

14 November 2024

Chris McCashin
E-mail: fyi-request-28788-ae61f12c@requests.fyi.org.nz

Dear Mr McCashin

REQ.622574: NORTHERN WAIROA RIVER ALUMINIUM INVESTIGATION OFFICIAL INFORMATION REQUEST

I refer to your official information request received by the Northland Regional Council (“the council”) on 16 October 2024 regarding the council’s investigation of high levels of aluminium (Al) reported in the Northern Wairoa River.

The following is council’s response to the specific information requests (repeated immediately below in italics):

Any and all companies and associated scope of works associated with further investigation and reports completed by the company.

If no investigations are planned or proposed can you please provide any and all internal reports / memos associated / completed by Northland Regional Council associated.

Council staff have been investigating the matter, and no companies have been contracted to assist in the investigation.

The council has undertaken the following sampling and testing while investigating the matter:

Wairoa River in the Vicinity of Dargaville

Site ID	Site Name	Sample ID	Date	Time	Al Total g/m3	Al Total Sediment mg/kg	pH	Salinity (Field) ppt
100305	Wairoa River 3666 at Below stormwater discharge	20244000	24/07/2024	14:10	1.4		6.81	0.08
101727	Wairoa River at Ramp (town bank)	20244003	24/07/2024	10:50		18000		
		20244002	24/07/2024	10:51	4.2		7.23	0.26
339278	Northern Wairoa River at 50m US of Awakino River Confluence	20244007	24/07/2024	10:20		20000		
		20244006	24/07/2024	10:21	9.1		7.09	0.25

339279	Northern Wairoa River at Northern	20244008	24/07/2024	11:30	3.4		6.94	0.07
	Wairoa Boating Club Moorings	20244009	24/07/2024	11:31		19000		
339280	Northern Wairoa River at Parenga St Wharf	20244010	24/07/2024	11:50	4.2		6.82	0.07
339281	Northern Wairoa River at 20m DS of Kaihu River Confluence	20244012	24/07/2024	12:20	5.2		6.94	0.07
339282	Northern Wairoa River at Bassett St	20244014	24/07/2024	12:30	4.6		6.87	0.08

Test Methods: Al (Total) by ICP-MS; Al Total Sediment (Recoverable Dry Wt) by ICP-MS

Kaipara Harbour (Al testing added to existing routine water quality monitoring run)

Site ID	Site Name	Sample ID	Date	Time	Al Dissolved g/m3	Al Total g/m3	Al Total Sediment mg/kg	Salinity (Field) ppt
318293	Kaipara Harbour at Wairoa River	20244076	16/08/2024	10:36			17000	
		20243817	22/08/2024	09:50	<0.05	13		2.07
		20244248	25/09/2024	12:05				4.11
		20244508	17/10/2024	09:20	<0.1	2.6		17.45
109670	Kaipara Harbour at Burgess Island	20244074	16/08/2024	11:05			5400	
		20243818	22/08/2024	10:10	<0.1	<0.1		20.2
		20244249	25/09/2024	11:50				16.71
		20244509	17/10/2024	09:00	<0.1	1.1		27.38
109671	Kaipara Harbour at Five Fathom Channel	20244075	16/08/2024	11:40			3500	
		20243819	22/08/2024	10:30	<0.1	0.32		27.1
		20244250	25/09/2024	11:30				28.75
		20244510	17/10/2024	10:00	<0.1	0.17		31.64
109665	Kaipara Harbour at Wahiwaka Creek	20244070	16/08/2024	12:59			9900	
		20243820	22/08/2024	11:30	<0.1	0.43		22.75
		20244251	25/09/2024	10:20				22.63
		20244511	17/10/2024	11:20	<0.1	0.85		27.52

109666	Kaipara Harbour at Te Hoanga Point	20244071	16/08/2024	13:30			11000	
		20243821	22/08/2024	12:05	<0.1	0.3		26.4
		20244252	25/09/2024	10:00				28.06
		20244512	17/10/2024	12:00	<0.1	0.32		30.1
109668	Kaipara Harbour at Te Kopua	20244072	16/08/2024	14:00			9100	
		20243822	22/08/2024	12:15	<0.1	0.31		26.13
		20244253	25/09/2024	09:15				28.39
		20244513	17/10/2024	12:05	<0.1	0.57		29.57
109669	Kaipara Harbour at Kapua Point	20244073	16/08/2024	13:55			7100	
		20243823	22/08/2024	12:30	<0.1	0.29		25.07
		20244254	25/09/2024	09:35				27.73
		20244514	17/10/2024	12:20	<0.1	0.37		29.03

Test Methods: Al (Dissolved) by ICP-MS; Al (Total) by ICP-MS; Al Total Sediment (Recoverable Dry Wt) by ICP-MS

During our investigation it was discovered that it is possible to obtain results for some metals (including Al) from the laboratory the council uses for samples that the council had collected in the past which the council had not requested to be tested when those samples were collected. This is possible where the testing equipment used automatically tested for multiple metals at the same time. This enabled council to obtain (purchase) the following Al results for historic samples it had collected:

Site ID	Site Name	Date	Time	Sample ID	Al Total g/m3
100007	Waiharakeke at Stringers Road	8/03/2023	12:45:00	20231109	0.24
		5/04/2023	13:35:00	20231641	0.18
		3/05/2023	13:15:00	20231964	1.3
		7/06/2023	13:50:00	20232226	0.72
100237	Mangahahuru at Main Road	14/03/2023	9:55:00	20231129	0.33
		11/04/2023	9:55:00	20231648	0.75
		13/06/2023	10:15:00	20232238	0.33
100363	Awanui at FNDC	21/03/2023	8:25:00	20231152	0.19
		19/04/2023	9:35:00	20231669	0.092
		17/05/2023	9:25:00	20231997	0.79
		21/06/2023	9:35:00	20232260	1.2
100501	Utakura River at Lake Omapere outlet bridge	21/03/2023	13:05:00	20231149	0.03
		19/04/2023	14:35:00	20231672	0.25
		17/05/2023	14:00:00	20232000	0.15
		15/06/2023	13:30:00	20232254	0.26

101038	Mangakahia at Titoki	14/03/2023	12:10:00	20231119	0.36
		11/04/2023	13:45:00	20231646	0.17
		9/05/2023	11:35:00	20231974	15
		13/06/2023	14:30:00	20232236	0.88
101625	Mangere at Knight Road	14/03/2023	12:05:00	20231131	0.3
		11/04/2023	11:30:00	20231650	0.25
		13/06/2023	12:45:00	20232240	0.41
101751	Waipapa at Forest Ranger	13/04/2023	13:45:00	20231663	0.05
		15/06/2023	11:35:00	20232253	0.053
101752	Waitangi at Wakelins	9/03/2023	12:35:00	20231114	0.068
		3/04/2023	14:20:00	20231630	0.67
		17/05/2023	13:50:00	20231969	0.56
		8/06/2023	12:45:00	20232231	0.42
101753	Wairua at Purua	14/03/2023	11:25:00	20231130	0.87
		11/04/2023	11:00:00	20231649	1.3
		13/06/2023	11:45:00	20232239	0.91
102248	Waiotu at SH1	14/03/2023	8:20:00	20231128	0.25
		11/04/2023	9:15:00	20231647	0.48
		13/06/2023	9:10:00	20232237	0.47
102256	Kaihu at Gorge	15/03/2023	12:10:00	20231136	0.088
		12/04/2023	13:40:00	20231655	0.12
		14/06/2023	12:25:00	20232250	0.25
102257	Manganui at Mititai Road	15/03/2023	13:45:00	20231141	0.73
		12/04/2023	13:25:00	20231660	0.71
		14/06/2023	13:55:00	20232246	0.82
102258	Opouteke at Suspension Bridge	14/03/2023	10:20:00	20231117	0.16
		11/04/2023	11:45:00	20231644	0.17
		9/05/2023	10:25:00	20231972	30
		13/06/2023	10:55:00	20232234	0.26
102674	Kaeo at Dip Road	8/03/2023	10:15:00	20231107	0.065
		5/04/2023	11:30:00	20231639	0.073
		3/05/2023	11:50:00	20231962	0.41
		7/06/2023	11:25:00	20232225	0.46
103178	Waitangi at Waimate North Road	9/03/2023	11:00:00	20231112	0.12
		3/04/2023	12:15:00	20231628	0.23
		17/05/2023	12:15:00	20231967	0.86
		8/06/2023	11:05:00	20232229	0.4
103304	Waipoua at SH12	15/03/2023	10:20:00	20231135	0.18
		12/04/2023	12:40:00	20231654	0.32
		14/06/2023	11:15:00	20232249	0.18
105008	Ruakaka at Flyger Road	15/03/2023	8:15:00	20231137	0.32
		12/04/2023	9:05:00	20231656	0.35
		14/06/2023	9:15:00	20232242	0.29

105231	Punakitere at Taheke	13/04/2023	9:45:00	20231661	0.12
		15/06/2023	9:50:00	20232251	0.39
105532	Victoria at Victoria Valley Road	21/03/2023	7:55:00	20231151	1.3
		19/04/2023	9:00:00	20231668	2.9
		17/05/2023	8:55:00	20231996	0.51
		21/06/2023	9:00:00	20232259	9.9
105972	Hatea at Whangarei Falls	7/03/2023	11:30:00	20231101	0.53
		4/04/2023	13:35:00	20231633	0.14
		2/05/2023	13:10:00	20231956	0.85
		6/06/2023	13:40:00	20232219	1.8
107284	Utakura at Okaka Road	13/04/2023	13:10:00	20231662	0.15
		15/06/2023	10:55:00	20232252	0.46
		15/06/2023	10:55:00	20232252	0.46
108359	Waiarohia at Second Avenue	7/03/2023	10:20:00	20231106	0.17
		4/04/2023	13:20:00	20231638	0.14
		2/05/2023	12:40:00	20231961	0.8
		6/06/2023	11:30:00	20232224	2.2
108941	Waipao at Draffin Road	14/03/2023	12:25:00	20231132	0.055
		11/04/2023	12:00:00	20231651	0.054
		13/06/2023	13:25:00	20232241	0.12
108979	Oruru at Oruru Road	20/03/2023	10:30:00	20231146	0.29
		16/05/2023	11:45:00	20231994	1.1
		20/06/2023	11:55:00	20232257	0.66
109021	Hakaru at Topuni	15/03/2023	10:45:00	20231139	0.38
		12/04/2023	10:30:00	20231658	0.4
		14/06/2023	10:51:00	20232244	0.27
109096	Mangakahia at Twin Bridges	14/03/2023	11:15:00	20231118	0.19
		11/04/2023	12:35:00	20231645	0.073
		9/05/2023	10:50:00	20231973	17
		13/06/2023	12:15:00	20232235	0.16
109098	Waimamaku at SH12	15/03/2023	8:40:00	20231133	0.073
		12/04/2023	10:50:00	20231652	0.82
		14/06/2023	9:25:00	20232247	0.15
110431	Otaika at Otaika Valley Road	7/03/2023	8:55:00	20231104	0.7
		4/04/2023	11:20:00	20231636	0.11
		2/05/2023	10:35:00	20231959	0.79
		6/06/2023	9:45:00	20232222	1.8
110603	Ngunguru at Coalhill Lane	7/03/2023	12:10:00	20231102	0.26
		4/04/2023	14:20:00	20231634	1.2
		2/05/2023	13:45:00	20231957	1.2
		6/06/2023	14:30:00	20232220	1.7

304589	Waiaruhe at Puketona	9/03/2023	11:50:00	20231113	0.1
		3/04/2023	13:10:00	20231629	0.27
		17/05/2023	13:00:00	20231968	0.57
		8/06/2023	12:05:00	20232230	0.4
304641	Oruaiti at Windust Road	20/03/2023	8:50:00	20231148	0.096
		16/05/2023	10:15:00	20231992	0.26
		20/06/2023	9:55:00	20232255	0.33
304709	Raumanga at Bernard Street	7/03/2023	9:30:00	20231105	0.14
		4/04/2023	12:10:00	20231637	0.097
		2/05/2023	11:20:00	20231960	0.56
		6/06/2023	10:25:00	20232223	2.6
312177	Pukenui at Kanehiana Drive	7/03/2023	8:00:00	20231099	0.36
		4/04/2023	9:25:00	20231631	0.11
		2/05/2023	10:15:00	20231954	0.47
		6/06/2023	9:50:00	20232217	1.2
313165	Tapapa at SH1	21/03/2023	11:50:00	20231150	0.085
		19/04/2023	13:35:00	20231671	0.25
		17/05/2023	12:25:00	20231999	0.38
		27/06/2023	9:25:00	20233770	0.17
313168	Wairau at SH12	15/03/2023	9:45:00	20231134	0.24
		12/04/2023	11:50:00	20231653	0.6
		14/06/2023	10:35:00	20232248	0.22
313171	Punaruhi at Russell Road	7/03/2023	9:50:00	20231100	0.13
		4/04/2023	11:50:00	20231632	0.27
		2/05/2023	12:00:00	20231955	0.31
		6/06/2023	11:40:00	20232218	0.14
322490	Tangowahine at Tangowahine Valley Road	14/03/2023	9:05:00	20231116	0.11
		11/04/2023	10:05:00	20231643	0.18
		9/05/2023	9:45:00	20231971	34
		13/06/2023	9:35:00	20232233	0.6
322778	Takou River at 547 Takou Bay Road	24/05/2023	10:20:00	20233428	0.37
		27/06/2023	9:35:00	20233523	0.48
327283	Ahuroa at Braigh Flats	15/03/2023	8:45:00	20231138	0.37
		12/04/2023	9:35:00	20231657	2.6
		14/06/2023	9:55:00	20232243	0.45
328459	Waipapa at Doonside Road	9/03/2023	8:10:00	20231110	0.043
		3/04/2023	9:15:00	20231626	0.053
		17/05/2023	9:45:00	20231965	0.17
		8/06/2023	9:30:00	20232227	0.39

329989	Northern Wairoa at Pukehuia Road	14/03/2023	8:20:00	20231115	1.3
		11/04/2023	9:15:00	20231642	2
		9/05/2023	9:05:00	20231970	3.6
		13/06/2023	9:00:00	20232232	0.81
330446	Waitiki Stream at Te Paki	21/06/2023	10:45:00	20233471	0.86
		21/06/2023	10:45:00	20233471	0.86
330493	Wairoa Stream at Ahipara	21/03/2023	9:15:00	20231153	0.095
		19/04/2023	11:25:00	20231670	0.12
		17/05/2023	10:30:00	20231998	0.76
		21/06/2023	10:30:00	20232261	2.7
330512	Peria at Honeymoon Valley US Dutton Road	20/03/2023	11:10:00	20231147	0.098
		16/05/2023	12:25:00	20231995	0.46
330531	Paparoa Stream at Paparoa Oakleigh Road	15/03/2023	12:30:00	20231140	0.064
		12/04/2023	12:25:00	20231659	0.087
		14/06/2023	12:35:00	20232245	0.14
330972	Kerikeri at Golf View Road	9/03/2023	9:40:00	20231111	0.058
		3/04/2023	10:40:00	20231627	0.072
		17/05/2023	11:20:00	20231966	0.16
		8/06/2023	10:30:00	20232228	0.21
331352	Hatea at A H Reed Park	7/03/2023	8:15:00	20231103	0.33
		4/04/2023	10:05:00	20231635	0.15
		2/05/2023	9:15:00	20231958	1
		6/06/2023	9:10:00	20232221	2.2
333375	Toatoa Stream at Parapara- Toatoa Road	20/03/2023	9:55:00	20231145	0.14
		16/05/2023	10:55:00	20231993	0.34
		20/06/2023	11:05:00	20232256	0.41

As part of the investigation, council staff consulted with other councils/organisations and a former staff member. A copy of the internal and external correspondence and associated documents pertaining to the investigation is provided in the attached PDF titled "Wairoa River AI Investigation Correspondence".

The names and contacts details of external individuals have been redacted from the correspondence and associated documents to meet the requirements of the Privacy Act 2020, except for the individuals that the council contacted seeking approval to release their details who gave their approval.

I note that the council will be preparing a report on the investigation for public release and aims to complete the report in the next two to three months.

The council is committed to providing a quality service and would welcome your feedback. A short feedback form is accessible via www.nrc.govt.nz/feedback/.

Yours faithfully



Colin Dall
Group Manager Regulatory Services
Pou Whakaritenga