

## F4.4a GERALDTON PORT BERTH 4 WASHDOWN MATRIX

Last reviewed: 23/06/2016

Leading:	Following:										
	Copper Concentrate	Garnet	Ilmenite	HPM Concentrate	Rutile / HyTi	SREP & SR	Talc Coarse / Fines	Zinc Concentrate	Zircon Concentrate	Zircon	
Copper Concentrate		CW	CW	S	CW	CW	CW	S	CW	CW	
Garnet	PCW		W	PCW	W	W	W	PCW	W	W	
Ilmenite	PCW	W		PCW	IRB	IRB	W	PCW	IRB	W	
HPM Concentrate	S	CW	CW		CW	CW	CW	S	CW	CW	
Rutile HyTi	PCW	W	N	PCW		N	W	PCW	IRB	W	
SREP / SR	PCW	W	N	PCW	N		W	PCW	W	W	
Talc Coarse / Fines	W	W	W	W	W	W		W	W	W	
Zinc Concentrate	S	CW	CW	S	CW	CW	CW		CW	CW	
Zircon Concentrate	PCW	W	W	PCW	W	W	W	PCW		W	
Zircon	PCW	W	W	PCW	W	W	W	PCW	N		
MVPL Iron Ore	W	W	W	W	W	W	W	W	W	W	

### Legend:

No Washdown	N	Nil
Inspection & Run Belts	IRB	1-2 hours
Scrape -Transfer Points	S	2 hours
Water wash	W	See table
Concentrate Wash	CW	See table
Pre-Concentrate wash	PCW	10 hours

\* PCW includes bin changeout and circuit preparation.

\* Above times may vary according to condition of product.

### Water Wash:

R-CV4	12-16 hours
BOOM	

\* Add 4 hours after Zircon Concentrates.

\* Add 4-8 hours after Talc.

Additional time required after Iluka cargoes

### Concentrate Wash:

T3	2-4 hours
T4	2-4 hours
BOOM	6-8 hours
501	2-4 hours

\* Add 4-6 hours for Copper Oxide.

### Chute Change Times (hours):

	Cascade	Telescopic	Artic	Poly	Cons Artic
Removal	2	1	1	1	1
Fitting	3.5	1	1	1	1.5
Washing	4-6*	1-2	1-2	1	1.5

\* Weather dependent - high winds can delay/halt washdown

### NOTES:

This matrix is a guide, and as such if clarification is required further information should be sought.

Any variations to this matrix require confirmation by customer to MWPA, Mercantile Marine & Agent.

Inspection for contamination of ship loading system not possible at night.