words, the discharge would fall under the (suggested) restricted discretionary activity and therefore all the matters covered in the conditions on Rule C.6.3.1 would need to be included as matters of discretion in the restricted discretionary rule to allow controls in the resource consent. While I accept there may be merit in such a restricted discretionary activity, this is not what the submitter has requested.

<sup>&</sup>lt;sup>32</sup> Egg Producers Federation of New Zealand. p.4

<sup>&</sup>lt;sup>33</sup> Tegel Foods Ltd. p.16

100. Northland Fish and Game submitted that rule C.6.3.5 should be classified as a restricted discretion activity:<sup>34</sup>

... that where there is going to be an agricultural waste discharge that is not any of the permitted activities listed in 1-6 of [Rule C.6.3.1], that specific considerations regarding application, separation distance, the type and quality of ponds, tanks, or structures to store agricultural wastewater, and measures to avoid remedy or mitigate adverse effects, should be taken into account as matters of discretion.

101. I do not think that it is necessary to identify all of the relevant considerations in a rule or in policy. It is obvious to decision-makers what is important, particularly when rule C.6.3.1 has an almost exhaustive list of requirements.

#### Activity status of rule C.6.3.1

- 102. Whatitiri Resource Management Unit and Environment River Patrol-Aotearoa consider that dairy farms that discharge effluent to land should be required to have resource consents. It is not clear why the submitters are opposed to a permitted activity rule for the activity.
- 103. Whangarei District Council also disagrees with a permitted activity classification for farm wastewater discharges to land because "the proposed conditions are not sufficient to address the risks of contamination to public water supplies."<sup>35</sup> The council submitted that the water abstraction points for registered drinking water supplies should be mapped and "supported by rules which prevent discharges within an appropriate buffer (e.g. 5km minimum) from these abstraction points. However, Whangarei District Council did not provide any evidence that discharges of farm wastewater to land are a risk to human health associated with drinking water supplies. The rule precludes discharges to water. It also requires that discharges to land are only done when there is sufficient soil moisture deficit.
- 104. As an aside, I think that the only way to minimise risks of waterbodies being contaminated by faecal pathogens is to remove agriculture and other anthropogenic activities from catchments. That is not a credible option.

<sup>&</sup>lt;sup>34</sup> Northland Fish and Game. p.41

<sup>&</sup>lt;sup>35</sup> Whangarei District Council. p.22

#### Other matters

105. Man O'War Dairies Ltd is concerned "that not all aspects of [its] existing systems may comply with the proposed new requirements [of rule C.6.3.1] and the costs and operational implications if upgrade is required."<sup>36</sup> It also stated in relation to rule C.6.3.5 that:<sup>37</sup>

We are concerned that the agricultural waste discharge systems on some of our farms may not meet some of the permitted activity standards and that we will be required to obtain a full discretionary activity resource consent. Our concerns relate to the potential costs associated with such an application and the implications for business continuity if such an application proved to be unsuccessful.

- 106. I appreciate that the submitter may face costs associated with complying with rules or resource consents.
- 107. Mikaera Miru and Tinopai RMU Ltd submitted that rule C.6.3.1 should be amended to specify that farm wastewater discharges must not occur within an area of significance to tangata whenua.<sup>38</sup> They are also seeking the same relief in relation to rules C.6.3.2, C.6.3.3 and C.6.3.4.
- 108. The Proposed Plan only maps places of significance to tangata whenua in freshwater bodies and the coastal marine area, in accordance with section 30 of the RMA (refer "Tangata whenua" S42A report for details). Rules C.6.3.1 to C.6.3.4 are for discharges to land.
- 109. Northland Fish and Game stated in its submission that rule C.6.3.1 should be amended to require "a farm management plan process set out in schedule of the plan which ensures adequate information is provided to council to support a nutrient allocation management approach required by the NPS-FM."<sup>39</sup>
- 110. The Royal Forest and Bird Protection Society of New Zealand made a similar submission, albeit in relation to the New Zealand Coastal Policy Statement (NZCPS). That is, the rule should be amended to require "a farm management plan process set out in schedule of

37 Ibid

<sup>&</sup>lt;sup>36</sup> Man O'War Dairies Ltd. p.4

<sup>&</sup>lt;sup>38</sup> Mikaera Miru. p.15., Tinopai RMU Ltd. p.14

<sup>&</sup>lt;sup>39</sup> Northland Fish and Game. p.39

the plan which ensures adequate information is provided to council to support a nutrient allocation management approach required by the NZCPS.<sup>340</sup>

- 111. Northland Fish and Game is also seeking the same relief in relation to Rule C.6.3.4 for the emergency discharge of milk to land and along with the Royal Forest and Bird Protection Society of New in relation to Rule 6.3.2 for discharges associated with making or storage of silage.
- 112. I disagree with Northland Fish and Game and the Royal Forest and Bird Protection Society that a nutrient allocation management approach should be embedded within the Proposed Plan. I set out my reasons in the RMA section 42A report titled "Water quality general matters".
- 113. Northland Fish and Game also considers that the rule should specify that the maximum effluent application rate is 10 millimetres for each individual application, and that the maximum nitrogen loading rate is 150 kilograms per hectare per year.<sup>41</sup>
- 114. The basis for the maximum application rate and nitrogen loading rate is unclear.
- 115. Landcorp Farming Ltd. believes that rule C.6.3.1 will be difficult to meet, "which is contrary to the goals of encouraging discharges to land [and that] Council must reassess the fundamental premise that seasonal discharge of dairy effluent to waterways is of lesser effect than storage and land application, even when (subject to best practice) that may enter waterways diffusely."<sup>42</sup>. It documents its concerns with rule C.6.3.1 from page 11 of its submission.
- 116. It is important to note that the regional council does hold the premise that discharges of dairy effluent to water during wet weather is of lesser effect that storage and land application. Also, I have not seen any published information that run-off and ponding of wastewater from land during wet weather is of lesser effect than discharges of 'treated' effluent to water.
- 117. Landcorp wants rule C.6.3.1:43

<sup>&</sup>lt;sup>40</sup> Royal Forest and Bird Protection Society of New Zealand. p.52

<sup>&</sup>lt;sup>41</sup> Northland Fish and Game. p.39

<sup>&</sup>lt;sup>42</sup> Landcorp Farming Ltd. p.11

<sup>&</sup>lt;sup>43</sup> Landcorp Farming Ltd. p.12

... removed and replaced with a permitted activity rule which promotes the application to land of dairy effluent compliant with 6.3.1(1) and (2) and promotes best practice land application but incorporating provisions for land application where it may (diffusely) enter water over 1 May – 30 September **OR** 

The Proposed Rule 6.3.1 be removed and replaced with a controlled activity status for farm wastewater discharge to land only, between the months of November to March inclusive, and application to land (where contaminants may enter water) from April to October inclusive. Matters of control would be limited to designated land areas, periods, methodologies and requiring all reasonable steps to avoid discharge to land (where contaminants may enter water) via compliance with DESC pond requirements and demonstration that all available irrigatable days have been utilised prior to 1 April or 90% storage availability. Control also applied to restricting discharges to land (in a manner where contaminants may enter water) subject to pond level at more than 80% capacity, after earlier mitigations have been demonstrated as having been applied.

- 118. It is not clear to me what Landcorp means by "(diffusely) enter water". Does it mean via overland flow, lateral flow or deep drainage? This is an important question because I consider that rule C.6.3.1 provides for land application where it may diffusely enter water by way of condition 1 of the rule and by reference in the rule to RMA s15(b). That is, the rule provides for the discharge of farm wastewater into or onto land where it may enter water provided there is no direct discharge to water or discharge via overland flow.
- 119. Regarding rule C.6.3.5, DairyNZ and Federated Farmers of New Zealand sought clarification on what tool or method Northland Regional Council will use to determine storage requirements under a consent application. Federated Farmers suggested that the Dairy Effluent Storage Calculator should be used, and also in relation to rule C.6.3.6. I recommended above that rule C.6.3.1 should require the use of storage facilities on dairy farms that are designed, constructed and used in accordance with the Dairy Effluent Storage Calculator. I consider that by making reference to the calculator in rule C.6.3.1 people applying for resource consents under rule C.6.3.5 and decision-makers will rely on the calculator. However, if an alternative method for calculating storage requirements is available and proven to be a more appropriate approach then it could be entertained.
- 120. Billy Leonard submitted that the discharge of farm wastewater, contaminants associated with the making or storage of silage, contaminants associated with the disposal or dead stock or offal or milk onto or into land that is not a permitted activity should be a prohibited activity. I think that this would be impractical and is not effects-based.

- 121. The Royal Forest and Bird Protection Society of New Zealand submitted that the rule C.6.3.5 should be amended to "exclude discharges within or adjacent to significant indigenous vegetation or habitats."<sup>44</sup> It also requested a non-complying rule for activities that cannot comply with the new condition. It is not clear if the Society is referring to significant indigenous vegetation and habitats within waterbodies and the coastal marine area or terrestrial vegetation and habitats. The regional council can only issue rules for protecting the former. It is important to note that rule C.6.3.5 is for discharges to land, not water.
- 122. Rule C.6.3.6 classifies the discharge of treated farm wastewater into water as a discretionary activity provided the discharge is not into a dune lake, surface water flowing into a dune lake, or into an outstanding freshwater body or significant wetland. Discharging treated wastewater into those receiving environments is a prohibited activity (rule C.6.3.7).
- 123. Several people disagreed with the discretionary activity status of rule C.6.3.6. Northland Fish and Game submitted that it should specify a non-complying activity<sup>45</sup>, although it did not set out why. Billy Leonard submitted that it should be a prohibited activity on the grounds that farm wastewater discharges degrade freshwater ecology<sup>46</sup>.
- 124. Beef and Lamb New Zealand considers that rule C.6.3.6 should be amended to provide for farm wastewater discharges to water to be phased out by 2020, because:<sup>47</sup>

The discharge of farm effluent to rivers, lakes, or wetlands, is no longer socially acceptable. Pond, storage, and treatment systems need to be designed with sufficient storage to enable the discharge of farm effluent to land. The majority of regional councils across New Zealand have now phased out discharges of effluent to surface water.

125. I agree with Beef and Lamb New Zealand that farm discharging farm wastewater to land is more appropriate than discharging it to water. Farm wastewater, while treated in pond systems, often contains high concentrations of contaminants (for example, faecal microbes, ammonia and phosphorus) and low concentrations of dissolved oxygen. This is apparent from reviewing water quality data for farm dairy effluent discharges in Northland.

<sup>&</sup>lt;sup>44</sup> Royal Forest and Bird Protection Society of New Zealand. p.52

<sup>&</sup>lt;sup>45</sup> Northland Fish and Game. p.42

<sup>&</sup>lt;sup>46</sup> Bill Leonard. p.1

<sup>&</sup>lt;sup>47</sup> Beef and Lamb New Zealand. p.9

It is also apparent from reading published literature on farm dairy effluent.<sup>48</sup> The cumulative effects of hundreds of dairy farms also need to be taken into accounts.

- 126. I consider that the discharge of treated farm wastewater to water should be classified as a non-complying activity.
- 127. Landcorp Farming Ltd stated in its submission that "the adverse effects on the environment of discharges of farm wastewater to water and are likely to be more than minor and therefore all such discharge consents should require notification [under Rule C.6.3.6]."<sup>49</sup> I do not think that this is necessary because the RMA already sets out a detailed process for determining whether to publicly notify or give limited notification of an application for a resource consent (see sections 95A and 95B of Act).
- 128. Whatitiri Resource Management Unit and Environment River Patrol-Aotearoa objected to Rule C.6.3.6 because "it does not fit with the policy and aspirations of this new Labour led coalition Government [and] the NRC methodology for testing discharge to receiving water by consent is flawed". <sup>50</sup> They recommend changing the council's monitoring and compliance programme requiring all dairy farms to have 150-day storage capacity for their effluent.
- 129. I consider that the inclusion of a condition requiring effluent storage systems to be designed, constructed and used in accordance with the Dairy Effluent Storage Calculator is more appropriate than requiring 150-day storage capacity. I also believe that direction on the council's monitoring and compliance programme is beyond the scope of the Proposed Plan.
- 130. DairyNZ and Fonterra would like stronger policy direction in the plan on preferring discharging to land rather than water.<sup>51</sup> I agree that better direction is required and recommend that policy D.4.7 is amended consistent with DairyNZ's request.
- 131. As an aside, the second clause in D.4.7 states that an application to discharge wastewater to water will generally not be granted unless there is not trade waste connection available to receive the industrial or trade wastewater or the network operator is unable or unwilling to accept the discharge. While I understand the intent of the clause,

<sup>&</sup>lt;sup>48</sup> For example, see D J Houlbrooke. 2008. Best practice management of Farm Dairy Effluent in the Manawatu-Wanganui region. Prepared for Horizons Regional Council. AgResearch.

<sup>&</sup>lt;sup>49</sup> Landcorp Farming Ltd. p.13

<sup>&</sup>lt;sup>50</sup> Whatitiri Resource Management Unit and Environment River Patrol-Aotearoa. p.32

<sup>&</sup>lt;sup>51</sup> Fonterra. p.44

I consider that it is not 'effects-based' for it assumes wastewater network utilities can treat wastewater from industrial or trade premises to a higher standard than the company can (regardless of where the costs fall). I think that it should be deleted.

#### Discharges associated with the making or storage of silage (Rule C.6.3.2)

- 132. Felicity Foy and K & F King are concerned about the setback distances required by condition 2 of rule C.6.3.2, which permits discharges associated with the making or storage of silage. I infer that they consider the condition to be too onerous. On the other hand, Billy Leonard considers that they should be larger.
- 133. However, the submitters did not provide any information to justify different setback distances.

#### Discharges associated with the disposal of dead animals or offal (Rule C.6.3.3)

- 134. The NZ Pork Industry Board submitted that rule C.6.3.3 should be amended to provide for the composting of dead animals as a permitted activity because currently the definition of compost in the plan excludes dead animals or animal parts.<sup>52</sup> The Board stated that composting of dead animals is the preferred method of disposal by the pork industry, which is supported by the NZ Pork Environmental Management Guidelines. I understand that this matter is addressed in a separate RMA section 32 report titled "Solid waste".
- 135. Concerns were raised by Terence Brocx and Bryan Clements that disposal sites for dead animals or offal must be covered (condition 5). They stated that:

...it is not practical to cover a disposal site in all circumstances. An offal pit for sheep etc. is definitely correct thing to do. For larger animals where the frequency may require semi regular disposals and the only method to cover is to bury, then it is no longer practical E.g. soil conditions may not be suitable to bring in machinery capable to cover carcass. Whereas for sheep a concrete cap and lid is suitable.

136. They suggested adding the term 'where practical' to condition 5. Consistent with case law, I consider that it is not appropriate to use the term because it is not certain. The purpose of the condition is to minimise the potential for nuisance odour. However, I think that this is covered by condition 6 in rule C.6.3.3 which states that the discharge must not cause an offensive or objectionable odour beyond the property boundary.

<sup>52</sup> NZ Pork Industry Board. p.4

#### Emergency discharge of milk to land (Rule C.6.3.4)

137. Landcorp Farming Ltd. considers that it will be difficult for farmers to know when they will be compliant with condition 3 of the rule, which states that the emergency discharge of milk to land must not cause an offensive or objectionable odour beyond the property boundary. It states that "[a]t the time of emergency need for land application, it would not be possible to know if an adverse effect from odour beyond the boundary was likely"<sup>53</sup> and therefore the condition should be deleted. I consider that if nuisance odour is generated then the person responsible for the discharge could cover the decomposing milk with earth to minimise the odour. I disagree with Landcorp Farming; the condition should remain in the rule.

#### Horticulture wastewater discharges (new rules)

138. Horticulture New Zealand submitted that the plan should contain specific rules for discharges of horticulture wastewater.<sup>54</sup> That is, it should be regulated differently from farm wastewater. Horticulture New Zealand provides the following definition of horticulture wastewater:<sup>55</sup>

Horticulture wastewater includes wastewater from vegetable washing and greenhouses and may include sediment and residues from the activity, but does not include animal effluent or animal products.

139. Horticulture New Zealand has developed codes of practice for the discharge of vegetable wash water<sup>56</sup> and the discharge of greenhouse nutrients<sup>57</sup> and consider that such discharges should be permitted if they are done in accordance with the codes of practice. It also submitted:<sup>58</sup>

Where horticulture wastewater activities do not meet the permitted activity conditions, the default rules should be:

- controlled activity for vegetable wash water, with clear matters of control
- restricted discretionary for greenhouse nutrient solution, with clear matters of discretion.

<sup>&</sup>lt;sup>53</sup> Landcorp Farming Ltd. p.13

<sup>&</sup>lt;sup>54</sup> Horticulture New Zealand. p.40

<sup>&</sup>lt;sup>55</sup> Horticulture New Zealand. p.18

<sup>&</sup>lt;sup>56</sup> Vegetable Washwater Discharge – Code of Practice. 2017. Horticulture New Zealand

<sup>&</sup>lt;sup>57</sup> A Code of Practice of the Management of Greenhouse Nutrient Discharges. 2007. Horticulture New Zealand

<sup>&</sup>lt;sup>58</sup> Horticulture New Zealand. p.40

140. I think that it would be appropriate to include rules in section C.6.3 of the plan for horticulture wastewater discharges to land and water, as well as the definition requested by Horticulture New Zealand.

# Recommendation

- 141. I recommend that the following changes are made to the Proposed Plan:
  - Delete "when containing water" from condition 2(b) of rule C.6.3.1;
  - Clarify that conditions 7(a) and (b), renumbered as 7(a)(i) and (ii), of rule C.6.3.1 are specific to dairy farms;
  - Amend condition 7(a), renumbered as 7(a)(i), of rule C.6.3.1 so that it requires farm wastewater storage facilities on dairy farms to be designed, constructed and used in accordance with the Dairy Effluent Storage Calculator;
  - Amend condition 7(b), renumbered as 7(a)(ii), of rule C.6.3.1 so that it requires farm wastewater storage facilities on dairy farms to have at least 75% working volume available between 1 March and 1 May each year;
  - Amend condition 7(d), renumbered as 7(c), of rule C.6.3.1 by replacing "Chartered Professional Engineer" with "person with a qualification in farm dairy effluent system design";
  - Include a new permitted rule for horticultural wastewater discharges to land and an associated definition of horticultural wastewater;
  - Amend rule C.6.3.5 so that it applies to the discharge of horticulture wastewater to land that are not a permitted activity;
  - Amend rule C.6.3.6 so that it applies to the discharge of horticulture wastewater that is not permitted under the recommended new rule; and
  - Include a new rule that classifies the discharges of treated farm wastewater to water as a non-complying activity.
- 142. I have also recommended several changes for readability and clarification purposes.

## **Evaluation of recommended changes**

143. Section 32AA of the RMA requires an evaluation of changes to the Plan. I consider that the recommended changes to rule C.6.3.1 (listed above) and the introduction of a new permitted activity rule for discharging horticulture wastewater discharges to land will reduce the compliance costs but not at the expense of the environment.

- 144. Classifying the discharge of treated farm wastewater to water as a non-complying activity, rather than a discretionary activity, should hopefully result in a reduction in contaminant loads (including nitrogen, phosphorus, faecal microbes) to fresh and coastal waters by encouraging dairy farmers to discharge effluent to land.
- 145. I consider that the changes are the most appropriate way to achieve the high-level objectives in the RMA section 32 report for the Proposed Plan and also the recommended new objectives for the plan.
- 146. The other changes are of minor effect and are within the scope of a change under clause16 in schedule 1 of the RMA.

# Industrial and trade wastewater discharges

## Background

- 147. Section C.6.6 of the Proposed Plan contains three rules for managing wastewater discharges from industrial and trade premises. Section 15(1) of the RMA states that no person may discharge any contaminant or water into water or contaminant from any industrial or trade premises onto or into land unless the discharge is expressly allowed by a national environmental standard or other regulations, a rule in a regional plan as well as a rule in a proposed regional plan for the same region (if there is one), or a resource consent.
- 148. That is, unless authorised by a rule, regulation or resource consent the discharge of industrial and trade wastewater to land or water is a discretionary activity.<sup>59</sup>
- 149. The RMA defines an industrial or trade premise as:<sup>60</sup>
  - (a) any premises used for any industrial or trade purposes; or
  - (b) any premises used for the storage, transfer, treatment, or disposal of waste materials or for other waste-management purpose, or used for composing organic materials; or
  - (c) any other premises from which a contaminant is discharged in connection with any industrial or trade process; but does not include any production land.

<sup>&</sup>lt;sup>59</sup> RMA s87B <sup>60</sup> RMA s2

- 150. An industrial or trade process is defined to include "every part of a process from the receipt of raw material to the dispatch or use in another process or disposal of any product or waste material, and any intervening storage of the raw material, partly processed matter, or product".<sup>61</sup>
- 151. The Regional Water and Soil Plan has four rules for industrial or trade discharges:
  - Rule 20.1.1 permits the discharge of cooling water into water subject to conditions;
  - Rule 20.1.2 permits the discharge of wastewater from an industrial or trade premise onto or into land subject to conditions;
  - Rule 20.2.1 classes the discharge of water containing contaminants into water from water treatment plants for potable water supply as a controlled activity subject to conditions; and
  - Rule 20.3.1 classes the discharge of contaminants from an industrial or trade premise into or onto land or into water that does not meet rules 20.1.1, 20.1.2, 20.2.1 or any other rule relating to the discharge of contaminants from an industrial or trade premises as a discretionary activity.
- 152. The three rules in the proposed plan are similar to the existing rules. The notable changes are the absence of a rule for discharges of water and contaminants from a water treatment plant and the narrowing of activities that can discharge industrial and trade wastewater to land as a permitted activity. The first change was an oversight (a drafting error) and the second deliberate.

# Submissions and analysis

- 153. Mikaere Miru and Tinopai RMA Ltd. consider that rules C.6.6.1 and C.6.6.2 should not allow discharges to water or land within 20 metres of an area of significance to tangata whenua. They believe that the rules, along with others, "have not taken into account Sections 5, 6, 7 and 8 of the Resource Management Act [and in] order for tangata whenua to apply tangata whenuatanga to our Areas of Significance, amendments are necessary in the rules".
- 154. Rule C.6.6.1 permits the discharge of cooling water into water, subject to conditions. Rule C.6.6.2 permits the discharge of certain discharges into or onto land. While I respect that the submitters have concerns, the submitters have not provided any reasons why 20

<sup>61</sup> Ibid

metres would be an appropriate setback and nor any detail of how the rules have not taken into account sections 5, 6, 7 and 8 of the RMA.

- 155. Northland District Health Board is concerned that cooling water discharges to water (rule C.6.6.1) and certain industrial and trade discharges to land (C.6.6.2) can have adverse effects on drinking water supplies. They asked for both rules to be amended. First, by adding a new condition to C.6.6.2 that states "the discharge does not cause any more than minor adverse effect on source water for human consumption as per Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007." Second, by increasing the setback distances in conditions 9(a) (c) of rule C.6.6.2 from 20 metres to 50 metres.
- 156. Regulation 10 of the Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007 precludes a regional council from including a rule in its regional plan to allow a permitted activity, under section 9, 13, 14 or 15 of the RMA, upstream of an abstraction point unless certain matters can be satisfied. Regulation 10 only applies to an activity that has the potential to affect a registered drinking-water supply that provides no fewer than 501 people with drinking water for not less than 60 days each calendar year. Regulation 10 is shown below.
  - (1) A regional council must not include a rule or amend a rule in its regional plan to allow a permitted activity, under section 9, 13, 14, or 15 of the Act, upstream of an abstraction point where the drinking water concerned meets the health quality criteria unless satisfied that the activity is not likely to—
  - (a) introduce or increase the concentration of any determinands in the drinking water so that, after existing treatment, it no longer meets the health quality criteria; or
  - (b) introduce or increase the concentration of any aesthetic determinands in the drinking water so that, after existing treatment, it contains aesthetic determinands at values exceeding the guideline values.
  - (2) A regional council must not include a rule or amend a rule in its regional plan to allow a permitted activity, under section 9, 13, 14, or 15 of the Act, upstream of an abstraction point where the drinking water concerned is not tested in accordance with the compliance monitoring procedures in the Drinking-water Standard unless satisfied that the activity is not likely to—
  - (a) increase the concentration of any determinands in the water at the abstraction point by more than a minor amount; or
  - (b) introduce or increase the concentration of any aesthetic determinands in the drinking water, so that, after existing treatment, it contains aesthetic determinands at values exceeding the guideline values.
  - (3) A regional council must not include a rule or amend a rule in its regional plan to allow a permitted activity, under section 9, 13, 14, or 15 of the Act, upstream of an abstraction point where the drinking water concerned does not meet the health quality criteria unless satisfied that the activity is not likely to—

- (a) increase, by more than a minor amount, the concentration of any determinands in the water at the abstraction point that in the drinking water already exceed the maximum acceptable values for more than the allowable number of times as set out in table A1.3 in Appendix 1 of the Drinking-water Standard; or
- (b) increase the concentration of any determinands in the water at the abstraction point that in the drinking water do not exceed the maximum acceptable values for more than the allowable number of times as set out in table A1.3 in Appendix 1 of the Drinking-water Standard to the extent that the drinking water, after existing treatment, exceeds the maximum acceptable values for more than the allowable number of times as set out in the table in relation to those determinands; or
- (c) introduce or increase the concentration of any aesthetic determinands in the drinking water so that, after existing treatment, it contains aesthetic determinands at values exceeding the guideline values.
- 157. I consider that rules C.6.6.1 and C.6.6.2 are not contrary to regulation 10.
- 158. As mentioned above, the Proposed Plan does not contain a rule for the discharge of water and contaminants from a water treatment plant. This was an oversight as the Regional Water and Soil Plan does. Whangarei District Council recognised this and submitted that rule C.6.6.2 (or potentially Rule C.6.9.5) should be amended to provide for the discharge of raw or partially treatment water. Whangarei District Council:

...requests a specific, effects based condition for Water Treatment Plants, rather than the current volume based condition. Discharge events are infrequent, and do not give rise to adverse effects as the discharge is generally raw or partially treated water (chlorine dosing is terminated during discharge events. In the infrequent event partially treated water is discharges, chlorine is rapidly dissipated in a short space of time

- 159. I consider that a rule should be included in the Proposed Plan to permit the discharge of untreated of primary treated water containing contaminants into water or onto land from a water treatment plan for potable water supply, subject to conditions.
- 160. Whangarei District Council also requested the justification and source of the standards in condition 7 of rule C.6.6.2. The standards have been carried over from rule 20.1.2 of the Regional Water and Soil Plan and were sourced from the Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000 (ANZECC Guidelines). That is, they are long-term trigger values for heavy metals and metalloids in irrigation water set out in table 4.2.10 of the ANZECC Guidelines. The long-term trigger values are the maximum concentrations (mg/L) of contaminants in the irrigation water which can be tolerated assuming 100 years of irrigation loading assumptions described in Volume 3 of the Guidelines.

- 161. The ANZECC Guidelines states that the long-term trigger values were "developed (1) to minimise the build-up of contaminants in surface soils during the period of irrigation; and (2) to prevent the direct toxicity of contaminants in irrigation waters to standing crops."<sup>62</sup>
- 162. I am not convinced that they are required for the purposes of managing discharges of cooling water, filter backwash water, vehicle wash-water or rock aggregate wash-water onto land. That is, they are not necessary.
- 163. The New Zealand Refining Company requested a new rule for existing and new discharges from their Marsden Point site. That is, they would like the proposed plan to contain a controlled activity rule for the re-consenting of a discharge of contaminant or water into water or onto or into land and for new discharges of contaminant or water or onto or into land and for new discharges of contaminant or water or into land or into water from the Refining New Zealand Marsden Point site.
- 164. The reason for its request is as follows:<sup>63</sup>

The Company holds a number of existing resource consents for discharges from its Marsden Point site. The management of these resource consents is such that there is a considerable amount of information on the effects on the environment resulting from them. This information concludes that the effects are able to be appropriately managed and as such a consenting framework that provides for their 're-consenting' is, in the Company's opinion, appropriate. It is noted that the Northland Regional Council holds this information although a copy of the monitoring results can be provided. The existing discharges from the Site of relevance to this rule include all stormwater and waste water from the operations.

In addition to this, given the Company's Marsden Point operation's status as Regionally Significant Infrastructure, it is appropriate (and in accordance with objectives 3.7 and 3.8 and policies 5.3.2 and 5.3.3 of the RPS) to provide a greater level of certainty to the Company than is provided in the notified pRP, while at the same time ensuring the potential environmental effects are appropriately addressed.

In light of the above, the Company considers that an appropriate outcome will be provided via a controlled activity rule for re-consenting and new discharges from the Refining NZ Marsden Point Oil Refinery Site. Such a rule would encompass all discharges from the Site and therefore ensure that rules C.6.2.3. C.6.4.3, C.6.6.1 and C.6.6.3 (being the relevant stormwater, waste water and industrial and trade discharge rules) would no longer be applicable to the Site. Such

<sup>&</sup>lt;sup>62</sup> ANZECC Guidelines 2000, p. 4.2-12

<sup>&</sup>lt;sup>63</sup> Refining New Zealand. p.18

an approach broadly aligns with the approach Council is proposing for water takes via rule C.5.1.6 (and the changes sought by the Company to rule C.5.1.6).

- 165. While I sympathise with the company's desire for greater certainty about its ability to discharge from its site, and presumably at a lower administrative cost, I do not believe that the plan should be amended to include company-specific provisions as it would create a precedent for other enterprises to request specific rules. I also do not think that company-specific rules are necessary.
- 166. Condition 1 of Rule C.6.6.2 states that the maximum discharge of cooling water, filter backwash water, vehicle wash-water or rock aggregate wash-water onto land must not exceed (a) three cubic metres per day, averaged over the month of greatest discharge, and (b) six cubic metres during any 24-hour period. The condition was also carried over from Rule 20.1.2 of the Regional Water and Soil Plan.
- 167. I do not know the reason for the volumes, although it is also found in the rules for discharges from on-site wastewater systems in the Regional Water and Soil Plan.
- 168. Ballance Agri-Nutrients Ltd submitted that:

The Company operates a number of loader wash facilities associated with its Service Centre and Consignment Store operations and as such, Rule C.6.6.2 is directly relevant to it. The Company supports the general framework of the rule, being the provision for a discharge within certain parameters. However, based on its operations throughout the country, it is considered that the volume controls in condition 1) are overly restrictive and should be increased to a more practical volume, with eight cubic metres considered to be a minimum. Further, the expansion of the condition to ensure that the volume of discharge is appropriate for the ground conditions would enable a 'case by case' assessment to be undertaken as necessary. The Company is of the opinion that the remaining conditions will ensure that the quality of the water discharged is appropriate.

- 169. I consider that the proposed volumes are subjective and could be revised but I do not know what would be appropriate alternative volume(s). Ballance Agri-Nutrients Ltd did not provide justification for the eight cubic metre minimum, other than it would be more practical. In the absence of a justifiable alternative volume(s) I recommend keeping with volumes as notified.
- 170. Rule C.6.6.3 provides for the discharge of contaminants from an industrial or trade premise into or onto land or into water that is not permitted by rule C.6.6.1 or C.6.6.2 "or

any other rule relating to discharges of contaminants from industrial or trade premises" as a discretionary activity.

- 171. The last part of the rule is uncertain. AFFCO New Zealand Ltd identified this and submitted that the words "or any other rule relating to discharges of contaminants from industrial or trade premises" should be deleted. Fonterra and GDC Winstone also considers that the words are unclear and it should be replaced with "is not managed by any other rule...".
- 172. I agree that the words are unclear and should be deleted.
- 173. On a similar note, Tegel Foods Ltd supports the intent of the rule but considers that it is unclear if the rule applies to contaminants within stormwater from an industrial or trade premises. It submitted that the rule should be amended to "specifically state that the discharge of contaminants within stormwater is not captured by this rule." The request is logical because there are other rules in the plan relating to stormwater discharges from industrial and trade premises.

### Recommendation

- 174. I recommend that the following amendments are made to the Proposed Plan:
  - Include a new rule that permits the discharge of untreated or primary treated water containing contaminants into water or onto or into land from a water treatment plant for potable water supply, subject to conditions;
  - Delete condition 7 of rule C.6.6.2; and
  - Expressly exclude contaminants entrained in stormwater from rule C.6.6.3 and delete "or any other rule relating to discharges of contaminants from industrial or trade premises" from the rule.
- 175. I have also recommended several changes for readability and clarification purposes.

### **Evaluation of recommended changes**

176. Section 32AA of the RMA requires an evaluation of changes to the Plan. I consider that introducing a new permitted activity rule for the discharge of contaminants from a water treatment plan to land or water will reduce the compliance costs for network providers but not at the expense of the environment.

- 177. I consider that the changes are the most appropriate way to achieve the high-level objectives in the RMA section 32 report for the Proposed Plan and also the recommended new objectives for the plan.
- 178. The other recommended changes are of minor effect and are within the scope of a change under clause 16, schedule 1 of the RMA.

# **Other matters**

179. Refer to Appendix A for the summary of submission points, analysis and recommendations made on the industrial or trade wastewater discharge provisions not addressed in the key matters sections of this report.

# **Appendix A - Response to other matters raised in submissions**

The following table does not include the summary of submission points, analysis and recommendations made on the key matters in the main body of the report.

Provision	Summary of main submission points	Discussion	Recommendation
D.4	Haititaimarangai Marae 339 Trust submitted that a policy should be included in the plan "regarding wastewater that ensures any adverse effects on the values and attributes that result in an area being identified as an Outstanding Natural Features and Landscapes, Areas of Outstanding Natural Character and Outstanding Water Bodies are avoided." The Trust stated that "[a] policy is also required to ensure that where existing activities have resulted or are resulting in degradation of the qualities and characteristics that result in an area outstanding, the policy directs that these activities, in future, are responsible for resolving these effects."	With respect to the first request, I consider that there is sufficient direction in superior policy documents, including the New Zealand Coastal Policy Statement, the National Policy Statement for Freshwater Management and the Regional Policy Statement, and the policies in the Proposed Plan (including recommended additions and changes). Regarding the second request, I am not aware of any evidence that wastewater discharges are compromising the qualities and characteristics of an 'outstanding area'.	To not grant the relief sought.
General submission on C.6.1 - On-site domestic wastewater discharges	M Hicks: Amend so that wastewater discharge (including partly treated) into a protected water body (e.g. Dune lake adjoining Ruakaka Race Course) is a prohibited activity.	I consider that the proposed rules, in combination with policy direction, are sufficient for managing the adverse effects of wastewater discharges on the dune lake adjoining the Ruakaka Race Course.	To not grant the relief sought.
General submission on C.6.1, C.6.2, C.6.3, C.6.6	NZ Geothermal Association wants a new restricted discretionary activity rule for discharging water and contaminants within 100 metres of significant geothermal features (including all geothermal features within a mapped ONF), with effects on the feature one matter of discretion.	The submitter did not provide evidence to support its request for a new rule.	To not grant the relief sought.

Provision	Summary of main submission points	Discussion	Recommendation
General submission on C.6.1 - On-site domestic wastewater discharges	C Simon submitted that the plan should allow for innovative and sustainable methods of dealing with wastewater. "Modern waste water treatment needs to be permitted in rural areas and areas with sewage plants connections."	I do not think that the plan stifles or precludes sustainable methods for dealing with wastewater.	To not grant the relief sought.
Rule C.6.2.2	Refining NZ submitted that the council should retain C.6.2.3 as notified if council accepts submitter's request for new rule C.6.6.3A (controlled activity for discharges from Refining New Zealand Marsden Point site). However, if the council does not then it should amend rule C.6.2.3 as follows: C.6.2.3 Wastewater treatment plant discharge – discretionary activity The discharge of treated wastewater from a wastewater treatment plant into water or onto or into land, including from private treatment plants servicing an industrial or trade activity, is a discretionary activity.	This is not necessary rule C.6.6.3 has the same activity status as rule C.6.2.3.	To not grant the relief sought.
General submission on C.6.3	The Landowners Coalition submitted that it believes that the rules in section C.6.3 are too restrictive.	The submitter did not explain how the rules are too restrictive or what changes should be made to the rules in the section.	To not grant the relief sought.
C.6.3.1	Foy F., and King K & F: Amend the conditions as they are not practical for farmers.		
C.6.3.1	Royal Forest and Bird Protection Society of New Zealand wants all references to "wastewater", to be replaced with "farm wastewater because the variance between "farm wastewater" and "wastewater" in the conditions is unnecessary as the rule only applies to "farm wastewater"	The request is not necessary because the term wastewater is used in a rule for farm wastewater discharges.	To not grant the relief sought.

Provision	Summary of main submission points	Discussion	Recommendation
C.6.3.1	Trina Upperton submitted that "the volume of discharge needs to be limited as 20m means little protection if the volume causes waste water and contaminants to overflow above land soakage ability, especially in times of soil saturation (winter months in Northland)."	I consider that the rule requires sufficient measures to be implemented to minimise the potential for farm wastewater enter water via overland flow.	To not grant the relief sought.
C.6.3.4	Trina Upperton wants a new condition added to rule C.6.3.4 that states that the discharge must not be to land within 50 metres of a waterway or wetland.	Condition 1(a) of the rule requires a 50 metre setback from surface water.	To not grant the relief sought.
C.6.6	Miru M. and Tinopai RMU Ltd object to industrial and trade discharges being permitted activities as it undermines Section 5 of the RMA.	The submitters did not explain how permitted certain industrial or trade discharges is contrary to the purpose of the Act.	To not grant the relief sought.
C.6.6.1	D Lourie submitted that the Proposed Plan needs to provide the method for safe disposal of radiator coolants from vehicles.	The submitter did not explain what the issue is. I understand that radiator coolants are appropriate disposed of by automobile technicians.	To not grant the relief sought.
C.6.6.1	Whangarei District Council raised concerns that the rule is inconsistent with C.6.4.1. The discharge of cooling water into water is a permitted activity under C.6.6.1 (subject to conditions), but discharge of public stormwater that contains cooling water is not.	The submitter raises a valid point. The rules are inconsistent with respect to the discharge of cooling water. C.6.4.1 does not permit the discharge while C.6.6.1 does.	To delete the term 'cooling water' from condition 2 of rule C.6.4.1.