Licence Conditions	
Proposed Condition Changes	Definitions
Remove Condition 212-39	
AVERAGE SALINITY DISCHARGE LIMIT - 6 HOUR PERIOD	
If average salinity at any point 100 metres from the diffuser structure	
exceeds 1.3 PPT above ambient salinity for a six hour period, then	
the Licensee must:	
<ol> <li>notify the EPA within six hours; and</li> <li>take appropriate corrective action to manage salinity in the receiving environment.</li> </ol>	
Proposed Replacement Condition U-145	
SALINITY DISCHARGE LIMIT - 6 HOUR PERIOD If the average desalination outfall effluent discharge salinity exceeds the intake salinity by a factor of 2.1 for a six hour period, then the Licensee must:	
<ol> <li>notify the EPA within six hours; and</li> <li>take appropriate corrective action to manage salinity in the receiving environment forthwith.</li> </ol>	
Remove Condition 212-44	
AVERAGE SALINITY DISCHARGE LIMIT - 24 HOUR PERIOD	
If average salinity at any point 100 metres from the diffuser structure exceeds 1.3 PPT above ambient salinity for a 24 hour period, then the Licensee must:	
<ol> <li>notify the EPA within six hours; and</li> <li>stop all marine discharge of brine and desalination effluent from the desalination plant within six hours</li> </ol>	
Proposed Replacement Condition	
U-146	
SALINITY DISCHARGE LIMIT - 24 HOUR PERIOD If the average desalination outfall effluent discharge salinity exceeds the intake salinity by a factor of 2.1 for a 24 hour period, then the Licensee must:	
<ol> <li>notify the EPA within six hours;</li> <li>stop all discharge of desalination effluent from the desalination plant within six hours; and</li> </ol>	
not recommence discharge until approved in writing by the EPA.	

# **Proposed New Condition**

U-147

### **OUTFALL HEAD LOSS - 24 HOUR PERIOD**

If the head loss across the outfall system drops below the minimum allowable head loss for a 24 hour period, then the Licensee must:

- 1. notify the EPA within six hours;
- stop all discharge of desalination effluent from the desalination plant within six hours; and
- not recommence discharge until approved by the EPA.

# OUTFALL HEAD LOSS - 24 HOUR PERIOD

"MINIMUM ALLOWABLE HEAD LOSS" means the head difference between the sea water and outfall de-aeration chamber being greater than or equal to (in [m]) -8.57E-1 + 8.12E-3 x + 2.69E-5 x2 where x = Production [ML/d] and is the volume of fresh water produced in the desalination process.

# **Proposed New Condition**

U-148

### **OUTFALL HEAD LOSS - 24 HOUR PERIOD**

If the head loss across the outfall system drops below the minimum allowable head loss for a 24 hour period, then the Licensee must:

- 1. notify the EPA within six hours;
- stop all discharge of desalination effluent from the desalination plant within six hours; and
- **3.** not recommence discharge until approved by the EPA.

# **Proposed New Condition**

U-149

#### AVERAGE SALINITY DISCHARGE LIMIT

If the average salinity measured at 100 metres from the diffuser structure exceeds 1.3 PPT above ambient salinity for a 24 hour period, then the Licensee must:

- undertake an investigation to determine the cause of the exceedence
- provide to the satisfaction of the EPA and within 5 working days of the determination of the exceedence, a program to develop and submit a final investigation report.
- 3. in accordance with the program required by 2., provide a final investigation report to the satisfaction of the EPA which includes:
  - 3.1. the outcomes of the investigation;
  - 3.2. actions to be undertaken to ensure that a maximum 1.3ppt differential averaged over 24 hours is maintained at all times;
  - 3.3. timeframes for the actions to be completed.
- **4.** implement the actions as required by 3(b) within the approved timeframes upon approval in writing by the EPA.

Average salinity is the salinity measured at ten minute intervals at MP2 or MP4 average over a 24 hour running period

### **Remove Condition 305-627**

#### MONTHLY SALINITY MONITORING REPORT

The Licensee must submit to the EPA results of all salinity monitoring for each month by the end of the following month.

# **Proposed Replacement Condition**

U-150

### QUARTERLY SALINITY MONITORING REPORT

The Licensee must submit results of all salinity monitoring, to the EPA according to the following schedule:

- all marine monitoring undertaken in January, February or March in any year by the end of May in that year;
- all marine monitoring undertaken in April, May or June in any year by the end of August in that year;
- all marine monitoring undertaken in July, August or September in any year by the end of November in that year; and
- 4. all marine monitoring undertaken in October, November or December in any year by the end of February in the following year.

## Remove Condition 305-628

### QUARTERLY MARINE MONITORING REPORT

The Licensee must submit results of all marine monitoring, other

than salinity monitoring, to the EPA according to the following schedule:

- all marine monitoring undertaken in January, February or March in any year by the end of May in that year;
- all marine monitoring undertaken in April, May or June in any year by the end of August in that year;
- all marine monitoring undertaken in July, August or September in any year by the end of November in that year; and
- 4. all marine monitoring undertaken in October, November or December in any year by the end of February in the following year

# **Proposed Replacement Condition:**

MARINE MONITORING REPORT

U-151

#### MARINE MONITORING REPORT

The Licensee must submit to the EPA by 31 March of each year all marine monitoring results, other than results of salinity monitoring for the preceding calendar year.

# **Remove Condition 212-40** SEA WATER EXTRACTION LIMIT The Licensee must not extract more than 7.77 cubic metres of sea water per second from the marine environment. **Proposed Replacement Condition** U-152 SEA WATER INTAKE VELOCITY The Licensee must ensure that the seawater intake velocity at the entry to the intake structure does not exceed 0.15 m/s at any time. Remove Condition 212-34 OPERATIONAL ENVIRONMENTAL MANAGEMENT AND MONITORING PLAN The Licensee must: 1. prepare, maintain and implement an OEMMP which describes to the satisfaction of the EPA how the Licensee will comply with the Act and this licence: 2. provide a full copy of the OEMMP to the EPA on request; and 3. review the OEMMP annually. **Proposed Replacement Condition** U-153 OPERATIONAL ENVIRONMENTAL MANAGEMENT AND MONITORING PLAN The licensee must: 1. revise the OEMMP to the satisfaction of the EPA to address the following: 1.1. methodologies for all monitoring required by conditions of this licence 1.2. methodologies to manage the discharge of plant effluent to meet the salinity discharge limits for conditions U-145 and U-146: 1.3. methodologies to manage the discharge of plant effluent to meet the outfall head loss requirements for conditions 147 and U-148; 1.4. methodologies to manage the intake of seawater into the plant to meet the intake velocity limits in accordance with condition U-152; and 2. submit the revised OEMMP to the EPA for approval by 30 April 2015; and 3. implement the revised OEMMP upon approval

in writing by the EPA or any further revised OEMMP approved in writing by the EPA.

INDEPENDENT MARINE MONITORING REVIEW

**Remove Condition 305-626** 

Licence Attachment to replace existing Attachment

Ambient Marine Ecological Monitoring	
Monitoring Type	Proposed Monitoring Condition
Subtidal Reef	Two surveys per year of benthic flora and fauna on the subtidal reef undertaken once every 3 years
Baited Remote Underwater Video	Two seasonal video fish traps to monitor local fish populations undertaken once every 3 years
Infauna Survey	Two surveys per year of the meiofauna and macrofauna undertaken once every 3 years
Intake Monitoring	
Monitoring Type	Proposed Monitoring Condition
Seawater Characteristic	Measure conductivity, temperature, pH & DO of seawater intake every 10 minutes at Ambient MP1.
Seawater Characteristics	Analyse seawater quarterly for Biological Oxygen Demand, suspended solids, Total nitrogen (as N), Total phosphorus (as P), zinc, lead and copper. Sample is to be a 24-hour flow weighted sample and to be collected on the same day
Intake volume	Measure volume of seawater intake in ML daily.
Discharge Monitoring (outfall)	
Monitoring Type	Proposed Monitoring Condition
Discharge volume	Measure volume of outfall effluent discharge in ML daily.
Discharge Characteristics	Measure conductivity, temperature, DO, pH and Cl <sub>2</sub> (or alternatively ORP) of whole of effluent discharge every 10 minutes. Must be measured for each stream separately and reported as separate streams and proportionately flow weighted.
Discharge Characteristics	Analyse quarterly for Biological Oxygen Demand, suspended solids, Total nitrogen (as N), Total phosphorus (as P), zinc, lead and copper. Sample is to be a 24-hour flow weighted sample and to be collected on the same day
Receiving Environment Monitoring	
Monitoring Type	Proposed Monitoring Condition
Salinity (100 Metres)	Measure conductivity and temperature of seawater at MP2 & MP4 every 10 minutes.