

Ōtaki Wastewater Treatment Plant- Community Liaison Group (CLG) Meeting

Wednesday 20 November – 1-2:30PM
Ōtaki Memorial Hall

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Welcome / Introductions

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Today's Agenda

1. Welcome / Introductions / Apologies
2. Agenda Overview
3. Matters arising since previous meeting
4. Review of resource consent compliance
5. Proposed changes to activities
6. CLG feedback on compliance report
7. Other feedback
8. Other matters
9. Next meeting

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Matters arising since previous meeting

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LDTA upgrades

- Bulk earthworks, lateral upgrades, planting of LDTA to address DRP issue.
- Resource consent from KCDC obtained.
- Several resource consents required from GWRC.
- Outstanding concerns include:
 - potential contamination from earthworks
 - potential for spray drift from irrigators.

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Publishing annual reports

- Commenced the process of publishing annual reports online.
- Will circulate link to CLG members.

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Resource consent compliance

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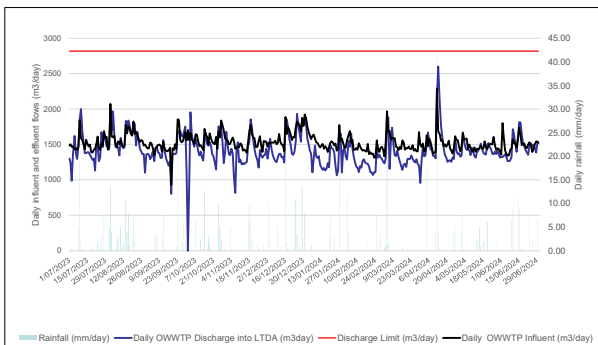
Resource consent compliance

- KCDC compliant with all consent conditions except:

Resource consent condition	No.	Compliance
Wet weather storage capacity	11	●
Treated effluent standards:		
• NH4-N	17(d)	●
Performance and maintenance of the distribution system:		
• Maintenance of infiltration discharge area	24	●
Incident notification	42	●

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Influent/effluent rates



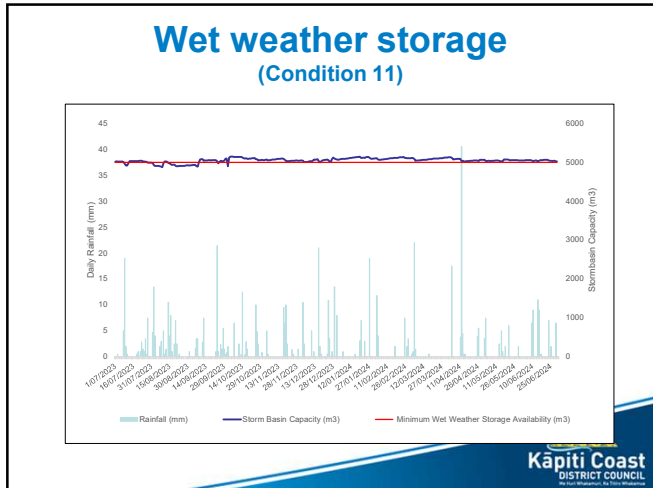
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Wet Weather Storage

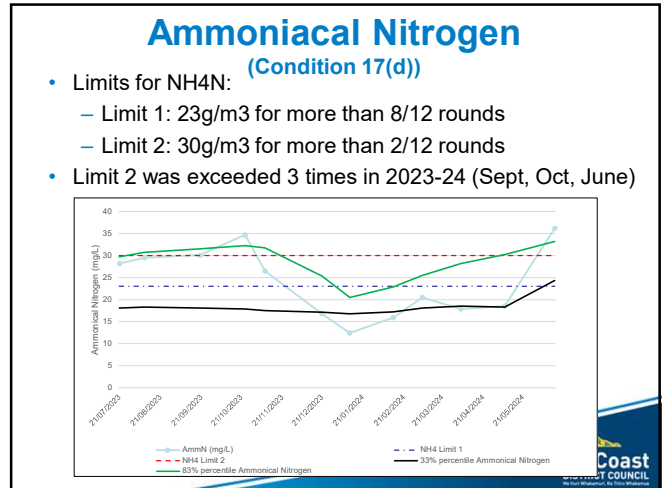
(Condition 11)

- Consent requires 5,000m³ of wet weather storage capacity at the site.
- WWTP storm flow buffer is 5,200m³.
- Pond historically maintained with a minimum of 10% volume for "residual material" (e.g. treated WW and rainwater) to prevent liner being displaced.
- Has resulted in a reduced capacity of 4,700m³.
- In Q1, Council updated so no more than 200m³ residual material in pond, maintaining 5,000m³ required.
- Council compliant in Q2-Q4 following mitigation measures.
- Additional upgrades to manage increased flows, including desludging oxidation ponds & aeration lagoon.
- Wastewater network simulation model is being verified and updated and will report the revised dry & wet weather inflow to the plant considering the projected population growth to 2054.

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- ### Ammoniacal Nitrogen (Condition 17(d))
- Seasonal patterns:
 - NH₄N levels in oxidation ponds typically elevated in winter months (slow biological activity increases ammonia)
 - Works at OWWTP:
 - Feb 2023: Desludging aeration lagoon (lower biological treatment during works)
 - Feb 2024: Replaced inlet screen (higher organic load during works)
 - Proposed works to upgrade aerators
- Kāpiti Coast**
DISTRICT COUNCIL

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- ### Distribution system (Condition 24)
- Minimal standards for distribution system, including uniformity, coverage and ponding.
 - Could required to apply effluent to >75% of LDTA; Council estimates approx. 30%
 - Distribution laterals causing ponding and erosion, inefficient distribution.
 - Could be contributing to DRP downstream.
- Kāpiti Coast**
DISTRICT COUNCIL

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- ### Distribution system (Condition 24)
- Proposed improvements:
 - Earthworks on LDTA
 - Upgrading laterals to a sprinkler system with close to 100% coverage
 - Further LDTA planting
- Kāpiti Coast**
DISTRICT COUNCIL

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Incident response & notification

(Condition 42)

- Technical non-compliance only.
- We are updating our systems, so we get an alert notification of any consent compliances (currently reported in quarterly reporting).

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Compliant conditions

- Within maximum discharge rates.
- Compliance with all treated effluent standards, except NH4N.
- Odour management.
- LDTA planting and perimeter planting.
- Fencing & signage.
- Iwi consultation / CLG.

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GWRC 2023/24 Compliance Assessment

- Provided at the meeting.

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Proposed changes to activities

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Projects undertaken in 2023-24

- Inlet screen replacement (increased capacity)
- Investigations & consenting for LDTA upgrades
- Trial of new sprinkler system
- Coordinating planting plan with Ngā Hapū o Ōtaki

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Projects proposed for 2024-25

- LDTA upgrade works (earthworks and lateral upgrades)
- Bulk planting of the LDTA
- Concrete sealing of the base of the aeration lagoon
- Upgrading the aerators in the aeration lagoon

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Inlet screen replacement

Flow parameter	Units	2022	Design
Average Dry Weather Flow (ADWF)	m3/d	1,850	3,000
	L/s	23	34
Peak Wet Weather Flow (PWWF)	m3/d	10,400	11,200
	L/s	130	160
Peak Instantaneous Flow (PIF)	L/s	120	185

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New discharge system

- Trial undertaken in July 2024

Current system:



Proposed system:



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Proposed mitigations

- Install a weather monitor on site to record wind speeds and directions to integrate into SCADA system for automatic isolation/interlocking of select cells during higher-wind conditions.
- Only use cells 2, 3, 4, 5 during winds 5-10m/s
- Avoid using cells during 10m/s + winds, use cells 3 and 4 if necessary.

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Separation distances

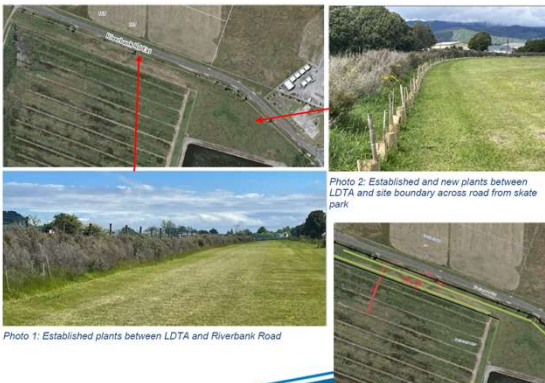
Feature	Separation distance	
	5-10m/s	10m/s +
NE site boundary	99 m	170 m
Riverbank Road	101 m	172 m
Skatepark	145 m	198 m
SW site boundary	142 m	223 m
Otaki River Track	144 m	225 m

During the trial, the nozzle of the sprinkler was removed to achieve the consented daily discharge volume. Removal of the nozzle increased opening of the sprinkler outlet orifice helps to achieve more droplets than aerosol.



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Perimeter Planting



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LDTA planting

- Working on planting plan with Ngā Hapū o Ōtaki
- LDTA discharge area to be replanted with grasses with improved nutrient uptake (e.g. rye grass).
- LDTA center bunds to be planted with natives
- Cut and carry system to be implemented.

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Bulk earthworks

- Consent application currently on hold while we work through technical details
- Investigating alternative options and the viability/suitability of these.
- To report back in 2024-25.

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Lining aeration lagoon

- Design complete for the plinth
- Required isolation of the pond
- Desludging/cleaning
- Geotec assessment before concreting
- Fee proposals received from prospective suppliers
- Required favourable weather window
- Ideal to do in Jan-Feb

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New aeration system

- Consultation for right spec of the aerators underway.
- Upgrade of aerations system can happen after the concrete lining of the pond.

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CLG Feedback/Observations?

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Other CLG Feedback?

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Other matters

- None to report

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Recommendations / Next Steps



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Next steps

- Confirm timing for next meeting & any items for discussion.



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