

Appendix A3

Section 21 water uses triggered in terms of the NWA

The Coega ADZ will require a water use license for:

21 (a) borehole abstraction	N/A for this EIA. Separate studies by individual developers if they propose to abstract groundwater.
21(b) <u>storing water</u>	Yes. see details below
21(g) <u>disposing of waste</u> in a manner which may detrimentally impact on a water resource;	Yes. see details below
21(h) <u>disposing in any manner of water which contains waste</u> from, or which has been heated in, any industrial or power generation process;	Yes. see details below

Triggered Water Uses

A. Water, Waste Water and Solid Waste Storage		
<ul style="list-style-type: none"> Desalination 		
	First Phase For a 15 MI/d plant	Target Scope and Threshold for Assessment and Application For a 60 MI/d plant
Fresh Water:		
Product Water ^(a)	0.46 MI	1.83 MI
Water Containing Waste :		
Brine ^(a)	0.61 MI	2.44 MI
Pre-Treatment backwash water ^(a)	0.11 MI	0.43 MI

(a) 30 minute buffer tanks, assuming 18 hours pumping per day

<ul style="list-style-type: none"> Intake Water Storage ^(a) 			
	Initial	Target	Long-Term Scope and Threshold for Assessment and Application
Seawater intake water in reservoir	250 MI	500 MI	1000 MI
Fresh water intake in reservoir or tanks	2 MI	20 MI	100 MI
Total	252 MI	520 MI	1100 MI

(a) 24 hour storage

<ul style="list-style-type: none"> Aquaculture Production Water Storage ^(a) 			
	Initial	Target	Long-Term Scope and Threshold for Assessment and Application
Seawater in various tanks, ponds and raceways ^(a)	95 750 ML	1 419 000ML	5 152 600 ML
Fresh water in various tanks, ponds and raceways ^(b)	71 250 ML	742 500ML	2 451 000 ML

Total	167 000 ML	2 161 500 ML	7 603 600 ML
--------------	-------------------	---------------------	---------------------

(a) 30 kg/m³

(b) 60 kg/m³

(c) 30 kg/m³ with a 50/50 split between seawater and fresh water aquaculture production

(d) 60 kg/m³ with a 50/50 split between seawater and fresh water aquaculture production

Processing Plant Waste			
	Initial	Target	Long-Term Maximum Scope and Threshold for Assessment and Application
Waste Water ^(c)			
Abalone	42 m ³ ^(a)	168 m ³ ^(b)	504 m ³ ^(b)
Finfish and Shellfish	101 m ³ ^(a)	114 m ³ ^(b)	2280 m ³ ^(b)
Solid Waste			
Scenario 1: If all waste is stored frozen for 7 days	13 tn	156 tn	3118 tn
Scenario 2: If all waste is cold stored for 48 hours	4 tn	45 tn	891 tn

(a) 7 day storage (interim)

(b) 1 day storage

(c) Can be above-ground tanks

Sewage and Grey Water (Offices and Staff Facilities)			
	Initial	Target	Long-Term Scope and Threshold for Assessment and Application
Sewage	30 m ³ ^(a) ^(b)	N/A. Linked to sewer system	
Grey Water ^(c)	88 m ³ ^(a)	220 m ³ ^(a)	4400 m ³ ^(a)

(a) 4 day storage

(b) 5 x 6000 L conservancy tanks in the ADZ

(c) Can be above-ground tanks

Aquaculture Production Waste (Sludge)			
	Initial	Target	Long-Term Scope and Threshold for Assessment and Application
Sludge separated from process ^(a)			
Scenario 1: As dewatered solids	8 tn	60 tn	600 tn
Scenario 2: Slurry (~5% solids)	160 tn	1200 tn	12000 tn

(a) 7 day storage

The activities listed above will take place within the following area:



EIR Report Figure 1-5: Ref	Latitude	Longitude
AQ1	33°46'7.41"S	25°42'24.47"E
AQ2	33°46'5.18"S	25°42'27.79"E
AQ3	33°46'7.35"S	25°42'34.18"E
AQ4	33°46'0.13"S	25°42'42.53"E
AQ5	33°45'52.30"S	25°42'42.58"E
AQ6	33°45'4.33"S	25°44'12.16"E
AQ7	33°44'32.49"S	25°43'53.98"E
AQ8	33°44'22.99"S	25°44'15.16"E
AQ9	33°44'48.00"S	25°44'54.03"E
AQ10	33°45'31.23"S	25°44'3.47"E
AQ11	33°46'19.90"S	25°42'51.63"E
AQ12	33°46'18.77"S	25°43'13.75"E
AQ13	33°46'24.44"S	25°43'19.90"E
AQ14	33°46'20.14"S	25°43'28.65"E
AQ15	33°46'24.14"S	25°43'33.03"E
AQ16	33°46'8.81"S	25°44'2.81"E
AQ17	33°46'17.72"S	25°44'10.15"E
AQ18	33°46'50.06"S	25°43'13.56"E
AQ19	33°46'56.44"S	25°43'2.64"E