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Wastewater Standards Potential Reporting Requirements and How They Relate to ID

Discharge Type	Reporting Parameters	Monitoring Frequency	Reporting Frequency	Receiving Authority	How can Lutra help?
Discharges to Water	Limits outlined in Figure 1. - Carbonaceous Biochemical Oxygen Demand (cBOD5) - Total Nitrogen - Total Phosphorus - Total Suspended Solids (TSS) - E. coli- Enterococci (for marine waters) - Ammoniacal Nitrogen - Other site-specific contaminants that are not covered by the standards will be defined in the usual consenting process (if identified by regional council, e.g. metals, PFAS, mercury)	Continuous monitoring will be required for wastewater treatment plants serving populations greater than 10,000 Fortnightly monitoring is required for plants serving populations between 1,000 and 10,000 people.	The reporting frequency will be defined by the resource consent. This will typically include monthly or quarterly sampling – with a quarterly or annual reporting requirement. In the event of non-compliance, this will need to be reported immediately. There is also a requirement for public reporting – with compliance to applicable standards being made publicly available on a website maintained by the operator.	Regional Council Annual reporting is required for Taumata Arowai Annually, network operators will be required to engage a 3rd party to audit compliance with matters covered by the standard, including monitoring and reporting requirements.	Infrastructure Data can be used to schedule, track and receive all of the lab samples required. ID can automatically generate the monthly reports for the public reporting, into a PDF format. ID can load the resource consent and track all of the conditions that need monitoring. ID can support the reporting to both the Regional Council and Taumata Arowai. Lutra's Engineering team can provide the 3rd party audits annually.

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Wastewater Standards Potential Reporting Requirements and How They Relate to ID

Discharge Type	Reporting Parameters	Monitoring Frequency	Reporting Frequency	Receiving Authority	How can Lutra help?
Small Plants (SPS)	- Faecal indicators (E. coli) - Ammoniacal Nitrogen (if applicable) - Dissolved cBOD5 - Simplified set of parameters compared to larger plants - Operational requirements i.e. desludging	This will be defined by the consent. It is likely to be quarterly based on the typical consents that exist currently.	For smaller plants, the reporting will be defined by the resource consent. We expect the frequency of sampling to be reduced e.g. quarterly, semi-annually depending on plant size	Regional Council	Infrastructure Data can be used to schedule, track and receive all of the lab samples required. ID can automatically generate the monthly reports for the public reporting, into a PDF format. ID can load the resource consent and track all of the conditions that need monitoring. ID can support the reporting to both the Regional Council and Taumata Arowai.

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Wastewater Standards Potential Reporting Requirements and How They Relate to ID

Discharge Type	Reporting Parameters	Monitoring Frequency	Reporting Frequency	Receiving Authority	How can Lutra help?
Discharges to Land	Limits outlined in Figure 2 - Total Nitrogen - Total Phosphorus - E. coli - Soil moisture - Soil monitoring. ○ Cation exchange capacity ○ Exchangeable Cations (all measured by me/100g and base saturation %): Sodium, Potassium, Calcium, Magnesium. ○ Sodium absorption ratio ○ Soil pH ○ Total phosphorous ○ Olsen phosphorous - Groundwater quality (every 3 months) ○ pH, ○ electrical conductivity, ○ Total ammoniacal nitrogen, ○ Total nitrogen, ○ Nitrate nitrogen, ○ dissolved reactive phosphorous ○ E. coli and ○ Chloride	Groundwater quality – sampling must be undertaken every 3-months. Soil monitoring must be undertaken as part of the baseline and site-specific assessments – then every 5-years after that.	Public reporting – with compliance to applicable standards being made publicly available on a website maintained by the operator. In the event of non-compliance, this will need to be reported immediately. Annual reporting is required for both Taumata Arowai and the Regional Council.	Annual reporting is required for Taumata Arowai and the Regional Councils. Annually, network operators will be required to engage a 3rd party to audit compliance with matters covered by the standard, including monitoring and reporting requirements.	Infrastructure Data can be used to schedule, track and receive all of the lab samples required. ID can automatically generate the monthly reports for the public reporting, into a PDF format. ID can load the resource consent and track all of the conditions that need monitoring. ID can support the reporting to both the Regional Council and Taumata Arowai. Lutra's Engineering team can provide the 3rd party audits annually.

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Wastewater Standards Potential Reporting Requirements and How They Relate to ID

Discharge Type	Reporting Parameters	Monitoring Frequency	Reporting Frequency	Receiving Authority	How can Lutra help?
Beneficial Reuse of Biosolids	- Biosolids grade (A or B) will determine the monitoring requirements. - Pathogen levels (e.g. Helminth ova, E. coli) - Metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, zinc) - Emerging contaminants i.e. PFAS.	Baseline soil testing or testing where biosolids have been applied to land continuously for more than 5 years. The full details will be outlined in a consent and will be linked back to the grade of biosolids.	It is proposed that the standards will establish Permitted, Controlled, and Restricted Discretionary consenting pathways for the reuse of biosolids, depending on their categorisation grade. - Grade A: Reduced frequency (annual or less frequent depending on application) - Grade B: Higher frequency (batch-based or per application cycle)	Regional Council Taumata Arowai	Lutra's Engineering team can support with the design, grading and auditing related to the reuse of Biosolids. ID can be used to monitor the consent and final receiving environment monitoring parameters.
Overflows and Bypasses	- Overflow event occurrence - Volume discharged - Location - Duration - Cause of overflow - Receiving environment impacted		Event-based reporting (as events occur); annual summary of overflow incidents in the NEPM	Regional Council Public Health Reporting Requirements	ID can be used to track overflows, provide alerting and provide the data relating to the volume, duration, location and follow up transgression reports. Lutra's engineering team can support with the development of Risk Management Plans.