

BHP

Western Australia Iron Ore (WAIO)

Quarterly Drinking Water Quality Report - Newman WL53 Operating Area

Oct – Dec 2024



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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			
	Newman Water Treatment Plant		
	Number of Samples Assessed	Number of Samples Within Guidelines	Number of Non-Conformances to Guidelines
Microbiological			
<i>E. coli</i>	16	16	0
Amoeba (Thermophilic <i>Naegleria</i>)	16	16	0
Chemical			
Chemical - Health	79	79	0
Chemical - Aesthetic	42	42	0
Radiological	0	0	0
	Newman Mine Services Industrial Area		
	Number of Samples Assessed	Number of Samples Within Guidelines	Number of Non-Conformances to Guidelines
Microbiological			
<i>E. coli</i>	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
	Newman North West Area		
	Number of Samples Assessed	Number of Samples Within Guidelines	Number of Non-Conformances to Guidelines
Microbiological			
<i>E. coli</i>	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				
<i>E. coli</i>	Non-Detect	16	16	100
Amoeba				
Thermophilic <i>Naegleria</i>	Non-Detect	16	16	100

Newman Mine Services Industrial Area				
Microbiological Parameter	Compliance Criteria	Number of samples	Number of Compliant Samples	Compliance %
Bacterial				
<i>E. coli</i>	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				
<i>E. coli</i>	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 4 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	16	16	100	1.6
2,4-D	mg/L	0.03	1	1	100	<0.001
Antimony	mg/L	0.003	1	1	100	<0.001
Arsenic	mg/L	0.01	3	3	100	<0.0005
Atrazine	mg/L	0.02	1	1	100	<0.001
Benzene	mg/L	0.001	1	1	100	<0.0005
Bromate	mg/L	0.02	1	1	100	<0.005
Bromoxynil	mg/L	0.01	1	1	100	<0.001
Cadmium	mg/L	0.002	1	1	100	<0.00005
Carbaryl	mg/L	0.03	1	1	100	<0.001
Chlorite	mg/L	0.8	1	1	100	<0.05
Chlorpyrifos	mg/L	0.01	1	1	100	<0.000009
Chromium (as Cr VI)	mg/L	0.05	1	1	100	<0.0005
Copper	mg/L	2	1	1	100	<0.0005
Cyfluthrin	mg/L	0.05	1	1	100	<0.001
Cypermethrin isomers	mg/L	0.2	1	1	100	<0.001
Deltamethrin	mg/L	0.04	1	1	100	<0.001
Diazinon	mg/L	0.004	1	1	100	<0.001
Dicamba	mg/L	0.1	1	1	100	<0.001
Dichlorvos	mg/L	0.005	1	1	100	<0.001
Dimethoate	mg/L	0.007	1	1	100	<0.0001
Diuron	mg/L	0.02	1	1	100	<0.001
Ethylbenzene	mg/L	0.3	1	1	100	<0.0005
Fenthion	mg/L	0.007	1	1	100	<0.001
Fipronil	mg/L	0.0007	1	1	100	<0.0002
Glyphosate	mg/L	1	1	1	100	<0.01
Hexazinone	mg/L	0.4	1	1	100	<0.001
Lead	mg/L	0.01	1	1	100	<0.0005
Manganese	mg/L	0.5	1	1	100	<0.001
MCpA	mg/L	0.04	1	1	100	<0.001
Mercury	mg/L	0.001	1	1	100	<0.00005
Molybdenum	mg/L	0.05	1	1	100	<0.0005
Nickel	mg/L	0.02	1	1	100	<0.001
Nitrate	mg/L	50	1	1	100	0.73
Nitritotriacetic acid	mg/L	0.2	1	1	100	<0.01

Newman Water Treatment Plant						
Parameter	Units	ADWG Health-Related Guideline	Number of Samples Assessed	Number of Compliant Samples	Compliance %	Maximum Value
Nitrite	mg/L	3	1	1	100	<0.05
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	<0.0002
Permethrin	mg/L	0.2	1	1	100	<0.001
Picloram	mg/L	0.3	1	1	100	<0.001
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
Triclopyr	mg/L	0.02	1	1	100	<0.001
Trihalomethanes	mg/L	0.25	1	1	100	<0.002
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	14	14	100	0.9

Note: As of October 2023, fluoridated water is supplied to Newman WL53 Operating Area. See DoH media release ([Fluoridated drinking water in Newman set to combat tooth decay \(health.wa.gov.au\)](https://www.health.wa.gov.au/news-releases/fluoridated-drinking-water-in-newman-set-to-combat-tooth-decay)).

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 4 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
pH		6.5-8.5	16	16	100	7.3
Turbidity	NTU	5	16	16	100	0.1
Ammonia	mg/L	0.5	1	1	100	<0.01
Chloride	mg/L	250	1	1	100	72
Colour	HU	15	1	1	100	<1
Hardness (as Calcium carbonate)	mg/L	200	1	1	100	140
Iron	mg/L	0.3	1	1	100	0.005
Silica	mg/L	80	1	1	100	13
Sodium	mg/L	180	1	1	100	65
Sulphate	mg/L	250	1	1	100	37
Total dissolved solids	mg/L	600	1	1	100	330
Zinc	mg/L	3	1	1	100	<0.0005

Newman Mine Services Industrial Area						
Parameter	Units	ADWG Aesthetic-Related Guideline	Number of Samples Assessed	Number of Compliant Samples	Compliance %	Maximum Value
pH		6.5 – 8.5	3	3	100	7.4
Turbidity	NTU	5	3	3	100	0.2

Newman North West Area						
Parameter	Units	ADWG Aesthetic-Related Guideline	Number of Samples Assessed	Number of Compliant Samples	Compliance %	Maximum Value
pH		6.5 – 8.5	3	3	100	7.4
Turbidity	NTU	5	3	3	100	0.2

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 4 2024.

7 Planned Sample Summary

7.1 Planned Sample – Compliance Summary

Newman Water Treatment Plant								
Microbiological			Chemical			Radiological		
Planned	Taken	%	Planned	Taken	%	Planned	Taken	%
32	32	100	121	121	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								
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

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 ([Drinking Water Quality Perth & WA | Water Quality Testing & More \(watercorporation.com.au\)](#)).

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.

Newman Water Treatment Plant Drinking Water Storage Upgrade project was completed in December 2024. Additional sampling will be assessed under the Newman Water Treatment Plant zone.