



Annual Audit Compliance Report Form

Environmental Protection Act 1986, Part V Division 3

Once completed, please submit this form either via email to info@dwer.wa.gov.au, or to the below postal address:

Department of Water and Environmental Regulation
Locked Bag 10
Joondalup DC WA 6919

Section A – Licence details			
Licence number:	L9208-2019-1	Licence file number:	
Licence holder name:	Piper Preston Pty Ltd		
Trading as:	Salt Lake Potash Ltd		
ACN:	142 862 409		
Registered business address:	Ground Floor, 239 Adelaide Terrace Perth WA 6000		
Reporting period:	1/9/21 to 31/8/22		

Section B – Statement of compliance with licence conditions
Did you comply with all of your licence conditions during the reporting period? (please tick the appropriate box)
<input type="checkbox"/> Yes – please complete: <ul style="list-style-type: none">• section C;• section D (if required); and• sign the declaration in Section F.
<input checked="" type="checkbox"/> No – please complete: <ul style="list-style-type: none">• section C;• section D (if required);• section E; and• sign the declaration in Section F.

Section C – Statement of actual production	
Provide the actual production quantity for this reporting period. Supporting documentation is to be attached.	
Prescribed premises category	Actual production quantity
14. Solar salt manufacturing	0 tonnes of sulphate of potash
85. Sewage facility premises	43.18m ³ per day of treated wastewater

Section D – Statement of actual Part 2 waste discharge quantity	
Provide the actual Part 2 waste discharge quantity for this reporting period. Supporting documentation is to be attached.	
Prescribed premises category	Actual Part 2 waste discharge quantity
Bitterns	0 tonnes

Section E – Details of non-compliance with licence condition			
Please use a separate page for each condition with which the licence holder was non-compliant at a time during the reporting period.			
Condition no:	4	Date(s) of non-compliance:	April 2022
Details of non-compliance:			
Condition 4 of L9208/2019/1 requires SO4 to submit an environmental compliance report by the 1 st of April 2022 for the pond 5 construction. Due to a delay with the drafting of the as built drawings Piper Preston were unable to meet the due date and advised DWER of the delay. An Environmental Compliance Report and audit, satisfying condition 4, was submitted to DWER on the 3rd of May 2022. This was 32 days late and is reported here as a non-compliance.			
What was the actual (or suspected) environmental impact of the non-compliance?			
NOTE – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.			
No environmental impact from the reported non-compliance.			
Cause (or suspected cause) of non-compliance:			
Delay in drafting of the as built drawings.			
Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance.			
For future environmental compliance reports, SO4 will request that the engineer commences drafting of the as built drawings earlier to avoid any delays in submission to DWER.			
Was this non-compliance previously reported to DWER? Yes.			
<input checked="" type="checkbox"/> Yes, and			
<input type="checkbox"/> Reported to DWER verbally		Date: / /	
<input checked="" type="checkbox"/> Reported to DWER in writing		Date: 30 / 03 / 2022	

Section E – Details of non-compliance with licence condition

Please use a separate page for each condition with which the licence holder was non-compliant at a time during the reporting period.

Condition no:	10	Date(s) of non-compliance:	August 2021 – September 2022
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Details of non-compliance:

Condition 10 of L9208/2019/1 requires SO4 to ensure that treated wastewater discharged to the spray field is within the emission limits.

As part of the AACR, an audit was completed against the licence conditions which included the review of the Wastewater Treatment Plant (WWTP) treated water quality. Several exceedances of the discharge water quality criteria were recorded during the reporting period. Treated water quality results are provided in the below table. Red shading indicates exceedance of the target limits.

Date	Biochemical Oxygen Demand (mg/L) Limit (<20)	Total Nitrogen (mg/L) Limit (<30)	Total Phosphorus (mg/L) Limit (<12)	Total Suspended Solids (mg/L) Limit (<10)	Chlorine residual (mg/L) Limit (0.2-2.0)	pH Limit (6.5-8.5)	E. coli (cfu/100 mL) Limit (<10)
31/08/2021	100	53	11	330	>3.4	7.6	<10
28/09/2021	18	15	4.2	93	0.8	7.8	<10
9/11/2021	20	15	14	95	0.6	8	<10
22/12/2021	24	13	12	34	1.2	8.2	<10
18/01/2022	16	20	9.8	26	0.1	8.2	1,300
8/02/2022	5	19	8.7	14	0.8	8.1	<10
16/03/2022	9	7.5	9	25	0.8	7.4	<10
25/04/2022	N/A	N/A	N/A	28	N/A	N/A	N/A
31/05/2022	7	8.4	4.5	64	3	7.6	<10
28/06/2022	12	6.8	5.9	37	1.5	8.3	<10
11/07/2022	N/A	N/A	N/A	11	N/A	N/A	N/A
22/08/2022	18	4.1	1.5	24	0.26	8.4	<10

/What was the actual (or suspected) environmental impact of the non-compliance?

NOTE – please attach maps or diagrams to provide insight into the precise location of where the non-compliance took place.

During the reporting period, wastewater was discharged to the fenced spray field at an average of 21.01kL per day which is well below the license limit of 60 kL per day. Several exceedances of wastewater quality criteria were recorded but given the wastewater is being disposed to land (and not directly to water) over a short time, these exceedances are not likely to have any short-term environmental consequences on groundwater quality or soil contamination status.

A review of the water quality results against the ANZECC guidelines was completed as part of this assessment and summarized below;

- The average total N and total P average concentrations do not exceed ANZECC short term irrigation (up to 20 years) trigger guideline values.

Section E – Details of non-compliance with licence condition
<ul style="list-style-type: none"> The suspended solids values are indicative of a plant that is not working correctly. Given that wastewater is being disposed to land (and not directly to water), these exceedances are not likely to have any short-term environmental consequences. TSS readings have trended down exponentially over the reporting period, ranging from 330mg/L (31/08/21) to 11mg/L (11/07/22); with future numbers expected to drop below the threshold of 10mg/L. Three exceedances of residual chlorine were recorded which were due to incorrect dosing of chlorine. One exceedance of coliform numbers was reported in January 2022, which was attributed to low chlorine levels in the plant. Routine maintenance was being undertaken at the time of sampling which is believed to have influenced the result. No further exceedances of coliform numbers were reported. If we compare coliform numbers with the values recommended in the ANZECC water quality guidelines for water used for irrigation, we are well below the <1000 cfu/100 mL median value. The spray field is fenced and not readily accessible to humans or animals.
<p>Cause (or suspected cause) of non-compliance:</p>
<p>Insufficient filtration was the primary cause for treated effluent exceeding the license limit for TSS. One of the dual media filters was determined to have a low level of filtration media, resulting in inadequate filtration. The loss of media was attributable to failure of a component inside the filter vessel. Refurbishment of both media filters was completed in June 2022.</p> <p>The chlorine exceedances were due to wrongful dosing of chlorine, considered most likely due to addition rates being set too high or equipment malfunction. The coliform exceedance was likely due to low chlorine levels in the plant.</p>
<p>Action taken to mitigate any adverse effects of non-compliance and prevent recurrence of the non-compliance.</p>
<p>Incident investigations were completed to determine the cause of the wastewater quality exceedances.</p> <p>Wastewater quality monitoring frequency was increased from quarterly to monthly, with daily sampling taking place on several occasions during recalibration of the coagulant dosing. All samples were sent to a NATA accredited laboratory for testing.</p> <p>On recommendation from the plant manufacturer, commencing in March, higher addition of coagulant was trialed to determine the impact on TSS levels. Increasing coagulant addition was not effective in reducing TSS. Further investigation into the plant performance identified loss of media in one of the media filters. The refurbishment of both media filters has resulted in a reduction in TSS levels. The filter refurbishment included:</p> <ul style="list-style-type: none"> Renewal of control valves and internal piping inside the filter vessels Complete replacement of the media charge in each filter <p>Optimisation of the plant operation continues to further reduce TSS levels. The installation of an in-line turbidity meter (in May 2022) has permitted continuous monitoring of TSS levels. Recent learnings and experience are now being applied to develop a troubleshooting guideline and action response plan for the plant operators to apply when the treated effluent turbidity rises above the set high level. Additional training is also planned, to be provided by the plant manufacturer's subject matter expert.</p> <p>TSS results have trended down over the reporting period, ranging from 330mg/L (31/08/21) to 11mg/L (11/07/22); with future numbers expected to drop below the threshold of 10mg/L.</p> <p>Chlorine exceedances have been addressed by recalibrating the chlorine dosing pump to reduce the potential for inadvertent over or underdosing. This action was completed in June 2022.</p>

Section E – Details of non-compliance with licence condition	
Was this non-compliance previously reported to DWER? Yes.	
<input checked="" type="checkbox"/> Yes, and	
<input type="checkbox"/> Reported to DWER verbally	Date: / /
<input checked="" type="checkbox"/> Reported to DWER in writing	Date: 30/09/2021

Section F – Declaration

I / We declare that the information in this Annual Audit Compliance Report is true and correct and is not false or misleading in a material particular¹.

I / We consent to the Annual Audit Compliance Report being published on the Department of Water and Environmental Regulation's (DWER) website.

Signature ² :		Signature:	
Name: (printed)		Name: (printed)	
Position:	Chief Financial Officer	Position:	
Date:	30/09/22	Date:	
Seal (if signing under seal):			

¹ It is an offence under section 112 of the *Environmental Protection Act 1986* for a person to give information on this form that to their knowledge is false or misleading in a material particular.

² AACRs can only be signed by the licence holder or an authorised person with the legal authority to sign on behalf of the licence holder.