# Other discharges of contaminants to land and water

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

Date: 27/06/2018
Author: Ben Tait
Version: Final



## **Table of contents**

Purpose and format of the report	3
Report author	3
About the provisions for 'other discharges'	4
Rule C.6.9.1 Discharge of dust suppressants	4
Submissions and analysis	4
Recommendation	4
Rule C.6.9.2 Discharge of tracers	5
Submissions and analysis	5
Recommendation	5
Rule C.6.9.3 Discharge of fertiliser	5
Submissions and analysis	5
Recommendation	7
Rule C.6.9.4 Discharge of sluicing water	7
Submissions and analysis	7
Evaluation of recommended changes	7
Rule C.6.9.5 Discharges to land or water not provided for by other rules	8
Submissions and analysis	8
Recommendation	10
Evaluation of recommended changes	11
Other matters	11
Appendix A - Response to other matters raised in submissions	12

#### Purpose and format of the report

- 1. This report was prepared in accordance with section 42A of the Resource Management Act 1991 (RMA). It addresses submissions on the rules for discharges of water and contaminants to land and water in section C.6.9 (Other discharges of contaminants) of the Proposed Plan. The rules provide for discharges of:
  - Dust suppressants;
  - Tracers:
  - Fertilisers:
  - Sluicing water; and
  - Water or contaminants into water or onto land not the subject of any other rules in the plan.
- 2. Rule C.6.9.7 prohibits the discharge of untreated sewage from a ship or offshore installation to certain coastal waters.
- 3. In most cases, the recommended changes to the Proposed Plan are 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'.
- 4. If there is no recommendation to amend a provision in the proposed plan then the general presumption is that it should be retained as notified.

#### Report author

- 5. 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 details about my qualifications and experience, refer to the RMA section 42A report titled "General approach".
- 6. 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.
- 7. 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.

8. It is also important to note that 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 provisions for 'other discharges'

9. The relevant provisions in the Proposed Regional Plan for 'other discharges' of contaminants into land and water are listed below.

#### Rules

- C.6.9.1 Discharge of dust suppressant permitted activity
- C.6.9.2 Discharge of tracers permitted activity
- C.6.9.3 Discharge of fertiliser permitted activity
- C.6.9.4 Discharge of sluicing water permitted activity
- C.6.9.5 Discharges to land of water not provided for by other rules permitted activity
- C.6.9.6 Other discharges discretionary activity
- C.6.9.7 Discharges of untreated sewage from a ship or offshore installation prohibited activity

#### **Rule C.6.9.1 Discharge of dust suppressants**

#### Submissions and analysis

- 10. Billy Leonard submitted that condition 2 of rule C.6.9.1 should require dust suppressants to be organic, but did not provide any information why this should be the case.
- 11. M Miru and Tinopai RMA Ltd want a new condition included in the rule that restricts the discharge of dust suppressants within 20 metres of an Area of Significance. The submitters did not provide any information why a 20 metres setback is needed. It is also not clear to me what is meant by an "Area of Significance".

#### Recommendation

12. I recommend that the relief sought by the submitters should not be granted.

#### **Rule C.6.9.2 Discharge of tracers**

#### **Submissions and analysis**

- 13. M Miru and Tinopai RMA Ltd submitted that condition 4 of the rule should require tangata whenua to be given at least 24 hours notice before the activity is done if it is within an Area of Significance. The submitters did not provide any information explaining why notification should be required.
- 14. The Royal Forest and Bird Protection Society of New Zealand believes that tracers are a nutrient, and that tracers "need to be considered by council as part of a nutrient allocation approach to give effect to the NPS FM"<sup>1</sup>. It appears to me that the Royal Forest and Bird Protection Society have conflated nutrients with tracers

#### Recommendation

15. I recommend that the relief sought by the submitters should not be granted.

#### Rule C.6.9.3 Discharge of fertiliser

#### **Submissions and analysis**

- 16. M Miru and Tinopai RMU Ltd. want a condition added to rule C.6.9.3 that states the discharge of fertiliser must "not occur within 20 metres of an Area of Significance [to tangata whenua]"<sup>2</sup>. Again, the submitters did not provide any information why a 20 metres setback is needed. It is also not clear to me what is meant by an "Area of Significance".
- 17. Ravensdown Ltd supports a permitted activity rule for the discharge of fertiliser done in accordance with the *Code of Practice of Nutrient Management (New Zealand Fertiliser,)* but stated that the "Code of Practice is subject to review, and considers it prudent for the condition to require compliance with any subsequent updated version of the code." I understand that it is not possible to require compliance with a future version of the plan. Part 3, schedule 3 of the RMA. Clause 31 of that schedule states:

5

<sup>&</sup>lt;sup>1</sup> Royal Forest and Bird Protection Society of New Zealand. p.55

<sup>&</sup>lt;sup>2</sup> M Miru. p.11., Tinopai RMA Ltd. p.13

An amendment to, or replacement of, material incorporated by reference in a plan or proposed plan has legal effect as part of the plan or proposed plan only if—

- (a) a variation that has merged in and become part of the proposed plan under Part 1, 4, or 5 states that the amendment or replacement has that effect; or
- (b) an approved change made to the plan under Part 1, 4, or 5 states that the amendment or replacement has that effect.
- 18. Ravensdown Ltd. also want a restricted discretionary activity rule included in the Proposed Plan for the discharge of fertiliser onto or into land where it may enter water if it does not comply with rule C.6.9.3, with matters of discretion being:
  - The actual or potential environmental effects of not meeting the requirements of Section 5.2 and 5.3 of the Code of Practice for Nutrient Management (New Zealand Fertiliser) 2013 or any subsequent updated version of that Code; and
  - The potential benefits of the activity to the applicant, the community and the environment.
- 19. I think that because fertiliser discharges can potentially cause a range of adverse effects on the environment a discretionary activity is appropriate.
- 20. The Royal Forest and Bird Protection Society of New Zealand submitted the following comments on rule C.6.9.3:<sup>3</sup>

Fertiliser inputs are a key consideration as part of a nutrient allocation approach to give effect to the NPS FM.

Reference to an external Code of Practice for Nutrient Management (New Zealand Fertiliser) 2013 creates uncertainty. As set out in the key issues for this submission requirements are set out in the RMA for the inclusion of material by reference.

The measures set out in sections 5.2 and 5.3 of the codes are not sufficiently certain to be enforceable as a condition of a rule. While this may be useful guidance, it does not provide adequate limits and standards which would enable council assess compliance and carry out enforcement if necessary. Limits must be set out in the rule as the primary requirements for a permitted activity rule.

\_

<sup>&</sup>lt;sup>3</sup> The Royal Forest and Bird Protection Society of New Zealand. p.55

- I disagree with the Royal Forest and Bird Protection Society of New Zealand; Chaptersand 5.3 of the Code provides sufficient direction and guidance to prevent and minimise the adverse effects of fertiliser discharges on the environment.
- 22. C Smith submitted that the Proposed Plan should require people who are planning to apply fertiliser from the air to notify residents within 200 metres of where the activity is to be undertaken, in order to given them "the opportunity to disconnect their water tanks"<sup>4</sup>. I consider that this is not necessary if aerial application is done in accordance with the Code of Practice.

#### Recommendation

23. I recommend that the relief sought by the submitters should not be granted.

#### Rule C.6.9.4 Discharge of sluicing water

#### **Submissions and analysis**

- 24. Whangarei District Council and Kaipara District Council want rule C.6.9.4 to be widened to provide for the discharge of water associated with reservoir draining. The nature of the discharge is not different to discharges of sluicing water. I consider that the rule should be amended as per the submitters' request.
- 25. M Miru and Tinopai RMU Ltd want a condition added to rule C.6.9.4 that states the discharge of fertiliser must "not occur within 20 metres of an Area of Significance [to tangata whenua]"<sup>5</sup>. Again, the reason for their request is not clear.

#### **Evaluation of recommended changes**

26. I consider amending rule C.6.9.4 as sought be Whangarei and Kaipara district councils is of minor effect.

\_

<sup>&</sup>lt;sup>4</sup> C Smith. p.8

<sup>&</sup>lt;sup>5</sup> M Miru. p.11., Tinopai RMA Ltd. p.13

# Rule C.6.9.5 Discharges to land or water not provided for by other rules

#### **Submissions and analysis**

27. Horticulture New Zealand made the following comments on rule C.6.9.5:6

This is a somewhat redundant rule as it repeats the restrictions in section 107 of the Act. The concern with the rule as it is currently drafted is that it applies a blanket restriction on discharges (outside those permitted by another authorising rule) where the existing water quality is at or above a current water quality or sediment quality standard. This may have been the intention, but it is not clear.

The implication is that other activities in the catchment may already have impacted the location of the discharge which may have a low or negligible effect on the environment but without specific authorisation in a rule is now subject to the discretionary rule C.6.9.6

HortNZ is also concerned that conditions are arbitrary and not well defined. This includes the mixing zone which is often described as the zone of non-compliance. The lack of temporal conditions for the water quality attributes (Dissolved Oxygen; Colour/Clarity and pH).

There needs to be provision that some hazardous substances are able to be discharged to land or water subject to meeting the provisions of HSNO. Changes are sought to clause 2 to this effect.

- 28. I acknowledge Horticulture New Zealand's concerns. First, I agree that it is not ideal to use the RMA s70(1) narrative standards in permitted activity rules. However, without a comprehensive suite of numeric water quality standards in the plan that provide for the protection of aquatic life from significant adverse effects and water suitable for consumption by farm animals, as well as numeric standards for visual water quality, for example, it is common practice to repeat the narrative standards in section 70(1)((c) (g).
- 29. This is because section 70 of the RMA precludes regional councils from including a rule a regional plan that allows: (a) a discharge of contaminant or water into water; or, (b) a discharge of a contaminant onto or into land which may result in that contaminant (or any other contaminant emanating as a result of natural processes from that contaminant)

-

<sup>&</sup>lt;sup>6</sup> Horticulture New Zealand. p.49

entering water, that would likely give rise to the effects described in paragraphs (c) - (g) occurring after reasonable mixing.

- 30. I consider that it is not appropriate to require permitted activities to require compliance with the numeric water quality standards in policies D.4.1 D.4.4 (to be relocated to an appendix) of the Proposed Plan for the reason raised by The Oil Companies in their submission. That is, it is too complex to require dischargers to determine if their discharge will comply with the standards beyond the zone of reasonable mixing. The standards are applied as annual medians, percentiles and maximum concentrations. I consider that the Proposed Plan should not permit activities that are likely to result in a standard in D.4.1 D.4.4 being breached. They should be subject to a resource consent process. I consider that condition (4)(a) of rule C.6.9.5 should be deleted.
- 31. Regarding Horticulture New Zealand's concern that the zone of reasonable is not well defined, I recommended in another section 42A report ("Water quality general matters") that a definition for the zone of reasonable mixing is included in the plan. Second, I do not think that temporal conditions on the narrative and numerical receiving water quality standards in condition 4 of the rule are necessary.
- 32. Regarding Horticulture New Zealand's point that "[t]here needs to be provision that some hazardous substances are able to be discharged to land or water subject to meeting the provisions of HSNO", it is not clear to me what hazardous substances it is referring too.
- 33. Whangarei District Council and Kaipara District Council submitted that rule C.6.9.5 should provide for discharges from water treatment plants because:<sup>7</sup>

These events typically involve the short term release of raw or semi treated water. Water treatment plans may be required to discharge to land after equipment failure or maintenance, or after heavy rainfall events which result in an elevated turbidity that may not meet drinking water standards. Chlorine dosing is typically ceased during such discharge events and any residual chlorine is rapidly dissipated with air and light exposure, thereby ensuring stream health is not adversely affected.

34. I recommended in the section 42A RMA report titled 'Wastewater discharges' that a rule should be included in the Proposed Plan that permits the discharge of primary treated water to land and water from water treatment plant.

\_

<sup>&</sup>lt;sup>7</sup> Whangarei District Council. p.26

- 35. M Miru and Tinopai RMU Ltd want a condition added to rule C.6.9.5 that states the discharge must not occur within 20 metres of an Area of Significance to tangata whenua, but they did not explain why the setback is needed.
- 36. The Royal Forest and Bird Protection Society states that rule C.6.9.5 "is not consistent with the NPS FM for the management of diffuse discharges to safeguard the life supporting capacity of water". Ido not understand what the Society means. It goes to state that the rule should be amended to "[r]equire resource consent for diffuse discharges [and for] other discharges, exclude the activity from outstanding and significant areas and from wetlands." I note that the rule requires consents for discharges that are not permitted and contains policy direction on applications for resource consents that will affect wetlands. Decision-makers will also have to have regard to objective A2 of the NPS-FM, which includes protecting the significant values of wetlands and outstanding freshwater bodies.

#### 37. The Oil Companies submitted: 10

The rule needs to be amended to permit the associated discharge of groundwater from petroleum industry sites, which may contain up to 15mg/l of petroleum hydrocarbons (the equivalent stormwater standard). During dewatering activities, where the water in the tank pit shows signs of hydrocarbon contamination, it is standard practise to treat that water to ensure that there is no more than 15mg/l of hydrocarbons in the water to be discharged from the site during the dewatering process. 15mg/l is the acceptable standard adopted in the MfE Water Discharge Guidelines.

38. The Companies submission contains additional information about the practice. Their submission is detailed and reasonable.

#### Recommendation

- 39. I recommend that condition 2 of rule C.6.9.5 should be amended to include the relief sought by The Oil Companies and condition 4(a) be deleted for reasons highlighted above.
- 40. I also consider that condition 1, which was 'carried over' from rule 23.1.4 of the Regional Water and Soil Plan, should be deleted because exotic organisms are not a contaminant

<sup>&</sup>lt;sup>8</sup> Royal Forest and Bird Protection Society of New Zealand. p.55

<sup>9</sup> Ibic

<sup>&</sup>lt;sup>10</sup> The Oil Companies. p.25

(unless a micro-organism in terms of RMA s2). The management of exotic organisms for biosecurity reasons is Biosecurity Act 1993 matter.

#### **Evaluation of recommended changes**

41. I consider that the changes are of minor effect.

#### **Other matters**

42. Refer to Appendix A for the summary of submission points, analysis and recommendations made on rules of discharges from other activities not addressed in the key matters sections of this report.

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

Provision	Summary of main submission	Discussion	Recommendation
	points		
New rule	Fire and Emergency New Zealand requested the following new rule: The discharge of contaminants by Fire and Emergency New Zealand, any defence fire brigade, or any industry brigade, into water, or onto or into land where they may enter water, for emergency response and training purposes is a permitted activity.	I consider that rule C.6.9.5 provides for the discharges contemplated by Fire and Emergency New Zealand and therefore new specific rule is not required	To not grant the relief sought by the submitter.
New rule	Horticulture New Zealand requested a new rule for the discharge of compost or animal manure onto or into land from poultry farms and piggeries.	Horticulture New Zealand stated that compost of animal manure is not classed as a fertiliser but it has nutrient and soil conditioning properties.	To include the definition of fertiliser requested by Horticulture New Zealand in the Proposed Plan.  To not include a rule for discharges of
	Horticulture also want a definition of fertiliser to be included in the Proposed Plan.	I consider that the definition of fertiliser request by Horticulture New Zealand accomodates compost and animal manure used for sustaining or increasing the growth, productivity, or quality of plants.	compost and animal manure onto or into land.
Other	M Miru and Tinopai RMA Ltd object to the discharge of contaminants as a permitted activity on the grounds that it undermines section 5 of RMA.	The submitter did not explain how permitted discharges undermine section 5 of the RMA.	To not grant the relief sought.
New rule	NIWA want a controlled activity rule included in the Proposed Plan for discharges of seawater and stormwater to coastal water from the Bream Bay aquaculture facility.	NIWA stated that "a rule specifically addressing the discharges from the Bream Bay facility site (seawater from fish tanks and stormwater) would provide clarity and certainty as to the status of	To not grant the relief sought.

Provision	Summary of main submission points	Discussion	Recommendation
		such discharges." <sup>11</sup> NIWA also stated that it "would support a more general rule addressing such discharges if the Council considered it to be more appropriate than a site specific rule." <sup>12</sup>	
		It is important to note that the discharge of stormwater from NIWA's Bream Bay facility is a classified as a permitted activity under rule C.6.4.2.	
		However, NIWA did not provide specific information on why discharges of seawater from land based aquaculture to coastal water should be a controlled activity.	
New rule	New Zealand Geothermal Association want a new restricted discretionary activity for discharging water within 100 metres of significant geothermal features (including all geothermal features within a mapped ONF), with features being a matter of discretion.	The submitter did not provide any information or evidence that discharges of water to land or water within 100 metres of a significant geothermal feature is or is likely to adversely affect the geothermal feature.	To not grant the relief sought.
New rule	Whangarei District Council want a discretionary activity rule included in the Proposed Plan for the discharge of highly treated wastewater to land or water, in order to support the	The discharge of treated wastewater to land or water is classified in the Proposed Plan as a discretionary activity.  It would be redundant to include an additional discretionary activity rule for	To not grant the relief sought.

<sup>&</sup>lt;sup>11</sup> NIWA. p.4 <sup>12</sup> NIWA. p.5

Provision	Summary of main submission points	Discussion	Recommendation
	sustainable reuse of treated wastewater.	the discharge of "highly treated" wastewater to land or water.	
New rule	Far North District Council wants a discretionary activity "rule for discharges from plantation forestry within 1km of public water supply catchments." 13	The district council stated: 14  [It] seeks to protect potable water catchments from discharges, including but not limited to, sediment discharges from forestry activities. The NES-PF s6(3)(c) allows more stringent plan where activities where activities are conducted 1km upstream of the abstraction point of a drinking water supply for more than 25 people.  However, Far North District Council did not provide any specific evidence that this is needed.	To not grant the relief sought.

<sup>&</sup>lt;sup>13</sup> Far North District Council. p.14 <sup>14</sup> Ibid