

Army Bay Wastewater Treatment Plant
2025-2026 Annual Report

Final - September 2026

Watercare

QUALITY INFORMATION

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REVISION HISTORY

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CONSENT CHANGE AND MONITORING HISTORY

Change type	Description	Effective date	Reference / condition	Reporting / monitoring implications
Discharge consent	Consent to discharge contaminants from Army Bay WWTP		34088	Monitoring discharge volumes, discharge quality, shellfish quality. Prepare annual reports and management plan.
Consent reissue	To replace resource consents for the discharge of contaminants from Army Bay WWTP, and to enable staged upgrades to be constructed on site	Dec 2019 valid till Dec 2054	DIS60331146 & DIS60331113 under bundle BUN60331144	Different conditions apply and cease as staged upgrades are completed. Flow amendment CLGs to be held annually.
Reporting deadlines	Annual performance report Report summarising results of the REMP Review of the REMP	Dec 2019 valid till Dec 2054	DIS60331146 & DIS60331113 under bundle BUN60331144	Annual report submitted by 30 September each year Submit REMP in 2020 Following 2nd year of sampling and then at 5 yearly intervals, submit independent review of the REMP
REMP	REMP document revised and re-submitted in April 2020	April 2020	Condition 18 of DIS60331146 & DIS60331113 under bundle BUN60331144	Revised for certification
REMP review	Suggest improvements following two years of sampling	Submitted Sep 2022	Condition 21 of DIS60331146 & DIS60331113 under bundle BUN60331144	To include DO measurements, assess nutrient data in winter months and chlorophyll-a data in summer
Consent variation	To extend duration of the existing short term discharge standards for 4 years	Submitted June 2025	S127 consent variation	Would include continued operation and reporting under existing short term discharge conditions until Dec 2030
Stage 1 conditions	First stage of upgrades require certain standards		DIS60331146 & DIS60331113 under bundle BUN60331144	Ave dry weather flow limit is 22,500m^3/d Peak dry weather flow limit is 65,400 m^3/d Max instantaneous flow (wet weather) limit is 1,010 L/s UV dose increases to 35 mJ/cm^2

Change type	Description	Effective date	Reference / condition	Reporting / monitoring implications
				Tighter limits of $cBOD_5$, TSS and ammonia standards Additional total N limit Emerging contaminants risk assessment prepared within 6 months Technology & growth report prepared within 1 year, then at 5 yearly intervals
Stage 2 conditions	Second stage of upgrades require certain standards		DIS60331146 & DIS60331113 under bundle BUN60331144	Ave dry weather flow limit is 31,500m^3/d Peak dry weather flow limit is 92,000 m^3/d Max instantaneous flow (wet weather) limit is 1,417 L/s Emerging contaminants risk assessment prepared within 6 months
Stage 3 conditions	Third stage of upgrades require certain standards		DIS60331146 & DIS60331113 under bundle BUN60331144	Ave dry weather flow limit is 42,410m^3/d Peak dry weather flow limit is 129,000 m^3/d Max instantaneous flow (wet weather) limit is 1,964 L/s Emerging contaminants risk assessment prepared within 6 months and at 5 yearly intervals

EXECUTIVE SUMMARY

This annual report for the Army Bay Wastewater Treatment Plant (WWTP) outlines the plant's operational performance, incidents, compliance with consent conditions, and environmental impacts for the 2025-2026 reporting period. The report fulfils the requirements under consents DIS60331113 and DIS60331146, which oversee the discharge of wastewater and air emissions, respectively.

Key findings include:

Treatment plant overview

The WWTP is an activated sludge facility, discharging treated effluent to the Hauraki Gulf. No operational incidents were recorded during the reporting period. Upgrades are underway, including inlet screen and UV treatment improvements. The Stage 1 upgrades to the WWTP are in the process of feasibility and design, with the expectation that the main liquid stream upgrade will be operational by 31 December 2030, in accordance with the consent requirements.

Discharge flow compliance

The annual average dry weather flow remained below the consented limit of 13,500 m^3/day. Several peaks in total daily treated wastewater discharge volume exceeded the 39,825 m^3/day dry-weather daily discharge limit shown in Figure 4-1; however, these occurred during wet-weather conditions and are therefore not considered exceedances of the dry-weather limit. The maximum instantaneous discharge flow remained below the 750 L/s peak wet-weather limit throughout the reporting period. Flow trend analysis indicated a weak but significant increasing pattern in daily flows over the five-year assessment period. However, this trend was not statistically significant when assessed using monthly median flows, indicating that there is currently insufficient evidence to conclude that a sustained long-term increase in flow has occurred.

UV treatment

The current UV disinfection system, consisting of one channel with four UV banks, is unable to consistently meet dosing requirements during higher flow periods. As a result, the plant did not meet the consented UV dose requirement of 25 mJ/cm^2 for 99% of the time in eight months of the 2025-2026 reporting year. Installation of two additional UV banks is planned to occur in Q1/Q2 of 2027, followed by an additional UV channel fitted with six UV banks in Q3 of 2027. Despite this non-compliance, the 2020-2025 REMP report indicates no evidence that reduced disinfection has affected the receiving environment; the 2025-2026 REMP is currently being prepared alongside this annual report.

Discharge quality compliance

Effluent quality met consented limits for $cBOD_5$, ammoniacal nitrogen, and total suspended solids. Weekly sampling confirmed that rolling 12-month medians and 92nd percentiles remained well within required thresholds.

Odour management

Six-monthly odour monitoring reports indicated minimal odour, and no complaints were received during the reporting period.

Receiving environment monitoring

Receiving environment monitoring indicated generally stable water quality, with no evidence of seasonal nutrient enrichment or increased *chlorophyll-a* attributable to the outfall discharge. Long-term trends showed a localised nutrient effect near the outfall, particularly for nitrate, while shellfish microbiology and heavy metal results remained below relevant food safety guideline values and did not indicate outfall-related contamination.

Future actions

Planned UV upgrades for 2027 are expected to improve UV dosing capacity and reduce the risk of future UV non-compliance.

Overall compliance for the 2025–2026 reporting period was assessed as Category 2. Non-compliances primarily related to UV dose performance, reflecting limitations in the capacity of the existing UV system during periods of elevated flow. While peaks in total daily treated effluent discharge volume exceeded the dry-weather daily discharge limit shown in Figure 4-1, these occurred during wet-weather conditions and are therefore not considered exceedances of the dry-weather limit. No significant environmental or community impacts were observed. Planned UV upgrades will improve disinfection capacity and support future compliance.

Monitoring of network inflow and infiltration through smart sensors started in early 2026 and will inform the prioritisation of network repair works across the catchment in future years.

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LIST OF ABBREVIATIONS AND ACRONYMS

Abbreviation	Description
$cBOD_5$	5-day carbonaceous biochemical oxygen demand
DO	Dissolved oxygen
DRP	Dissolved reactive phosphorus (synonym: dissolved soluble phosphorus)
E. coli	Escherichia coli
NH_4-N	Ammoniacal nitrogen (ammonia + ammonium, reported as mg N/L)
NO_2	Nitrite, reported in milligrams nitrogen
NO_3	Nitrate, reported in milligrams nitrogen
TIN	Total inorganic nitrogen (NH_4-N + NO_2 + NO_3)
TN	Total nitrogen
TP	Total phosphorus
TSS	Total suspended solids
UV	Ultraviolet disinfection (dose, expressed in mJ/cm^2)
Watercare	Watercare Services Limited
WWTP	Wastewater treatment plant

1 INTRODUCTION

1.1 Background

This report aims to fulfil the annual reporting requirements of condition 36 in consent DIS60331146 and DIS60331113 (Table 1-1). These consents are part of a bundle consent (BUN60331144) which enables the staged upgrades to the plant whilst continuing to service its communities. This report covers compliance for the reporting period 1 July 2025 – 30 June 2026.

The consent states that the following conditions apply, until the Stage 1 upgrade has been commissioned:

- Annual average dry weather flow shall not exceed 13,500 m^3 per day.
- The maximum daily treated wastewater discharge volume from the WWTP to the coastal marine area shall not exceed a maximum daily discharge of 39,825 m^3 per day (at peak dry weather flow), and a maximum instantaneous flow of 750 L/s (at peak wet-weather flow).
- The Consent Holder shall ensure that a validated Ultraviolet (UV) dose of 25 mJ/cm2 is delivered by the UV disinfection facility for 99% of the time (calculated based on a 15-minute average) over each calendar month.

1.2 Scope

Reporting is undertaken to demonstrate compliance with the conditions of consents DIS60331146 (treated wastewater discharge) and DIS60331113 (air discharge). These consents require:

- Treated wastewater quality monitoring (weekly to six-monthly sampling of physical, chemical, and microbiological parameters, assessed against short-term standards and, in future, staged upgrade limits).
- Air quality and odour monitoring (six-monthly odour field surveys and a log of any community complaints).
- Receiving environment monitoring (REMP) to assess water quality, shellfish quality, and marine ecology in the coastal environment around the Army Bay outfall.
- Complaints management including recording and reporting of any odour or discharge-related complaints.

Full reporting requirements listed in Table 1-1

Table 1-1 Annual report requirements as per condition 36

Requirement	Details to include	Consent condition	Report section
Treated wastewater quality	All monitoring results for treated wastewater discharges; assessment against median and 92nd percentile limits for $cBOD_5$, TSS, NH_4-N, TN, TP; confirmation of UV dose compliance (≥25 mJ/cm² short-term, ≥35 mJ/cm² post-Stage 1);	Conditions 6–7, 9–12	Section 3.5

Requirement	Details to include	Consent condition	Report section
Additional parameters	Weekly/monthly/6-monthly monitoring of pH, temperature, salinity, turbidity, nutrients, faecal coliforms, Enterococci, DRP, metals (As, Cd, Cr, Cu, Pb, Ni, Zn, Hg), organic compounds (PAHs, PCBs, pesticides), oil and grease	Conditions 8, 11	Section 3.6
Flow and volume	Daily inflows to the WWTP; daily discharge volume to outfall; compliance with ADWF, PDWF, PWWF and instantaneous flow limits	Conditions 6, 9, 15	Section 3.3
Receiving environment monitoring (REMP)	Monthly water quality at coastal sites (DO, temp, cond, pH, TSS, bacteria, chlorophyll-a, nutrients); shellfish quality; marine ecological and benthic surveys; interpretation of trends	Conditions 18–20	Section 3.9
Odour monitoring	Six-monthly odour field assessments; record of odour complaints, investigations, and outcomes	DIS60331113 (air discharge), general conditions	Section 3.7
Incidents and non-compliance	Summary of exceedances, non-compliances, spills or incidents; investigation findings; remedial actions; assessment of environmental effects	General condition, Condition 14	Sections 2.2 and 3.10
Works and upgrades	Progress on Stage 1–3 upgrades; confirmation of as-built certification if works completed; updates on interim works to maintain compliance	Conditions 5, 9	Section 2.1
Overall compliance statement	Clear statement on overall compliance for the reporting year; note any risks to future compliance	Condition 36	Section 3.10

2 OPERATIONAL DETAILS

2.1 Current operations

The Army Bay Wastewater Treatment Plant (WWTP) is on the eastern edge of the Whangaparāoa Peninsula (Figure 1-1). The WWTP is an activated sludge plant that uses the following treatment devices and processes for the treatment of wastewater and management of biosolids:

- Screening and grit removal
- Sequencing batch reactors
- Sludge dewatering (gravity belt thickener and centrifuge)
- Biofilters
- Balancing ponds (to control the rate of effluent discharge)
- UV disinfection

Treated effluent discharges via an outfall to the Whangaparāoa Passage in the Hauraki Gulf. All dewatered biosolids go to a permitted worm farm.



Figure 2-1 Aerial image of the Army Bay WWTP.

2.2 Changes in reporting year

No significant operational, infrastructure or process changes occurred during the reporting period that materially affected plant operation, monitoring or consent compliance.

2.3 Future changes

Future changes at the Army Bay WWTP are focused on increasing treatment capacity and improving resilience as flows to the plant continue to grow. The broader Stage 1 upgrade programme is

currently in feasibility and design, with the main liquid stream upgrade expected to be operational by 31 December 2030, in line with consent requirements.

Ahead of the wider Stage 1 works, upgrades to the UV disinfection system have been prioritised to address the capacity constraints observed during elevated flow conditions. Construction is scheduled to begin in summer 2026, with two additional UV banks planned for installation in early to mid-2027. A further UV channel, comprising six banks, is expected to be completed in late 2027.

Once completed, the UV works are expected to more than double disinfection capacity and improve the plant's ability to maintain the required UV dose during wet-weather events and other periods of high flow. This is expected to reduce the likelihood of recurring UV-related non-compliance. Until the upgrades are commissioned, discharge volumes, UV performance and receiving environment monitoring will continue to be reviewed to assess compliance risk and any associated environmental effects.

Monitoring of the network inflow and infiltration also started in early 2026, with the intention to target and prioritise areas of the catchment for repairs.

3 METHODOLOGY

3.1 Monitoring

Instantaneous discharge flows were recorded by a calibrated magnetic flow meter installed in the effluent pipe prior to UV disinfection and discharge, with reading logged at the same time each day. Daily effluent volume was calculated by converting this data from L/s to m^3/day.

Effluent quality is sampled according to Table 3-1 and Table 3-2. All parameters to which a limit applies are taken from 24-hour composite samples on a weekly basis and used to generate a median for a rolling 12-month period.

Table 3-1 Effluent quality parameter sampling schedule as outlined in condition 7.

Parameter	Unit	Monitoring Frequency	Median limit	92nd percentile limit
$cBOD_5$	mgO/L	Weekly 24h composite	20	35
TSS	mg/L	Weekly 24h composite	35	75
NH_4-N	mg/L	Weekly 24h composite	15	-

Table 3-2 Effluent quality parameter sampling schedule as outlined in condition 8.

Parameter	Unit	Monitoring Frequency
pH	-	Weekly grab sample
Temperature	°C	Weekly grab sample
Conductivity	mS/m	Weekly grab sample
TN	mgN/L	Weekly grab sample
NO_2-N	mgN/L	Weekly grab sample
NO_3-N	mgN/L	Weekly grab sample
Faecal coliforms	cfu/100 mL	Weekly grab sample
Enterococci	MPN/100 mL	Weekly grab sample
TP	mgP/L	Weekly grab sample
DRP	mgP/L	Weekly grab sample
Organics	mg/L	6-monthly
Total oil and grease	mg/L	6-monthly
Heavy metals†	mg/L	6-monthly

Monitoring data for treated wastewater quality, flow and receiving environment parameters were compiled from Watercare's operational monitoring records and laboratory certificates. (Appendix D details specific data tags used in preparing this report). Laboratory analyses were undertaken by IANZ-accredited provider using standard methods for the examination of water and wastewater.

3.2 Data handling and analysis

All data were quality-checked for transcription errors and completeness prior to analysis. For parameters with consent limits expressed as rolling medians or percentiles, results were processed using the following approaches:

- Median values: calculated over a rolling 12-month period using all valid samples.
- 92nd percentiles: calculated annually, based on a rolling 12-month dataset where 11 of 12 monthly values must comply with the stipulated limit.
- UV compliance: assessed as the proportion of 15-minute average SCADA records meeting or exceeding the validated dose requirement. Monthly compliance percentages were calculated to demonstrate performance against the 99% standard.
- Flow compliance: daily inflow and discharge records from calibrated flow meters were processed into daily totals and rolling averages. These were compared with consent thresholds for average dry weather flow (ADWF), peak dry weather flow (PDWF), and peak wet weather flow (PWWF). Rainfall records were also included to illustrate the influence of wet weather on flows (Figure 4-2).

Where relevant, statistical trend analyses (e.g. Kendall's Tau) were applied to long-term monitoring datasets to identify significant changes over time. Data below analytical detection limits were reported as "<DL" and included in summary statistics at half the detection limit, consistent with standard environmental monitoring practice.

All data sources are provided in Appendix D.

3.3 Compliance criteria

This section presents the monitoring results for the reporting year, along with an assessment of compliance with consent limits. Watercare assesses compliance with the consent using the same compliance rating system utilised by the Auckland Council (Table 3-1).

Table 3-3 Compliance assessment criteria

Rating	Detail
Category 1	Watercare has complied with the consent condition. Where a consent condition refers to a provision in a Management Plan, then the plan has been referred to in assessing consent compliance
Category 2	Watercare has not complied with the consent condition. Watercare has assessed the non-compliance as technical or having no more than minor adverse effect
Category 3	Watercare has not complied with the consent condition. Watercare has assessed the non-compliance having the potential to result in a more than minor adverse effects on the environment. Alternatively, since the last audit, there is evidence of repeat Category 2 non-compliance
Category 4	Watercare has not complied with the consent condition. Watercare has assessed the non-compliance as having the potential to cause significant adverse effects on the environment. Alternatively, since the last audit, there is evidence of repeat Category 3 non-compliance

4 RESULTS

4.1 Discharge volumes

The annual average dry weather flow for the 2025–2026 reporting period was 12,525 m^3/day, which was below the consented limit of 13,500 m^3/day. Total daily treated effluent discharge volumes are presented in Figure 4-1. While several peaks exceeded the maximum 39,825 m^3/day dry-weather daily discharge limit shown on the figure, these occurred during wet-weather conditions and are therefore not considered exceedances of the dry-weather limit. Instantaneous discharge flow remained below the 750 L/s peak wet-weather limit throughout the reporting period. Overall, elevated discharge volumes generally corresponded with rainfall events, as shown in Figure 4-2.

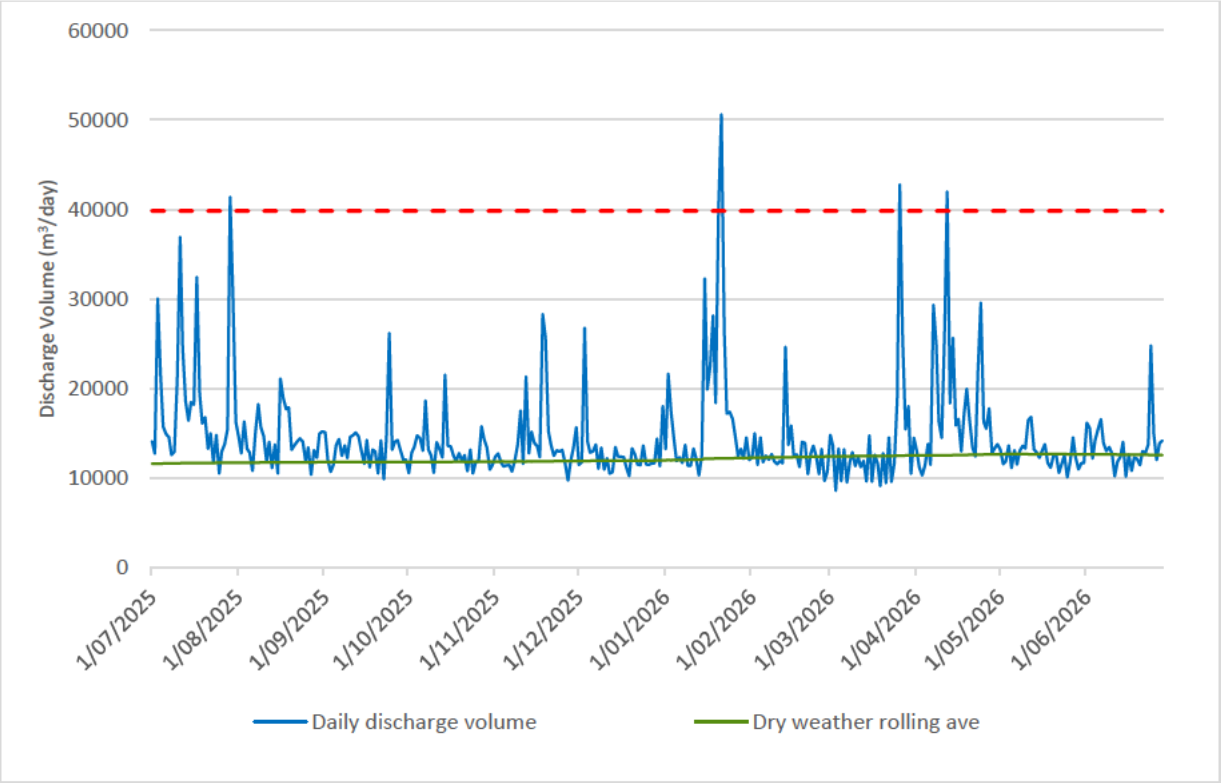

Figure 4-1 Total daily treated effluent discharge volumes for the Army Bay WWTP, for the reporting period July 2025 - June 2026. The red line represents the 39,825 m^3/day limit, the green line represents the dry weather rolling 12-month average.

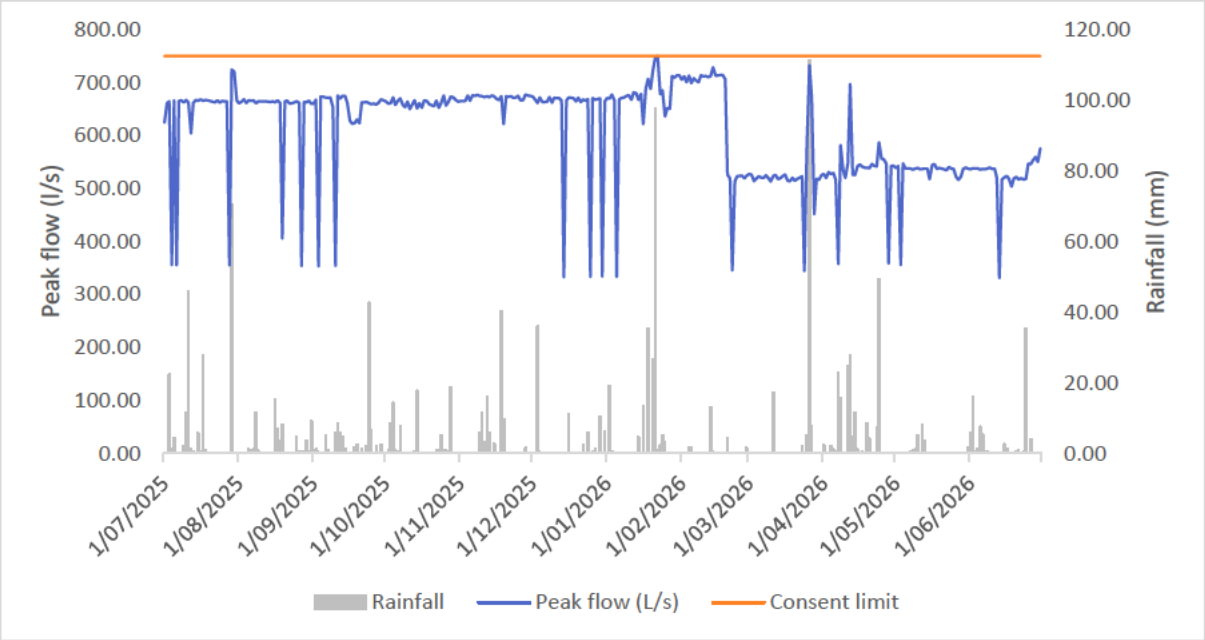

Figure 4-2 Maximum instantaneous discharge flow rates and total daily rainfall for the reporting period July 2025- June 2026. The step change in February 2026 was due to the operations team changing the flush set point from around 700l/s to 500l/s.

4.2 Discharge volume trends

Across the reporting periods, discharge volumes show some association with annual rainfall, with wetter years generally tending to exhibit higher flow volumes (Figure 4-3). However, the relationship is not consistent across all years. For example, the relatively high rainfall recorded during 2023-24 did not correspond to the highest maximum daily discharge volume, while 2024-25 exhibited elevated flow statistics despite lower annual rainfall than 2023-24. This suggests that factors other than annual rainfall totals, such as the timing and intensity of rainfall events, antecedent catchment conditions, inflow and infiltration, and operational influences, also contribute to observed discharge patterns. Over the 5-year period, winter months, particularly June and July, consistently show higher discharge volumes, while historically, January, March and April have generally shown lower discharge volumes compared with the long-term average; however, January 2026 was an exception, with the highest monthly rainfall recorded during the 2025–2026 reporting period and associated elevated flow conditions (Figure 4-4).

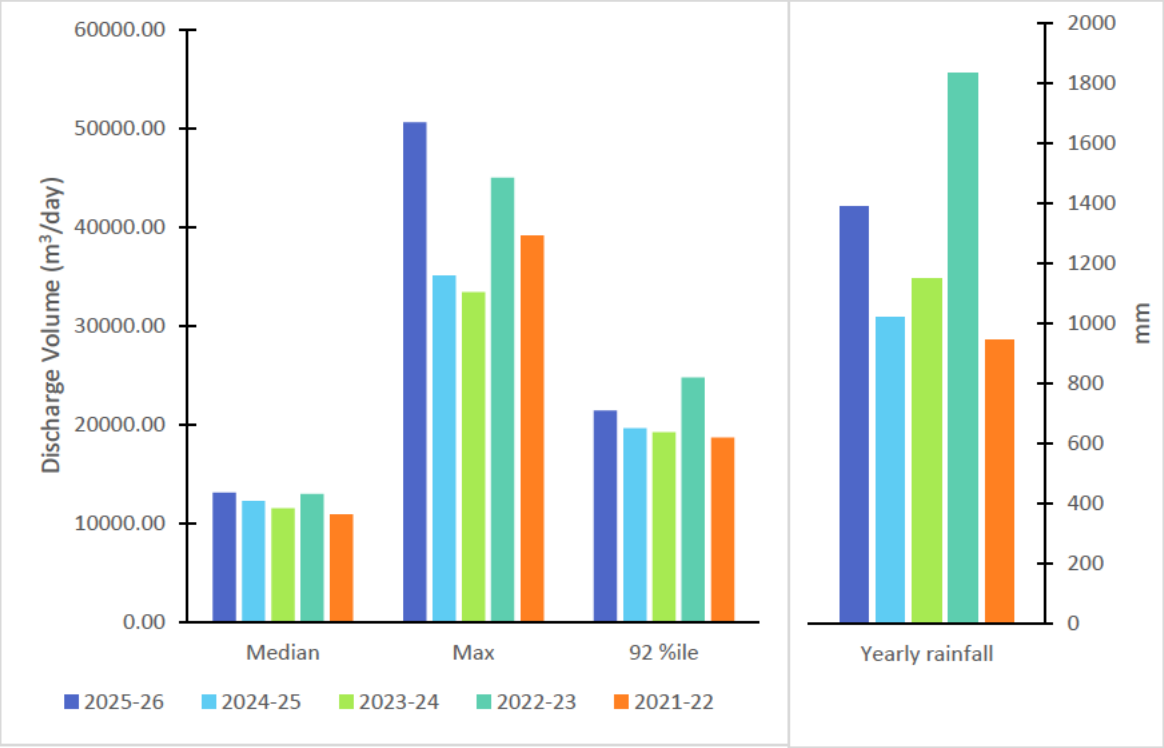

Figure 4-3 Daily flow rate patterns for current and previous reporting periods since 2020 and the total annual rainfall for the six reporting periods.

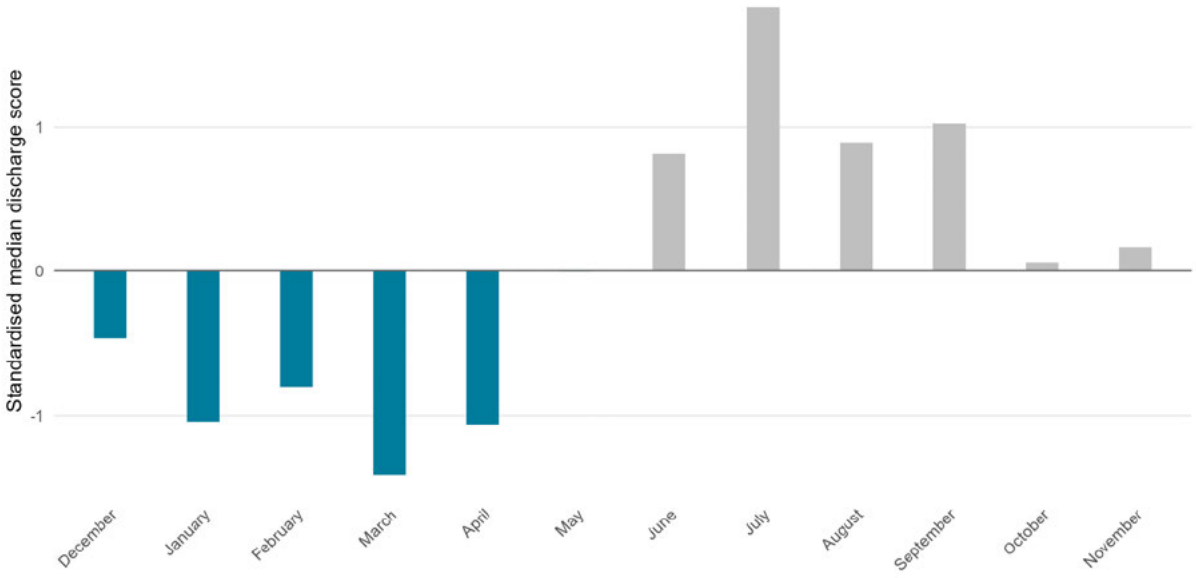

Figure 4-4 Chart presenting standardised scores of the median discharge volumes for each calendar month over the 5-year period. (Scores are calculated using z-scores, indicating deviation from overall average). Blue: below average, grey: above average.

A Kendall Tau analysis of daily effluent flow data (n = 1,825) identified a weak but statistically significant increasing trend over the five-year period ($\tau = 0.107$, $p < 0.001$). However, analysis of monthly median flows (n = 60), which reduces the influence of short-term variability, did not detect a statistically significant trend ($\tau = 0.155$, $p = 0.081$). Overall, the results suggest a weak

increase in effluent flows over time, although the evidence for a sustained long-term trend is not strong when data is aggregated to monthly timescales.

4.3 UV dosing

Currently the Army Bay WWTP has one channel with four UV banks to dose the treated water. This UV disinfection system struggles to meet UV dosing requirements when flow rates are above approximately 550 L/sec. As such, when the wastewater network is surcharging because of high inflows and infiltration during wet weather events or pump station failures, the flow volumes delivered to the WWTP and through the UV channel is too high to allow for the required dosing.

During the 2025-2026 reporting period, the consented requirement of delivering at least 25 mJ/cm^2 for 99% of the time each month was met in four months of the year. As presented in Table 4-2, monthly compliance ranged from 88.9% to 100%, with eight months below the 99% requirement. The lowest compliance occurred in January 2026, when the required UV dose was achieved for 88.9% of the time (January 2026 was notably the wettest month for the 2025-2026 reporting period, with a total of 269.6mm). The WWTP was therefore non-compliant with condition 6c for those eight months.

Due to the limitations of the current UV disinfection system and the resulting non-compliance, the upgrade works to the UV disinfection system has been prioritised with works scheduled to begin in this summer (December 2026). The first project involves installing two new UV banks, which will occur in early-mid 2027, followed by an additional UV channel with six banks being completed in late 2027. This will more than double the UV dosing capacity and reduce further non-compliance in the future.

The most recent completed receiving environment assessment did not identify evidence of environmental effects attributable to the discharge. Refer to Section 4.8 for a summary of receiving environment monitoring information. The 2025-2026 REMP is provided alongside this annual report and provides the current reporting-year assessment.

Table 4-1 Monthly average applied UV dose above 25 mJ/cm^2 for the reporting period July 2025 - June 2026

Month	UV Dose (%)
Jul-25	93.4
Aug-25	99.9
Sept-25	99.8
Oct-25	94.7
Nov-25	98.1
Dec-25	98.8
Jan-26	88.9
Feb-26	97.5
Mar-26	100
Apr-26	94.1
May-26	99.8
Jun-26	98.1

4.4 Treated wastewater discharge quality

The treated wastewater quality results sampled each week during the 2025-2026 reporting period are summarised in Table 4-3, along with rolling 12-month median and 92nd percentile values calculated using the current reporting period and relevant preceding data. The rolling median and 92nd percentile ranges for $cBOD_5$ and total suspended solids remained well below their respective consent limits, and ammonia medians also remained below the consented median limit. These results indicate the plant continued to perform well in treating effluent for the consented quality parameters, despite the separate limitations with the current UV dosing system.

Table 4-2 Summary of effluent quality results for cBOD5, ammonia and total suspended solids, presenting range in calculated rolling 12-month median and 92nd percentile values for the 2025-2026 reporting period, compared to the corresponding consented limit

Parameter	n	Median range	Consent limit Median	92nd %tile range	Consent limit 92nd %tile
cBOD5 (mg O2/L)	51.00	1.60-2.65	20.00	5.23-7.68	35.00
Ammonia (mg/L)	53.00	1.30-2.70	15.00	-	-
TSS (mg/L)	48.00	2.40-4.00	35.00	8.30-12.68	75.00

4.5 Trace metals and additional parameters

In accordance with Condition 8, a suite of trace metals (arsenic, cadmium, copper, chromium, lead, zinc, nickel and mercury), additional nutrient parameters (nitrate, nitrite, total nitrogen, total phosphorous and dissolved reactive phosphorus), bacterial indicators, organic compounds and also total oil and grease are monitored at the discharge point.

The consent does not impose specific compliance limits for these parameters, but it does require ongoing monitoring to track trends and ensure that any potential accumulation of contaminants is detected.

Trace metals monitoring results for the 2025-2026 reporting period showed very low concentrations for the metals summarised in Table 4-4, with reported maximums at or near analytical detection limits where results are shown. Nutrient results were generally lower than the previous reporting period, with nitrite, nitrate, total nitrogen, dissolved reactive phosphorus and total phosphorus showing lower median and 92nd percentile values. Temperature median values increased, while the 92nd percentile was lower than the previous reporting period. Bacterial indicator results were low for much of the year, but elevated peaks were recorded, particularly for enterococci and faecal coliforms. These elevated results indicate intermittent reduced disinfection performance; the current monthly UV compliance table shows UV non-compliance in several months, but the timing of individual bacterial peaks should be interpreted against daily UV performance records rather than monthly compliance percentages alone.

Organic compounds and oil and grease monitoring is conducted once in summer and again in winter. The results reported in Appendix A were very low overall, with most results below analytical detection limits.

All treated effluent quality results are provided in Appendix A.

Table 4-3 Summary of Army Bay WWTP treated effluent quality for the 2025-2026 reporting period, arrows indicate change from 2024-2025 reporting period based on median and 92nd %ile values

Parameters	Unit	n	Median	Min	92nd %ile	Max
Physicochemistry						
Temperature	˚C	53	20.8 ↑	17.10	23.768 ↓	24.70
pH	-	52	6.80	6.50	7.10	7.40
Nutrients						
Nitrite	mg N/L	53	0.11 ↓	0.02	0.644 ↓	0.72
Nitrate	mg N/L	53	9.94 ↓	6.47	14.6 ↓	16
Total N	mg N/L	52	15.0 ↓	9.2	18.0 ↓	21.0
DRP	mg P/L	53	3.370 ↓	0.378	5.752 ↓	6.820
Total P	mg P/L	53	3.580 ↓	0.542	6.371 ↓	8.470
Bacterial indicators						
Enterococci	cfu/100 mL	46	38 ↑	<1.6	5,120 ↑	32,000
Faecal coliforms*	cfu/100 mL	51	160 ↑	<1.6	28,000 ↑	130,000
Heavy metals (total)						
Arsenic	µg/L	2				0.0021
Cadmium	µg/L	2				<0.00005
Lead	µg/L	2				0.00028
Mercury	µg/L	2				<0.00005

4.6 Air quality

The six-monthly odour reports did not record any distinct or strong odours, with only very weak or weak odours detected at the grit bin on both monitoring occasions, and at the biofilter, centrifuge room and sludge tanks recording on one of the two monitoring occasions. Copies of the odour reports can be found in Appendix C.

4.7 Complaints

No complaints were reported against the Army Bay WWTP during the reporting period.

4.8 Receiving environmental monitoring

Receiving environment monitoring for the 2025–2026 reporting year indicated that water quality was generally similar across monitoring locations, with no evidence of seasonal nutrient enrichment or increased primary production attributable to the outfall. A statistically significant difference in pH was detected between monitoring sites N1000 and S2000; however, the difference was small and unlikely to indicate an ecologically meaningful effect. Longer-term analysis identified localised nutrient patterns near the outfall, particularly for nitrate, although results were variable and overlapped among inner effects, outer effects and reference sites (refer to the REMP report for details of names and locations). Shellfish microbiology and heavy metal results did not indicate effects associated with proximity to the WWTP outfall, with *E. coli* concentrations and inorganic arsenic, cadmium, lead and mercury concentrations below relevant food safety guideline values.

5 CONCLUSION

The Army Bay WWTP generally maintained effective treatment performance during the 2025–2026 reporting period, with treated wastewater quality remaining within the applicable consent limits for $cBOD_5$, ammoniacal nitrogen and total suspended solids. The calculated annual average dry weather flow also remained below the consented limit of 13,500 m^3/day.

The main non-compliances during the reporting period related to UV performance. The monthly UV performance requirement was not achieved in eight months, with performance declining during periods of elevated flow. Several peaks in total daily treated wastewater discharge volume exceeded the 39,825 m^3/day dry-weather daily discharge limit shown in Figure 4-1; however, these occurred during wet-weather conditions and are therefore not considered exceedances of the dry-weather limit. Instantaneous discharge flow remained below the 750 L/s peak wet-weather limit throughout the reporting period. These results highlight the influence of wet-weather inflow and infiltration on the hydraulic loading and disinfection performance of the existing plant.

Receiving environment monitoring identified a localised nutrient signal near the outfall, particularly for nitrate and dissolved reactive phosphorus. However, monitoring did not identify evidence of eutrophication or seasonal nutrient accumulation attributable to the discharge. Shellfish microbiological and heavy-metal results also did not indicate a spatial pattern consistent with contamination from the Army Bay outfall.

Overall compliance for the reporting period was assessed as Category 2, reflecting the UV non-compliances associated with limitations in the existing disinfection system during elevated flow conditions. The wet-weather discharge volume peaks identified in Figure 4-1 are not considered exceedances of the dry-weather limit. Available environmental monitoring indicates that the identified non-compliances resulted in no more than minor environmental effects. The planned increase in UV treatment capacity, together with continued monitoring of wet-weather flows and receiving environment conditions, will be important to reducing the risk of recurrence and maintaining compliance as flows to the plant increase.

Appendix A. Effluent quality summary

Weekly discharge quality sampling conducted during the 2025-2026 reporting period (<DL = below detection limit)

Date	Conductivity (mS/m 25°C)	Enterococci (cfu/100 mL)	F. Coliforms (cfu/100 mL)	Nitrate (mg/L)	Nitrite (mg/L)	DRP (mg P/L)	pH	Temp (°C)	Total N (mg/L)	Total P (mg/L)	Salinity (ppt)
1/07/2025	56.6	13	170	14.60	0.24	4.85	6.7	17.1	18	5.35	0.3
8/07/2025	49.3	1.6	20	10.60	0.18	2.30	6.6	17.9	14	2.58	0.2
15/07/2025	56.9	42	670	6.47	0.66	2.82	7.1	17.5	21	3.57	0.3
22/07/2025	54.3	500	1400	13.30	0.56	3.00	6.8	17.2	15	3.09	0.3
29/07/2025	54.9	68	130	15.00	0.23	4.99	6.5	17.9	18	5.4	0.3
5/08/2025	46.5	8.2	84	9.81	0.08	1.87	6.8	18.1	12	2.12	0.2
12/08/2025	57.5	11000	28000	7.78	0.36	3.14	7	18.3	17	3.5	0.3
19/08/2025	58.7	850	2100	9.45	0.18	3.37	6.8	17.9	14	3.56	0.3
26/08/2025	58.1	6800	34000	8.49	<DL	3.47	6.9	17.9	17	4.13	0.3
2/09/2025	56.2	300	450	8.48	0.1	3.05	6.8	18.3	14	3.69	0.5
9/09/2025	54.3	220	9	8.43	<DL	3.61	6.9	18.3	13	4.63	0.3
16/09/2025	56.5	1.6	4.9	9.07	<DL	3.01	6.9	17.9	13	3.45	0.8
23/09/2025	56.6	<DL	1.6	10.90	<DL	3.69	6.8	17.9	13	3.69	0.3
30/09/2025	50.8	<DL	<DL 0	8.50	<DL	3.58	7.3	18.4	10	3.58	0.3
7/10/2025	53.6	<DL	3.3	8.73	<DL	5.12	6.9	18.4	10	6.22	0.5
14/10/2025	50.5	<DL	9.8	8.23	<DL	3.98	7	22.7	9.4	4.8	0.2
21/10/2025	50.3	74	170	7.54	0.1	4.53	6.9	22.8	9.7	5.27	0.2
28/10/2025	53.4	36	160	9.92	0.05	5.08	7.3	22.8	13	6.09	0.3
4/11/2025	58.6	32000	130000	9.04	0.7	6.82	6.9	22.9	18	8.47	0.3
11/11/2025	54.4	40	200	9.44	0.13	6.32	6.8	24	12	6.48	0.3
18/11/2025	51.7	36	82	7.87	0.18	4.59	6.8	24.3	11	5.07	0.3
25/11/2025	52.6	<DL	11	7.54	0.03	3.23	6.9	24.7	9.2	3.35	0.3
2/12/2025	57.5	<DL	9.8	8.84	0.03	5.97	7.1	23.8	11	6.4	0.3
9/12/2025	51.5	<DL	4.9	7.51	0.02	2.01	7	24.1	10	2.14	0.2
16/12/2025	63.2	4000	89000	9.94	0.69	3.23	7.4	23.1	15	3.53	0.3

Date	Conductivity (mS/m 25°C)	Enterococci (cfu/100 mL)	F. Coliforms (cfu/100 mL)	Nitrate (mg/L)	Nitrite (mg/L)	DRP (mg P/L)	pH	Temp (°C)	Total N (mg/L)	Total P (mg/L)	Salinity (ppt)
23/12/2025	58.4	31	360	12.4	0.5	2.100	6.5	23.1	14	2.10	0.3
30/12/2025	56.6	18	200	12.00	0.07	1.390	6.8	23.3	18	2.96	0.3
6/01/2026	54.0	460	6300	9.70	0.2	0.936	6.7	21.3	15	1.16	0.3
13/01/2026	63.3	21	180	13.70	0.14	2.240	6.5	23.6	17	2.27	0.3
20/01/2026	45.4	<DL	20	6.50	0.05	0.378	6.6	21.3	9.7	0.542	0.2
27/01/2026	54.1	76	7600	8.55	0.31	0.718	7.0	21.3	12	1.21	0.3
3/02/2026	54.2	<DL	3.3	11.70	0.09	1.080	6.8	21.9	14	1.08	0.3
10/02/2026	58.0	88	670	13.00	0.34	2.410	7.2	21.6	15	2.73	0.3
17/02/2026	53.7	1.6	88	9.93	0.09	2.330	6.6	22.9	18	2.48	0.3
24/02/2026	66.1	<DL	58	11.50	0.36	1.890	6.6	22.9	17	2.28	0.3
3/03/2026	54.8	<DL	16	11.40	0.08	0.804	6.8	21.7	16	0.96	0.3
10/03/2026	57.6	530	7400	11.10	0.44	1.600	6.8	21.1	15	2	0.3
17/03/2026	57.7	3000	28000	9.36	0.39	1.100	6.8	21.3	15	1.5	0.3
24/03/2026	57.9	200	700	10.70	0.69	2.100	6.8	20.8	15	2.3	0.3
31/03/2026	42.1	1.6	16	7.38	0.15	1.200	6.7	20.8	11	1.4	0.2
7/04/2026	56.2	2100	13000	10.50	0.49	5.500	6.9	20.8	16	6.1	0.3
14/04/2026	55.2	7000	20000	8.76	0.72	4.500	7.0	19.7	12	5	0.3
21/04/2026	52.4	44	620	11.00	0.34	4.200	6.9	19.4	15	4.5	0.3
28/04/2026	49.8	13	44	12.50	0.1	4.300	6.8	19.1	14	4.5	0.3
5/05/2026	53.9	48	260	14.00	0.21	4.600	6.8	20.8	17	5.4	0.3
12/05/2026	50.3	3.3	54	15.30	0.11	5.100	6.6	18.1	18	5.3	0.3
19/05/2026	49.9	26	94	14.60	0.08	4.100	6.6	18.0	16	4.6	0.2
26/05/2026	53.8	82	260	13.80	0.09	5.500	6.6	17.6	19	6.4	0.3
2/06/2026	53.4	200	500	13.40	0.11	6.000	6.7	17.4	18	6.5	0.3
9/06/2026	53.6	<DL	3.3	12.30	0.11	4.600	6.9	18.1	17	5.2	0.3
16/06/2026	54.0	3.3	13	16.00	0.06	5.100	6.6	18.1	18	4.9	0.3
23/06/2026	55.3	21	23	14.90	0.04	5.800	6.7	18.2	17	5.6	0.3

Date	Conductivity (mS/m 25°C)	Enterococci (cfu/100 mL)	F. Coliforms (cfu/100 mL)	Nitrate (mg/L)	Nitrite (mg/L)	DRP (mg P/L)	pH	Temp (°C)	Total N (mg/L)	Total P (mg/L)	Salinity (ppt)
30/06/2026	50.8	3.3	11	10.90	0.04	3.300	6.8	18.1	12	3.4	0.2

Effluent quality results for cBOD5, ammonia and total suspended solids with calculated rolling 12-month median and 92nd percentile values for the 2025-2026 reporting period

Date	$cBOD_5$ (mg O_2/L)	$cBOD_5$ Rolling median	$cBOD_5$ 92 %ile	Ammonia (mg/L)	Ammonia Rolling median	Ammonia 92 %ile	TSS (mg/L)	TSS Rolling median	TSS 92 %ile
1/07/2025	0.91	1.85	7.45	1.40	2.70	5.74	1.00	3.40	12.68
8/07/2025	0.72	1.80	7.45	1.20	2.40	*5.74*	1.00	3.20	12.68
15/07/2025	7.70	1.80	7.68	8.20	2.40	*5.88*	22.60	3.20	12.68
22/07/2025	2.60	1.80	7.45	0.54	2.30	*5.88*	3.00	3.20	10.71
29/07/2025	2.80	1.80	7.45	1.20	2.30	*5.88*	5.20	3.20	10.71
5/08/2025	3.20	1.85	7.45	1.10	2.20	*5.88*	7.80	3.20	10.71
12/08/2025	2.80	1.95	7.45	5.60	2.20	*5.88*	10.00	3.20	10.84
19/08/2025	1.80	1.95	7.45	3.60	2.20	*5.88*	1.00	3.00	10.84
26/08/2025	6.20	1.95	7.45	4.60	2.20	*5.88*	8.40	3.00	9.74
2/09/2025	0.95	1.90	7.45	2.30	2.20	*5.88*	2.00	3.00	9.74
9/09/2025	0.75	1.80	6.84	2.20	2.20	*5.88*	0.00	2.80	8.40
16/09/2025	0.76	1.80	6.84	1.10	2.10	*5.88*	3.40	3.00	8.40
23/09/2025	1.30	1.80	6.84	0.91	2.00	*5.88*	0.00	2.80	8.40
30/09/2025	0.89	1.75	6.84	0.14	2.00	*5.88*	0.00	2.40	8.30
7/10/2025	0.73	1.70	6.12	0.41	1.70	*5.77*	0.00	2.40	8.30
14/10/2025	1.00	1.60	6.12	0.15	1.60	*5.54*	7.80	2.40	8.30
21/10/2025	3.10	1.60	6.12	1.40	1.50	*5.10*	7.80	2.40	8.30
28/10/2025	5.30	1.60	6.13	1.60	1.50	*4.57*	0.00	2.40	8.30
4/11/2025	4.00	1.60	5.29	4.20	1.50	*4.40*	11.00	2.40	8.30
11/11/2025	2.70	1.70	5.29	0.75	1.40	*4.40*	7.60	2.40	8.30
18/11/2025	2.90	1.75	5.29	1.90	1.40	*4.40*	0.00	2.40	8.30
25/11/2025	1.90	1.75	5.23	1.70	1.40	*4.37*	3.00	2.40	8.30
2/12/2025	5.70	1.75	5.67	1.30	1.40	*4.37*	1.20	2.40	8.30
9/12/2025	0.64	1.70	5.67	1.20	1.40	*4.37*	2.00	2.40	8.30
16/12/2025	5.50	1.70	5.68	0.79	1.30	*4.10*	5.80	2.40	8.30
23/12/2025	3.80	1.75	5.68	0.16	1.30	*3.58*	4.80	2.80	8.30
30/12/2025	1.70	1.75	5.68	2.80	1.30	*3.58*	4.80	3.00	8.30
6/01/2026	8.30	1.80	6.16	2.10	1.30	*3.58*	8.80	3.00	8.74
13/01/2026	0.70	1.75	5.68	1.60	1.30	*3.57*	2.60	3.00	8.74
20/01/2026	<0.5	1.80	5.70	0.84	1.30	*3.57*	<1.0	2.90	8.77
27/01/2026	5.60	1.80	5.70	1.30	1.30	*3.57*	17.00	2.90	9.90
3/02/2026	0.86	1.70	5.70	0.15	1.30	*3.57*	<1.0	2.80	10.00
10/02/2026	0.76	1.70	5.70	1.10	1.30	*3.57*		2.90	10.08
17/02/2026	0.77	1.70	5.70	5.00	1.30	*4.10*	<1.0	3.00	10.16
24/02/2026	3.50	1.70	5.70	4.70	1.30	*4.54*	<1.0	2.90	10.24
3/03/2026	-	1.75	5.74	3.30	1.30	*4.54*	2.00	2.70	10.24
10/03/2026	4.20	1.80	5.74	2.80	1.30	*4.54*	6.60	2.70	10.24
17/03/2026	3.20	1.80	5.74	3.30	1.40	*4.54*	12.00	2.80	11.24
24/03/2026	1.20	1.80	5.74	2.60	1.40	*4.54*	7.40	3.00	11.24
31/03/2026	2.50	1.85	5.74	1.80	1.40	*4.54*	3.60	3.10	11.24
7/04/2026	7.20	1.95	6.28	3.40	1.50	*4.54*	2.20	3.10	11.24

Date	cBOD$_5$ (mg O_2/L)	cBOD$_5$ Rolling median	cBOD$_5$ 92 %ile	Ammonia (mg/L)	Ammonia Rolling median	Ammonia 92 %ile	TSS (mg/L)	TSS Rolling median	TSS 92 %ile
14/04/2026	3.00	2.25	6.28	3.30	1.60	*4.54*	3.60	3.20	11.24
21/04/2026	1.20	1.95	6.28	2.60	1.60	*4.54*	8.60	3.20	11.24
28/04/2026	7.20	2.25	7.20	0.28	1.60	*4.54*	5.20	3.50	11.24
5/05/2026	1.90	2.25	7.20	1.70	1.60	*4.54*	1.00	3.20	11.24
12/05/2026	1.10	2.25	7.20	0.32	1.60	*4.54*	4.80	3.50	11.24
19/05/2026	3.80	2.55	7.20	0.22	1.60	*4.54*	1.20	3.50	11.24
26/05/2026	1.70	2.25	7.20	0.26	1.60	*4.54*	3.80	3.60	11.24
2/06/2026	4.90	2.55	7.20	6.70	1.60	*4.68*	13.00	3.70	12.24
9/06/2026	3.20	2.65	7.20	1.50	1.60	*4.68*	2.40	3.70	12.24
16/06/2026	1.90	2.55	6.28	0.49	1.60	*4.68*	4.20	3.70	11.24
23/06/2026	1.10	2.55	6.28	0.45	1.50	*4.68*	16.00	4.00	12.24
30/06/2026	1.30	2.50	6.20	0.08	1.40	*4.68*	3.60	3.70	12.24

Annual trace metal results from the 2025-2026 reporting period

Metals in mg/L	Summer values	Winter values
Arsenic (Dissolved)	0.001	0.00091
Arsenic (Total)	0.0011	0.0021
Cadmium (Dissolved)	<0.00005	<0.00005
Cadmium (Total)	<0.00005	<0.00005
Chromium (Dissolved)	0.00089	0.00077
Chromium (Total)	0.001	0.002
Copper (Dissolved)	0.00089	0.0019
Copper (Total)	0.0015	0.0051
Lead (Dissolved)	<0.0001	<0.0001
Lead (Total)	<0.0001	0.00028
Mercury (Dissolved)	<0.00005	<0.00005
Mercury (Total)	<0.00005	<0.00005
Nickel (Dissolved)	0.0026	0.0017
Nickel (Total)	0.0029	0.002
Zinc (Dissolved)	0.03	0.037
Zinc (Total)	0.034	0.04

Bi-annual discharge quality results for organic compounds and oil and grease for the 2025-2026 reporting period

Parameter	Summer	Winter
trans-permethrin, Trace level	<0.0002	<0.0002
Pyrene	<0.00002	<0.00002
Phenanthrene	<0.00002	<0.00002
Oil and grease	<5.0	<5.0
Naphthalene	<0.00002	<0.00002
Methoxychlor, Trace level	<0.0002	<0.0002
Lindane (BHC gamma), Trace level	<0.00004	<0.00004

Parameter	Summer	Winter
Indeno(1,2,3, c,d) pyrene	<0.00002	<0.00002
Heptachlor, Trace level	<0.00004	<0.00004
Heptachlor epoxide, Trace level	<0.00004	<0.00004
Gamma-chlordane, Trace level	<0.00004	<0.00004
Fluorene	<0.00002	<0.00002
Fluoranthene	<0.00002	<0.00002
Endrin, Trace level	<0.00004	<0.00004
Endrin aldehyde, Trace level	<0.00004	<0.00004
Endosulfan sulfate, Trace level	<0.00004	<0.00004
Endosulfan II, Trace level	<0.00004	<0.00004
Endosulfan I, Trace level	<0.00004	<0.00004
Dieldrin, Trace level	<0.00004	<0.00004
Dibenzo(ah)anthracene	<0.00002	<0.00002
cis-permethrin, Trace level	<0.0002	<0.0002
Chrysene	<0.00002	<0.00002
BHC delta, Trace level	<0.00004	<0.00004
BHC beta, Trace level	<0.00004	<0.00004
BHC alpha, Trace level	<0.00004	<0.00004
Benzo(k)fluoranthene	<0.00003	<0.00003
Benzo(ghi)perylene	<0.00002	<0.00002
Benzo(b)fluoranthene	<0.00002	<0.00002
Benzo(a)pyrene	<0.00005	<0.00005
Benzo(a)anthracene	<0.00002	<0.00002
BAP Equivalent	<0.00008	<0.00008
Anthracene	<0.00002	<0.00002
Alpha-Chlordane, Trace level	<0.00004	<0.00004
Aldrin, Trace level	<0.00004	<0.00004
Acenaphthylene	<0.00002	<0.00002
Acenaphthene	<0.00002	<0.00002
4,4'-DDT, Trace level	<0.00004	<0.00004
4,4'-DDE, Trace level	<0.00004	<0.00004
4,4'-DDD, Trace level	<0.00004	<0.00004
3,4,4',5-Tetrachlorobiphenyl PCB81	<1.0	<1.0
3,3',4,4'-Tetrachlorobiphenyl PCB77	<1.0	<1.0
3,3',4,4',5-Pentachlorobiphenyl PCB126	<1.0	<1.0
3,3',4,4',5,5'-Hexachlorobiphenyl PCB169	<1.0	<1.0
2,4,6-Trichlorobiphenyl PCB30	<1.0	<1.0
2,4,4'-Trichlorobiphenyl & 2,4',5-Trichlorobiphenyl PCB28 & PCB31	<2.0	<2.0
2,3',4,5',6-Pentachlorobiphenyl PCB121	<1.0	<1.0
2,3,4,4'-Tetrachlorobiphenyl PCB60	<1.0	<1.0
2,3',4,4',5'-Pentachlorobiphenyl PCB123	<1.0	<1.0
2,3',4,4',5-Pentachlorobiphenyl PCB118	<1.0	<1.0
2,3,4,4',5-Pentachlorobiphenyl PCB114	<1.0	<1.0
2,3',4,4',5,5'-Hexachlorobiphenyl PCB167	<1.0	<1.0
2,3,3',4',6-Pentachlorobiphenyl PCB110	<1.0	<1.0

Parameter	Summer	Winter
2,3,3',4,5,5'-Hexachlorobiphenyl PCB159	<1.0	<1.0
2,3,3',4,4'-Pentachlorobiphenyl PCB105	<1.0	<1.0
2,3,3',4,4',5'-Hexachlorobiphenyl PCB157	<1.0	<1.0
2,3,3',4,4',5-Hexachlorobiphenyl PCB156	<1.0	<1.0
2,3,3',4,4',5,5'-Heptachlorobiphenyl PCB189	<1.0	<1.0
2,2',5,5'-Tetrachlorobiphenyl PCB52	<1.0	<1.0
2,2',4,5'-Tetrachlorobiphenyl PCB49	<1.0	<1.0
2,2',4,5,5'-Pentachlorobiphenyl PCB101	<1.0	<1.0
2,2',4,4',5,5'-Hexachlorobiphenyl PCB153	<1.0	<1.0
2,2',3,5'-Tetrachlorobiphenyl PCB44	<1.0	<1.0
2,2',3,5,5',6-Hexachlorobiphenyl PCB151	<1.0	<1.0
2,2',3,4,5-Pentachlorobiphenyl PCB86	<1.0	<1.0
2,2',3,4',5',6-Hexachlorobiphenyl PCB149	<1.0	<1.0
2,2',3,4,5,5'-Hexachlorobiphenyl PCB141	<1.0	<1.0
2,2',3,4,4',5'-Hexachlorobiphenyl PCB138	<1.0	<1.0
2,2',3,4,4',5,5'-Heptachlorobiphenyl PCB180	<1.0	<1.0
2,2',3,3',4,4'-Hexachlorobiphenyl PCB128	<1.0	<1.0
2,2',3,3',4,4',5-Heptachlorobiphenyl PCB170	<1.0	<1.0
2,2',3,3',4,4',5,5'-Octachlorobiphenyl PCB194	<1.0	<1.0
2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl PCB206	<1.0	<1.0

Appendix B. Compliance Commentary

Condition Number	Consent condition Army Bay Discharge to air (#DIS60331113) and water (DIS60331146)	Compliance Rating	Comments
1	The activities shall be carried out in accordance with the plans and information submitted with the application, detailed below, and all material referenced by the Council as consent numbers DIS60331146 (Wastewater discharge permit), DIS60331113 (Air Discharge Permit) and LUC60331145 (Land use Consent).	1	
2	The Consent Holder shall ensure that all staff and contractors undertaking works on site are aware of, and adhere to, all conditions of this consent.	1	
3	The agents of the Auckland Council shall be permitted to have access to the Wastewater Treatment Plant and discharge facilities at all reasonable times for the purpose of carrying out monitoring procedures, inspections, surveys, investigations, tests, measurements or take samples while adhering to the Consent Holder's health and safety policies.	1	
4	Discharge permits DIS6031146 and DIS60331113 shall expire 35 years from the date of commencement, unless they have lapsed, been surrendered or been cancelled at an earlier date pursuant to the Resource Management Act 1991.	1	
5	Within one month of the completion of the each of the staged upgrades to the Army Bay Wastewater Treatment Plant (WWTP) identified in Condition 9(a), (c) and (e), or of any interim works required to meet treated wastewater quality requirements in this consent, the Consent Holder shall notify Auckland Council in writing that the works are completed and shall provide 'as-built certification' from a suitably qualified engineer that the WWTP upgrades have been installed and are operating in accordance with industry standard and meeting the relevant discharge limits.	1	

Condition Number	Consent condition Army Bay Discharge to air (#DIS60331113) and water (DIS60331146)	Compliance Rating	Comments
6	From the date of the commencement of this consent, the requirements of this condition, and Conditions 7 and 8 below, apply to the ongoing operation of the existing Army Bay Wastewater Treatment Plant (WWTP) until the Army Bay WWTP - Stage 1 upgrade has been commissioned, but in any event for no longer than 11 years from commencement of this consent until 31 December 2030: (a) Annual average dry weather flow shall not exceed 13,500 m3 per day., and (b) The maximum daily treated wastewater discharge volume from the Wastewater Treatment Plant to the coastal marine area shall not exceed a maximum daily discharge of 39,825 m3 per day (at peak dry weather flow), and a maximum instantaneous flow of 750 L/s (at peak wet-weather flow). (c) The Consent Holder shall ensure that a validated (in accordance with USEPA UV Disinfection Guidance Manual 2006 or another suitable method as approved by Auckland Council) Ultraviolet (UV) dose of 25 mJ/cm2 is delivered by the UV disinfection facility for 99% of the time (calculated based on a 15-minute average) over each calendar month.	2	Condition 6(c) not compliant for eight out of twelve months
7	Treated wastewater discharges from the existing Army Bay Wastewater Treatment Plant shall be equal to or less than the limit specified for that parameter as set out in Table 1 below. The collection of treated wastewater samples shall occur weekly (using a 24-hour composite sample) and take place following treatment and prior to discharging to the outfall pipeline.	1	
8	Further to those parameters identified in Table 1, the Consent Holder shall also undertake discharge quality monitoring prior to discharging to the outfall pipeline for the parameters identified in Table 2 below.	1	
9	Terms (a) to (f) in this condition, and conditions 10 and 11, below apply to the long- term operation of the Army Bay WWTP following the staged upgrades to the WWTP (using SBR with inDENSE+miGRATE, MBR, or other compatible treatment processes): (a) Prior to the Average Dry Weather Flows into the Army Bay Wastewater Treatment Plant (WWTP) reaching 13,500 m3 per day, the Consent Holder shall commission sufficient upgrades at the Army Bay WWTP to meet the Stage 1 discharge quality standards outlined in Table 3 below; (b) Under the Stage 1 operations, the discharge volume from the wastewater treatment system to the coastal marine area shall not exceed the flow rates outlined in Table 4 below.	NA	Upgrade stage 1 not completed
10	Treated wastewater discharges from the each of the staged upgrades to the Army Bay Wastewater Treatment Plant shall be equal to or less than the limit specified for that parameter as set out in Table 3. The collection of treated wastewater samples shall occur weekly and take place following Ultraviolet treatment and prior to discharge to the outfall pipeline.	NA	Upgrade stage 1 not completed

Condition Number	Consent condition Army Bay Discharge to air (#DIS60331113) and water (DIS60331146)	Compliance Rating	Comments
11	Further to those parameters identified in Table 3, the Consent Holder shall also undertake discharge quality monitoring prior to discharging to the outfall pipeline for the parameters identified in Table 5 below.	NA	Upgrade stage 1 not completed
12	Following the implementation of the Stage 1 upgrades, the Consent Holder shall: a. Ensure that a validated (in accordance with USEPA UV Disinfection Guidance Manual 2006 or another suitable method as approved by Auckland Council) Ultraviolet (UV) dose of 35 mJ/cm2 is delivered by the UV disinfection facility for 99% of the time (calculated based on a 15-minute average) over each calendar month. b. The UV plant shall be operated with a minimum of three banks at all times, or in accordance with Condition 12(a) of the consent, whichever requirement is more stringent. c. If the hourly average UV transmissivity (UVt) falls below 40% , or the instantaneous flow exceeds 750 L/s, the UV plant must be operated with a minimum of five UV banks in each channel at full power output (i.e., greater than 98%).	NA	Upgrade stage 1 not completed
12A	If a MBR treatment system is installed at any Stages, the Consent Holder must: a. At 15 minutes intervals, measure the turbidity of the treated wastewater discharged from the MBR treatment train prior to entering the UV treatment. The MBR Turbidity monitoring shall demonstrate compliance with the following turbidity limits: Median - 0.5 Nephelometric Turbidity Unit (NTU) 92nd percentile – 1 NTU Compliance with the limits shall be determined on the following basis: 1. The median limit shall be determined on a daily basis based on a rolling 12-month period of the turbidity values recorded at 15-minute intervals. 2. The 92nd percentile shall be calculated on a monthly basis, using a rolling 12-month period, of the turbidity values recorded at 15-minute intervals. If the median of the turbidity records over two consecutive days exceeds 1 NTU, the Consent Holder shall investigate the cause of the elevated turbidity and rectify any issue identified, as soon as practicable. b. Keep a written record (electronic is acceptable) of the MBR turbidity monitoring by Condition 12(b), including any exceedances, investigations and subsequent works undertaken to rectify any breakdowns. This record shall be provided to the Council as part of the Annual Report required by Condition 36.		N/A – MBR treatment system not installed

Condition Number	Consent condition Army Bay Discharge to air (#DIS60331113) and water (DIS60331146)	Compliance Rating	Comments
13	The Consent Holder shall ensure that all chemical analyses and sampling techniques are carried out in accordance with the latest edition of "Standard Methods for the Examination of Water and Wastewater", APHA AWWA WEF, or other standards approved in writing by the Auckland Council. All wastewater quality analyses shall be undertaken by an IANZ accredited or equivalent laboratory.	1	
14	The Consent Holder shall advise the Auckland Council in writing immediately if problems are detected in association with the exercise of this consent that could pose an environmental risk by affecting discharge quality and shall outline a schedule of action to remedy issues. If the 92nd percentile limit is exceeded in any single sample for any analyte shown in Tables 1 and 3 above, an additional composite sample shall be collected and tested for the analyte within 5 working days of receipt of the laboratory result. If the second composite sample returns an exceedance, an investigation shall also be undertaken into the cause of the exceedance, the significance of the effect of the exceedance on the receiving environment, and the remedial action undertaken (if required) in response to the exceedance and the findings of this investigation report to the Auckland Council within one month of the exceedance occurring.	1	
15	At all times during the term of this consent, the Consent Holder shall maintain flow meters to continuously measure the total daily inflow to the wastewater treatment plant and the total daily volume discharged to outfall pipeline prior to entering the coastal marine area. The discharge volume meter must be maintained to ensure an accuracy of plus or minus 5 percent. Records shall be kept of the daily inflow and volumes discharged to the outfall pipeline prior to entering the coastal marine area. Recorded data shall be reported in accordance with Condition 36.	1	
16	The Consent Holder shall ensure that no new trade, industrial, non-domestic or other strong wastes shall be permitted to be received into the existing or upgraded Wastewater Treatment Plant except in accordance with the Trade Waste Bylaw / Te Ture a Rohe Waiparui a Mahi 2013 or any Operative Trade Waste By-law that may supersede this.	1	All trade waste dischargers must abide by the conditions of the Trade Waste Bylaw – whether they are low risk (i.e. no TW agreement required) or whether they hold a TW agreement with conditions.
17	The Consent Holder shall ensure that for the duration of this consent, the wastewater treatment system is maintained and operated by a suitably qualified and experienced wastewater plant operator. This operator shall oversee the operation and management of the wastewater treatment system and perform the operational and maintenance responsibilities specified in the Operations Management Plan (Condition 33).	1	

Condition Number	Consent condition Army Bay Discharge to air (#DIS60331113) and water (DIS60331146)	Compliance Rating	Comments
18	The Consent Holder shall prepare and implement a Receiving Environment Monitoring Plan (REMP) for the coastal marine area surrounding the outfall discharge point of the Army Bay Wastewater Treatment Plant. Within 40 working days of the commencement of this consent, the REMP shall be submitted to the Auckland Council for certification that it has been prepared in general accordance with the requirements listed in Condition 20 and the Draft Receiving Environment Monitoring Plan, a copy of which is attached as Appendix 1	1	Completed June 2019, last revision done in April 2022
19	The purpose of the Receiving Environment Monitoring Plan is to provide the framework for the receiving environment monitoring and to measure water quality in the receiving and surrounding coastal environments to detect and delineate any obvious temporal trends/changes in water quality, shellfish quality and marine ecology attributable to the discharges from the Wastewater Treatment Plant and to confirm predictions on effects.	1	
20	The Receiving Environment Monitoring Plan, as a minimum, shall include / provide for: a. Coastal Water Quality Monitoring on a monthly basis, initially from 6 sites (specified in the REMP), for the parameters listed in Table 6 below b. Sub-tidal Benthic Ecology Monitoring c. Intertidal Macroalgae Monitoring d. Sediment Quality Monitoring e. Shellfish / Kaimoana Monitoring f. Spatial and temporal extent of macroalgal blooms; g. The procedure for modifying the REMP; and h. The reporting and review procedure.	1	

Condition Number	Consent condition Army Bay Discharge to air (#DIS60331113) and water (DIS60331146)	Compliance Rating	Comments
21	Following the second year of sampling under the Receiving Environment Monitoring Plan (REMP), and subsequently at five yearly intervals or within each stage of upgrade (whichever comes first), the consent holder shall engage an independent suitably qualified person to review the REMP to confirm that the sampling provided for is 'fit for purpose. The review of the REMP shall, as a minimum, consider: a. monitoring results (particularly spatial and temporal patterns used to assess the effects of the outfall); b. whether the parameters measured are appropriate and/or actually required; c. the location and number of sampling sites and whether they are spatially appropriate; d. sampling frequencies; e. whether better methods are available for obtaining the information required (e.g. because of technological developments); f. the suitability of data analyses; and g. the adequacy of reporting. The review shall be forwarded to Auckland Council within one month of completion and where the findings of the review identify a need to amend the REMP, this shall be undertaken in accordance with the procedure for modifying the REMP as outlined in the REMP.	1	Completed in 2022, another review conducted 2025.
22	The Consent Holder shall engage a suitably qualified person to undertake an Emerging Contaminants Risk Assessment of the treated wastewater from the upgraded Army Bay Wastewater Treatment Plant (WWTP) within six months of each upgrade becoming operational and subsequently at five yearly intervals thereafter following the Stage 3 upgrade. The Emerging Contaminants Risk Assessment shall as a minimum include:	NA	Upgrade stage 1 not completed
23	The Emerging Contaminants Risk Assessment shall be forwarded to the Auckland Council by 30 September of each year that it is required for certification that it meets the requirements of Condition 22.	N/A	Upgrade stage 1 not completed
24	The Consent Holder shall ensure that all processes on site are operated, maintained, supervised, monitored and controlled to ensure that emissions to air authorised by this consent are maintained at the minimum practicable level.	1	
25	Beyond the boundary of the site, there shall be no odour or dust caused by discharges from the site which, in the opinion of an enforcement officer, is noxious, offensive or objectionable.	1	
26	All processes on site shall be operated in accordance with the certified Odour Management Plan submitted in accordance with Condition 30 of this consent.	1	

Condition Number	Consent condition Army Bay Discharge to air (#DIS60331113) and water (DIS60331146)	Compliance Rating	Comments
27	All sludge removal from the storage ponds, and the subsequent de-watering and disposal, shall be carried out in a manner that minimises odour to the extent practicable.	1	
28	No discharges from any activity on the site shall give rise to visible emissions, other than water vapour, to an extent which, in the opinion of an enforcement officer, is noxious, offensive or objectionable.	1	
29	No later than one month following the implementation of the Stage 1 upgrades to the Wastewater Treatment Plant, the Consent Holder shall install and operate a meteorological monitoring station to measure wind speed, wind direction, temperature and rainfall at the site. The monitor shall continuously log these meteorological conditions in real-time so that the readings are available to site staff and be of a type and in a location agreed to by the Auckland Council.	NA	Upgrade stage 1 not completed
30	The Consent Holder shall prepare and maintain an Odour Management Plan (OMP), the purpose of which is to describe measures to control and reduce the potential for odour generation to occur, which could give rise to off-site effects. The OMP shall, as a minimum, include the following: a. Identification of all fugitive and point sources for discharges of contaminants into air, including a site plan showing the locations of each point source and the specifications of all odour control devices; b. Details of procedures to minimise discharges of contaminants into air, including details of the inspection, maintenance, monitoring and contingency procedures in place; c. Monitoring and maintenance requirements for odour treatment equipment,	1	The Odour Management Plan (OMP) for the review and approval was sent to AC on 5 June 2020 by Operations Controller, Mai Hoque.
31	The Odour Management Plan (OMP) shall be submitted within three months from the date of commencement of this consent to the Auckland Council for certification that it meets the requirements of Condition 30.	1	The Odour Management Plan (OMP) for the review and approval was sent to AC on 5 June 2020 by Operations Controller, Mai Hoque.
32	Within one month of commissioning of each of the three staged upgrades to the Army Bay WWTP, the Consent Holder shall provide an updated Odour Management Plan (OMP) to the Auckland Council for approval, in a certification capacity, that the plan meets the requirements of Condition 30. The Consent Holder shall implement, and operate in accordance with, the certified OMP.	N/A	Upgrade stage 1 not completed

Condition Number	Consent condition Army Bay Discharge to air (#DIS60331113) and water (DIS60331146)	Compliance Rating	Comments
33	Within three months of the commencement of this consent, the Consent Holder shall prepare an Army Bay Operations Management Plan (ABOMP), the purpose of which is to provide a framework for the operation and management of the Wastewater Treatment Plant (WWTP) and discharge facilities to ensure compliance with the conditions of this consent. The ABOMP shall be submitted to the Auckland Council for certification that it meets the requirements of this condition and Condition 34.	1	Army Bay Operations Management Plan was sent to AC on 5 June 2020 by Operations Controller, Mai Hoque for the review and approval.
34	The Army Bay Operations Management Plan shall as a minimum include the following matters: a. An overview description of the Wastewater Treatment Plant (WWTP) and discharge facilities; b. A description and schedule of the routine inspection, monitoring and maintenance procedures to be undertaken to ensure operation of the WWTP and discharge facilities, complies with this consent; c. A description of the sampling location/s and methodology for sampling the treated wastewater discharge, including identification of the detection limits applicable for each parameter; d. A schedule of the critical aspects of the WWTP and the detailed response and contingency plans to remedy any possible variations from normal plant operation that could potentially affect discharge quality; e. Details of contingency plans and procedures to address a critical power or equipment failure at the WWTP; f. Procedures for recording routine maintenance and all major repairs that are undertaken; and g. The consent holders' chain of command, responsibility and notification protocols.	1	
35	The Consent Holder shall undertake the requirements of the Army Bay Operations Management Plan (ABOMP) once it has been finalised. All significant updates to the ABOMP throughout the term of this consent shall be submitted to the Auckland Council for certification that the updated ABOMP meets the requirements of Condition 34 prior to its implementation.		

Condition Number	Consent condition Army Bay Discharge to air (#DIS60331113) and water (DIS60331146)	Compliance Rating	Comments
36	An Annual Performance Report shall be submitted to the Auckland Council by September 30 of each year. The report shall include, but not be limited to: a. Collate, analyse and interpret all relevant data and information pertaining to this consent for the previous year from 1 July to 30 June; b. Report the calculated Average Dry Weather Flow, Peak Dry Weather Flow and Maximum Instantaneous Flow (Peak Wet Weather Flow) volumes, and the rainfall data for the previous year from 1 July to 30 June, and compare these values with the discharge volume requirements specified by Conditions 6 and 9 of this consent; c. Include comment on Wastewater Treatment Plant performance in relation to the quality of the treated wastewater discharge (including compliance with Ultraviolet dose requirements in accordance with Condition 12, and compliance with the MBR turbidity monitoring in Condition 12(b)), and any significant trends in changes in the discharge volume and/or the discharge quality over time; d. Comment on compliance with each consent condition; and e. Identify any actions required and submit a timetable to rectify any non- compliance.	1	
37	The Consent Holder shall engage a suitably qualified person(s) to review the collated receiving water quality and sediment quality data on the second anniversary of the commencement of this consent and subsequently at five yearly intervals thereafter. This assessment shall as a minimum: a. Summarise the results of the receiving environment monitoring programme; b. Report on any trends in the concentration of parameters measured; c. In combination with the results of coastal water quality monitoring undertaken by Auckland Council, assess whether there is any evidence that nutrients sourced from the Army Bay Wastewater Treatment Plant (WWTP) could breakthrough to the coastal marine area surrounding the outfall in sufficient quantities to cause deterioration of coastal water quality; and d. Review recorded concentrations of key contaminants of concern in treated wastewater (as per Tables 1, 2, 3 and 5) and assess whether the WWTP is operating efficiently and effectively. This assessment shall be forwarded to the Auckland Council by 30 September of each year that it is required.	1	

Condition Number	Consent condition Army Bay Discharge to air (#DIS60331113) and water (DIS60331146)	Compliance Rating	Comments
38	All complaints received by the Consent Holder about the treated wastewater discharges or odour discharges associated with the Wastewater Treatment Plant (WWTP) shall be logged immediately in the WWTP Complaints Register. The Register shall include: a. The date, time, location, duration and nature of the complaint; b. Name, phone number and address of the complainant unless the complainant wishes to remain anonymous; c. Any remedial action taken by the consent holder in response to the complaint and when it was undertaken, and if no remedial action was considered necessary by the consent holder, the reasons for taking no remedial action; d. The possible cause of the relevant event/ incident that lead to the complaint; e. The weather conditions at the time of the relevant event/ incident including estimates of wind direction, wind strength, temperature and cloud cover; f. The date and name of the person making the entry; and. g. Details of any complaints received shall be provided to the Auckland Council within 24 hours of receipt of the complaint(s) or on the next working day, if the complaint is associated with breaches to the performance standards set out in the above conditions. All other complaints shall be provided in the Annual Report required by Condition 36.	1	
39	All records, monitoring and test results that are required by the conditions of this consent shall be made available upon request by an enforcement officer and shall be kept for a minimum of two years from the date of each entry.	1	
40	The Consent Holder shall engage an independent suitably qualified person to prepare and submit a Technology and Growth Review Report for the Army Bay Wastewater Treatment Plant (WWTP), its catchment area and its contaminant discharges within one year of the commissioning of the Stage 1 WWTP upgrades, and at five yearly intervals thereafter. The Report shall be submitted to the Auckland Council for certification that it has been produced in accordance with the requirements of Condition 41, below by 30 September of each year that it is required.	NA	Upgrade stage 1 not completed

Condition Number	Consent condition Army Bay Discharge to air (#DIS60331113) and water (DIS60331146)	Compliance Rating	Comments
41	The Technology and Growth Review shall as a minimum include: a. A review of changes in the state of technology of wastewater treatment and discharge methods relevant to disposal options as they relate to land disposal and beneficial re-use options from the WWTP treated wastewater and other by-products either since the commencement of these consents or the previous Technology and Growth Review, whichever is more recent. b. An outline of significant technological changes and advances in relation to wastewater management, inflow and contaminant reduction (including for trade waste management), treatment, discharge and beneficial reuse technologies (including Managed Aquifer Recharge) that could be of relevance for possible future use in the Army Bay WWTP and discharge facilities. Specific information shall be included on: i. Options the consent holder has investigated for wastewater reduction and/or reuse and/or alternative discharge options, including Managed Aquifer Recharge and industrial re-use, and any actions taken as a result of those investigations; and ii. Any discharge volume and/or contaminant inflow reduction that has been achieved as a result of those actions, since the commencement of these consents, when assessed on a per domestic connection equivalent basis, as reported by the discharge monitoring in Condition 15. c. Consideration of the actual population growth that have occurred over the last 5-year interval, and whether this indicates that projections exceed design planning, and may trigger an upgrade prior to expiry of this consent. d. If clause (c) indicates higher than expected population growth which may exceed design treatment flows within the consented period, then an assessment of alternative discharge environments shall be undertaken, taking consideration, if still relevant, of the Auckland Unitary Plan, the RMA, the New Zealand Coastal Policy Statement 2010 (NZCPS), and any other relevant legislation at that time. e. An assessment of whether any newly available technology option/s or combination of options identified through (b) above represent the Best Practicable Option (BPO; in terms of the interpretation of BPO in the RMA) to minimise the potential and actual	N/A	Upgrade stage 1 not completed
42	Within six months of the commencement of this consent, the consent holder shall invite representatives of Ngati Manuhiri, Ngati Whanaunga, Te Kawerau a Maki, Ngai Tai ki Tamaki, and Ngati Maru, to establish an Army Bay Mana Whenua Liaison Group (ABMWLG). If established, the consent holder shall provide reasonable organisation and administrative support to facilitate the development and ongoing role of the group for the duration of the consents. The Army Bay Mana Whenua Liaison Group shall establish its own meeting protocols having regard to relevant customary practices and shall operate in accordance with the principles of the Treaty of Waitangi (Te Tiriti o Waitangi), especially the principles of consultation, active participation and partnership.	1	Engagement has taken place and council has been informed that that ABMWLG has been formed

Condition Number	Consent condition Army Bay Discharge to air (#DIS60331113) and water (DIS60331146)	Compliance Rating	Comments
43	The purpose of the Army Bay Mana Whenua Liaison Group (ABMWLG) is to facilitate consultation and information sharing between the ABMWLG and the consent holder. To that end, the functions of the ABMWLG shall include, but not necessarily be limited to the following:		
44	Within three months of its formation, the consent holder shall invite the Army Bay Mana Whenua Liaison Group (ABMWLG) to a meeting to discuss the Receiving Environment Monitoring Plan (Condition 18). The plan shall be provided to the ABMWLG sufficiently in advance of the meeting so that the ABMWLG has time to review and consider it. Any amendments to the plan as a result of this meeting shall be submitted to the Council for certification that any changes meet the requirements of Condition 20.	1	Engagement has taken place and council has been informed that that ABMWLG has been formed
45	Prior to submitting the Mitigation Planting Plan (LUC60331145 Condition 17), the Lizard Management Plan (LUC60331145 Condition 21), and the Avifauna Management Plan (LUC60331145 Condition 25), the consent holder shall invite the Army Bay Mana Whenua Liaison Group (ABMWLG) to a meeting to discuss the plans. The plans shall be provided to the ABMWLG sufficiently in advance of the meeting so that the ABMWLG has time to review and consider it. Any amendments to the plans as a result of this meeting shall be submitted to the Council for certification that any changes meet the requirements of LUC60331145 Condition 17 (MMP), LUC60331145 Condition 21 (LMP), and LUC60331145 Condition 25 (AMP).	1	
46	The consent holder shall keep minutes of any Army Bay Mana Whenua Liaison Group (ABMWLG) meetings held in accordance with Condition 42 and shall forward them to all attendees and provide a copy to the Auckland Council upon request. These meetings do not need to occur if the ABMWLG notifies the consent holder that a meeting is not required at any time for the duration of the consent.	1	
47	The consent holder shall provide the Army Bay Mana Whenua Liaison Group with final copies of all management plans and reports required by the conditions of this consent concurrently with them being submitted to the Auckland Council.	1	

Condition Number	Consent condition Army Bay Discharge to air (#DIS60331113) and water (DIS60331146)	Compliance Rating	Comments
48	The consent holder shall within six months of the commencement of this consent, invite the stakeholders listed in (a) – (h) below, to establish a Community Liaison Group (CLG). A general invitation shall be made by way of public notice in the New Zealand Herald, the Hibiscus Matters and the Rodney Times, direct notice (where practicable), and on the consent holder's website, to the following parties: a. The Auckland Council (being the Consent Compliance Officer or the Team Leader, Compliance Monitoring); b. The ABMWCG; c. Shakespear Open Sanctuary Society Incorporated; d. Shakespear Regional Park; e. Auckland Regional Public Health; f. The local community and representatives of community groups who express an interest in the project; and g. Other representatives of the local community who have expressed an interest in or concerns with the discharges of contaminants to the consent holder since the last CLG annual meeting.	1	
49	The purpose of the Community Liaison Group (CLG) shall be to provide a forum to: a. Facilitate communication and dialogue between the consent holder, the Council and the community on issues concerning plant operation, performance and upgrade works; and b. Facilitate communication and dialogue between the consent holder and the community on effects on the community / environment arising from plant operations and on future intentions.	1	
50	The consent holder shall use its best endeavours to ensure that formal meetings of the Community Liaison Group (CLG) are held at least once annually, and where practicable, within three months of the completion of the Annual Performance Report required by Condition 36. The CLG meeting can be cancelled or deferred subject to agreement being obtained from all parties who attended the prior year's CLG meeting or have requested to be invited to all future CLG meetings.	1	The next CLG is proposed for Nov 2026
51	The consent holder shall provide reasonable organisation and administrative support to facilitate the development and on-going role of this Consultative Community Liaison Group for the duration of the consent.	1	
52	The consent holder shall provide an appropriate venue for the Community Liaison Group (CLG) meetings, inform all parties listed above of each CLG meeting a minimum of ten working days prior to the scheduled meeting date, and provide the minutes of the CLG meeting to all parties listed above within one month following the CLG meeting.	1	

Condition Number	Consent condition Army Bay Discharge to air (#DIS60331113) and water (DIS60331146)	Compliance Rating	Comments
53	The consent holder shall assist the Community Liaison Group (CLG) to fulfil its purpose by providing information to the CLG parties on: a. Any concerns and complaints of the local community, aspects of non- compliance and remedial actions or proposals; b. Plant performance, including an overview of the most recent annual report and receiving environment monitoring; c. Any investigations and works at the plant; d. Updates on issues that have been resolved since the previous CLG meeting.	1	
54	The conditions of this consent may be reviewed by Auckland Council pursuant to section 128 of the Resource Management Act 1991 (RMA), by giving notice pursuant to section 129, on the fifth anniversary of the commencement of these consents and subsequently at intervals of not less than five years thereafter in order to: a. To deal with any adverse effects, which are more than minor, on the environment arising from the exercise of the consent, which was not foreseen at the time the application was considered and which is appropriate to deal with at the time of review, including more than minor adverse effects of the treated wastewater discharge on receiving water quality, shellfish quality and marine ecology, as identified through the monitoring undertaken in the Receiving Environment Monitoring Plan under Condition 18; and / or, b. To consider the adequacy of conditions that prevent nuisance and adverse effects beyond the boundary of the site particularly if regular or frequent complaints have been received and validates by a Council enforcement officer; and / or c. To consider developments in technology and management practices that would enable practical reductions in the discharge of contaminants, in particular where any technology option/s identified through Condition 41(b), and minimise any adverse effects of the treated wastewater discharge that were unforeseen at the time of the granting of these consents; and / or d. To alter the monitoring requirements, including requiring further monitoring, or increasing or reducing the frequency of monitoring.	1	

Condition Number	Consent condition Army Bay Discharge to air (#DIS60331113) and water (DIS60331146)	Compliance Rating	Comments
55	This consent (or any part thereof) shall not commence until such time as the following charges, which are owing at the time the Council's decision is notified have been paid in full: a. All fixed charges relating to the receiving, processing and granting of this resource consent under section 36(1) of the RMA; b. All additional charges imposed under section 36 of the RMA to enable the Council to recover its actual and reasonable costs in respect of this application; and c. All initial consent compliance monitoring charges, plus any further monitoring charges to recover the actual and reasonable costs incurred to ensure compliance with the conditions attached to this consent.	1	
56	The servants or agents of the Council shall be permitted to have access to the relevant parts of the property at all reasonable times for the purpose of carrying out monitoring procedures, inspections, surveys, investigations, tests, measurements or take samples while adhering to the Consent Holder's health and safety policies.	1	

Appendix C. Odour Reports

Army Bay WWTP – Six Monthly Odour Monitoring Report

Date: 02 July 2025 **Time:** 12.30 **Person:** Hayley Ashman

Wind Direction: NE **Wind Strength:** 31 km/h

Time	Location of odour[1]	Odour source	Strength	Description	Duration	Comments
12.30	**A**	**Biofilter # 1**	0			
12.35	**B**	**Grit bin**	1	Sewage/ Rubbish		Localised to area
12.40	**C**	**Biofilter # 2**	0			
12.50	**D**	**Storage Ponds**	0			
12.55	**E**	**Influent, splitter chamber**	0			
12.56	**F**	**Sludge Bin area**	0			
12.56	**G**	**WAS & TWAS Tanks**	0			
12.56	**H**	**Centrifuge room**	1	Biosolid		Localised to area

Intensity Scale 0 – no odor; 1 – very weak (odor threshold); 2 – weak; 3 – distinct; 4 – strong; 5 – very strong; 6 – intolerable

Army Bay WWTP – Six Monthly Odour Monitoring Report

Date: 28 January 2026 **Time:** 13:00 **Person:** Mai Hoque

Wind Direction: Southwest **Wind Strength:** 16 km/h

Time	Location of odour[1]	Odour source	Strength	Description	Duration	Comments
12.30	**A**	**Biofilter # 1**	3	Raw Sewage	1-2 min	Waft
12.35	**B**	**Grit bin**	3	Pungent	1-2 min	Waft
12.40	**C**	**Biofilter # 2**	0			
12.50	**D**	**Storage Ponds**	1	Earthy	<1 min	Waft
12.55	**E**	**Influent, splitter chamber**	0			
12.56	**F**	**Sludge Bin area**	0			
12.56	**G**	**WAS & TWAS Tanks**	0			
12.56	**H**	**Centrifuge room**	0			

Intensity Scale 0 – no odor; 1 – very weak (odor threshold); 2 – weak; 3 – distinct; 4 – strong; 5 – very strong; 6 – intolerable


A
B
C
D
E
F
G
H

Appendix D. Data Sources

Download location of environmental monitoring data used in this report

Category	Parameter	Source platform	Tag/ID
Rainfall	Total daily rainfall volumes	MOATA	ACC - Rain - Whangaparaoa Rainfall ID 646813
Discharge flow	Discharge volumes and flow rates	Pi DataLink	DTARB_48_FIT_100_PV
UV Dosing	Applied UV dose	Pi DataLink	DTARB_48_AYI_X01B_PV
Discharge quality	Physicochemical, nutrients, bacteria indicators, heavy metals	Labware ID	WSL_AB_STP_PUV_EFF_C DTARB-Field Data
Air quality	Odour reports	WSL shared drive	L:\Wastewater Operations\Regional Plants\Nth Region\03 Asset Ops_Nth\DTARB\19-Environmental Management\08-Odour