BHP

Western Australia Iron Ore (WAIO)

Quarterly Drinking
Water Quality Report Newman WL53
Operating Area

July - Sept 2024



Contents

1	Water Provider Information	4
2	Performance Summary	
3	Microbial Performance	
3.1	Microbiological – Compliance Summary	6
3.2	Microbiological – Exception Notification	7
3.3	Microbiological – Incident Specific Information	7
4	Chemical – Health Related Performance	8
4.1 Sur	Chemical – Health Related – Compliance mmary	8
4.2 Not	Chemical – Health Related – Exception tifications	10
4.3 Info	Chemical – Health Related – Incident Specific ormation	10
5	Chemical - Aesthetic Performance	11
5.1		
6	Radiological Performance	
6.1	Radiological – Compliance Summary	12
6.2	Radiological – Exception Notifications	12
6.3	Radiological – Incident Specific Information	12

7	Planned Sample Summary	.13
7.1	Planned Sample – Compliance Summary	13
7.2	Planned Sample – Exceptions	13
8	General Notes/Other News	14

1 Water Provider Information

Water Provider Contact Details							
Name of Company	BHP Western Australia Iron Ore						
Company Address	PO Box 7122 Cloisters Square Perth WA 6850						
A/General Manager Infrastructure and Services	D. Kelso						
DoH Liaison Officer	N. Morris						
Customer Enquiries	1800 421 077						

2 Performance Summary

Water Quality Meeting the Australian Drinking Water Guidelines v3.7 2022							
	Nev	vman Water Treatmen	t Plant				
	Number of Samples Assessed	Number of Samples Within Guidelines	Number of Non-Conformances to Guidelines				
Microbiological							
E. coli	13	13	0				
Amoeba (Thermophilic <i>Naegleria</i>)	12	12	0				
Chemical							
Chemical - Health	47	47	0				
Chemical - Aesthetic	31	31	0				
Radiological	0	0	0				
	Newma	an Mine Services Indus	strial Area				
	Number of Samples Assessed	Number of Samples Within Guidelines	Number of Non-Conformances to Guidelines				
Microbiological							
E. coli	3	3	0				
Amoeba (Thermophilic <i>Naegleria</i>)	3	3	0				
Chemical							
Chemical - Health	3	3	0				
Chemical - Aesthetic	6	6	0				
Radiological	0	0	0				
	ı	Newman North West A	rea				
	Number of Samples Assessed	Number of Samples Within Guidelines	Number of Non-Conformances to Guidelines				
Microbiological							
E. coli	3	3	0				
Amoeba (Thermophilic <i>Naegleria</i>)	3	3	0				
Chemical							
Chemical - Health	3	3	0				
Chemical - Aesthetic	6	6	0				
Radiological	0	0	0				

3 Microbial Performance

3.1 Microbiological – Compliance Summary

Newman Water Treatment Plant									
Microbiological Parameter	Compliance Criteria	Number of samples	Number of Compliant Samples	Compliance %					
Bacterial									
E. coli	Non-Detect	13	13	100					
Amoeba									
Thermophilic <i>Naegleria</i>	Non-Detect	12	12	100					

Newman Mine Services Industrial Area									
Microbiological Parameter	Compliance Criteria	Number of samples	Number of Compliant Samples	Compliance %					
Bacterial									
E. coli	Non-Detect	3	3	100					
Amoeba									
Thermophilic <i>Naegleria</i>	Non-Detect	3	3	100					

Newman North West Area										
Microbiological Parameter	Compliance Criteria	Number of samples	Number of Compliant Samples	Compliance %						
Bacterial										
E. coli	Non-Detect	3	3	100						
Amoeba										
Thermophilic <i>Naegleria</i>	Non-Detect	3	3	100						

3.2 Microbiological – Exception Notification

Microbiological Water Quality Exceptions								
Locality	Population served	Date Result Notified	Microbiological Parameter	Alert Level	Date DoH Notified	Close Out Date		

3.3 Microbiological – Incident Specific Information

No exception notifications recorded Quarter 3 2024.

4 Chemical – Health Related Performance

4.1 Chemical – Health Related – Compliance Summary

Newman Water Treatment Plant								
Parameter	Units	ADWG Health- Related Guideline	Number of Samples Assessed	Number of Compliant Samples	Compliance %	Maximum Value		
Free Chlorine	mg/L	5	13	13	100	1.3		
Arsenic	mg/L	0.01	3	3	100	<0.0005		
Benzene	mg/L	0.001	1	1	100	<0.0005		
Bromate	mg/L	0.02	1	1	100	<0.005		
Cadmium	mg/L	0.002	1	1	100	<0.0001		
Chlorite	mg/L	0.8	1	1	100	<0.05		
Chromium (as Cr VI)	mg/L	0.05	1	1	100	<0.001		
Ethylbenzene	mg/L	0.3	1	1	100	<0.0005		
Lead	mg/L	0.01	1	1	100	<0.001		
Mercury	mg/L	0.001	1	1	100	<0.00005		
Nickel	mg/L	0.02	1	1	100	<0.001		
Nitrilotriacetic acid	mg/L	0.2	1	1	100	<0.01		
Polycyclic aromatic hydrocarbons (Benzo-(a)-pyrene)	mg/L	0.00001	1	1	100	<0.000005		
Perfluorooctanoic Acid (PFOA)	μg/L	0.56	1	1	100	<0.0005		
Sum of Perfluorooctane sulfonate (PFOS) and Perfluorohexane sulfonate (PFHxS)	μg/L	0.07	1	1	100	<0.0002		
Toluene	mg/L	0.8	1	1	100	<0.0005		
Uranium	mg/L	0.02	3	3	100	0.002		
Xylene	mg/L	0.6	1	1	100	<0.0005		

Note: Trihalomethanes, Pesticides and inorganic parameters are collected on a yearly frequency. Results may be viewed in the annual report.

Newman Water Treatment Plant							
Parameter	Units	ADWG Health- Related Guideline	Number of Samples Assessed	Number of Compliant Samples	Compliance %	Maximum Value	
Fluoride	mg/L	1.5	13	13	100	0.8	

Note: As of October 2023, fluoridated water is supplied to Newman WL53 Operating Area. See DoH media release (<u>Fluoridated drinking water in Newman set to combat tooth decay (health.wa.gov.au)</u>).

Newman Mine Services Industrial Area								
Parameter	Units	ADWG Health- Related Guideline	Number of Samples Assessed	Number of Compliant Samples	Compliance %	Maximum Value		
Free Chlorine	mg/L	5	3	3	100	1.2		

Newman North West Area								
Parameter	Units	ADWG Health- Related Guideline	Number of Samples Assessed	Number of Compliant Samples	Compliance %	Maximum Value		
Free Chlorine	mg/L	5	3	3	100	1.3		

Note: Chlorine (as Free Chlorine residual) measured by field test instrument. Chemical Health results other than chlorine for Mine Services Industrial Area and North West Area are represented by Newman Water Treatment Plant data.

4.2 Chemical – Health Related – Exception Notifications

Health Related Chemical Water Quality Exceptions							
Locality	Population served	Date Result Notified	Health Related Chemical Characteristic	Alert Level	Date DoH Notified	Close Out Date	

4.3 Chemical – Health Related – Incident Specific Information

No exception notifications recorded Quarter 3 2024.

5 Chemical - Aesthetic Performance

5.1 Chemical – Aesthetic – Compliance Summary

Newman Water Treatment Plant									
Parameter	Units	ADWG Aesthetic- Related Guideline	Number of Samples Assessed	Number of Compliant Samples	Compliance %	Maximum Value			
рН		6.5-8.5	13	13	100	7.3			
Turbidity	NTU	5	13	13	100	<0.1			
Chloride	mg/L	250	1	1	100	64			
Hardness (as Calcium carbonate)	mg/L	200	1	1	100	150			
Iron	mg/L	0.3	1	1	100	<0.005			
Silica	mg/L	80	1	1	100	14			
Total dissolved solids	mg/L	600	1	1	100	300			

Newman Mine Services Industrial Area								
Parameter	Units	ADWG Aesthetic- Related Guideline	Number of Samples Assessed	Number of Compliant Samples	Compliance %	Maximum Value		
рН		6.5 – 8.5	3	3	100	7.3		
Turbidity	NTU	5	3	3	100	<0.1		

Newman North West Area								
Parameter	Units	ADWG Aesthetic- Related Guideline	Number of Samples Assessed	Number of Compliant Samples	Compliance %	Maximum Value		
рН		6.5 – 8.5	3	3	100	7.3		
Turbidity	NTU	5	3	3	100	<0.1		

Note: pH and Turbidity measured by field test instrument.

Chemical Aesthetic results other than pH and turbidity for Mine Services Industrial Area and North West Area are represented by Newman Water Treatment Plant data.

To ensure effective disinfection and maintain microbial safety of drinking water throughout the system, BHPIO has made an operating decision to maintain chlorine levels above the ADWG aesthetic guideline value of 0.6 milligrams per litre.

6 Radiological Performance

6.1 Radiological - Compliance Summary

	Newman Water Treatment Plant							
Parameter	Units	ADWG Screening Level	Number of Samples Assessed	Number of Compliant Samples	Compliance %	Maximum Value		

Next Radiological samples scheduled for October 2025.

6.2 Radiological – Exception Notifications

	Radiological Water Quality Exceptions							
Locality	Population served	Date Result Notified	Radiological Characteristic	Date DoH Notified	Close Out Date			

6.3 Radiological – Incident Specific Information

No exception notifications recorded Quarter 3 2024.

7 Planned Sample Summary

7.1 Planned Sample – Compliance Summary

Newman Water Treatment Plant								
Microbiological			Chemical			Radiological		
Planned	Taken	%	Planned	Taken	%	Planned	Taken	%
26	25	96	78	78	100	0	0	-

	Newman Mine Services Industrial Area								
Microbiological			Chemical			Radiological			
Planned	Taken	%	Planned	Taken	%	Planned	Taken	%	
6	6	100	9	9	100	0	0	-	

Newman North West Area									
М	Microbiological			Chemical			Radiological		
Planned	Taken	%	Planned	Taken	%	Planned	Taken	%	
6	6	100	9	9	100	0	0	-	

7.2 Planned Sample – Exceptions

Planned Samples Exceptions									
Locality	Planned Date	Parameter	Reason for Missed Sample						
Newman Water Treatment Plant	July 2024 (Week 1)	Microbiological (Thermophilic <i>Naegleria</i>)	Week 1 Thermophilic <i>Naegleria</i> samples not received by sub-contracted lab due to freight handling issue. Free Chlorine, Turbidity, pH and <i>E. coli</i> results compliant. Remainder of July, August and September 2024 samples collected and compliant.						

8 General Notes/Other News

Reporting for Newman WL53 Operating Area started as of July 2021 following the issue of Water Services Licence (WL53) in June 2021 by ERA. For further information, see Regulatory information | BHP.

Newman Water Treatment Plant is the supply handover point to Water Corporation. For further information on Newman town water quality data, see Water Corporation Annual Drinking Water Report (<u>Drinking Water Quality Perth & WA | Water Quality Testing & More (watercorporation.com.au)</u>).

BHPIO has prepared Customer Charter in December 2020. Any enquiries, suggestions or complaints on the way we deliver our services, or if you would like any further information about the quality of water we supply, please contact BHPIO on 1800 421 077.