

APPENDIX 11.1 – PREDICTED CHANGES TO CURRENT MS 1175 CONDITIONS

Condition Number	Original Condition	Updated Condition																																																												
1. Proposal Implementation																																																														
1-1	<p>When implementing the proposal, the proponent shall ensure the proposal does not exceed the following extents:</p> <table border="1"> <thead> <tr> <th>Proposal element</th> <th>Location</th> <th>Limitation or maximum extent</th> </tr> </thead> <tbody> <tr> <td colspan="3">Physical Elements</td> </tr> <tr> <td>Clearing of vegetation in good to excellent condition</td> <td>Figure 1</td> <td>No more than 2,319 ha within the 15,667 ha terrestrial development envelope.</td> </tr> <tr> <td>Clearing of landward samphire</td> <td>Figure 1</td> <td>No more than 854 ha within the 15,667 ha terrestrial development envelope.</td> </tr> <tr> <td>Clearing of coastal samphire</td> <td>Figure 1</td> <td>No more than 296 ha within the 15,667 ha terrestrial development envelope.</td> </tr> <tr> <td>Clearing of foraging habitat for the Pilbara leaf-nosed bat</td> <td>Figure 1</td> <td>No more than 2,562 ha within the 15,667 ha terrestrial development envelope.</td> </tr> <tr> <td>Clearing of foraging habitat for the northern coastal free-tailed bat</td> <td>Figure 1</td> <td>No more than 1,132 ha within the 15,667 ha terrestrial development envelope.</td> </tr> <tr> <td>Clearing of foraging habitat for the northern quoll</td> <td>Figure 1</td> <td>No more than 64.5 ha within the 15,667 ha terrestrial development envelope.</td> </tr> <tr> <td colspan="3">Operational elements</td> </tr> <tr> <td>Discharge of bitterns, including desalination plant bitterns</td> <td>Figure 2</td> <td>Up to 3.6 GL/a with a specific gravity no more than 1.25 via diffuser into the designated Low Ecological Protection Area shown in Figure 2.</td> </tr> </tbody> </table>	Proposal element	Location	Limitation or maximum extent	Physical Elements			Clearing of vegetation in good to excellent condition	Figure 1	No more than 2,319 ha within the 15,667 ha terrestrial development envelope.	Clearing of landward samphire	Figure 1	No more than 854 ha within the 15,667 ha terrestrial development envelope.	Clearing of coastal samphire	Figure 1	No more than 296 ha within the 15,667 ha terrestrial development envelope.	Clearing of foraging habitat for the Pilbara leaf-nosed bat	Figure 1	No more than 2,562 ha within the 15,667 ha terrestrial development envelope.	Clearing of foraging habitat for the northern coastal free-tailed bat	Figure 1	No more than 1,132 ha within the 15,667 ha terrestrial development envelope.	Clearing of foraging habitat for the northern quoll	Figure 1	No more than 64.5 ha within the 15,667 ha terrestrial development envelope.	Operational elements			Discharge of bitterns, including desalination plant bitterns	Figure 2	Up to 3.6 GL/a with a specific gravity no more than 1.25 via diffuser into the designated Low Ecological Protection Area shown in Figure 2.	<p>When implementing the proposal, the proponent shall ensure the proposal does not exceed the following extents:</p> <table border="1"> <thead> <tr> <th>Proposal element</th> <th>Location</th> <th>Limitation or maximum extent</th> </tr> </thead> <tbody> <tr> <td colspan="3">Physical Elements</td> </tr> <tr> <td>Clearing of vegetation in good to excellent condition</td> <td>Figure 1</td> <td>No more than 3,014 ha within the 19,645 ha terrestrial development envelope.</td> </tr> <tr> <td>Clearing of landward samphire</td> <td>Figure 1</td> <td>No more than 863 ha within the 19,645 ha terrestrial development envelope.</td> </tr> <tr> <td>Clearing of coastal samphire</td> <td>Figure 1</td> <td>No more than 330 ha within the 19,645 ha terrestrial development envelope.</td> </tr> <tr> <td>Clearing of foraging habitat for the Pilbara leaf-nosed bat</td> <td>Figure 1</td> <td>No more than 3,254 ha within the 19,645 ha terrestrial development envelope.</td> </tr> <tr> <td>Clearing of foraging habitat for the northern coastal free-tailed bat</td> <td>Figure 1</td> <td>No more than 1,186 ha within the 19,645 ha terrestrial development envelope.</td> </tr> <tr> <td>Clearing of foraging habitat for the northern quoll</td> <td>Figure 1</td> <td>No more than 80 ha within the 19,645 ha terrestrial development envelope.</td> </tr> <tr> <td colspan="3">Operational elements</td> </tr> <tr> <td>Discharge of bitterns, including desalination plant bitterns</td> <td>Figure 2</td> <td>Up to 5.5 GL/a with a specific gravity no more than 1.25 via diffuser into the designated Low Ecological Protection Area shown in Figure 2.</td> </tr> </tbody> </table>	Proposal element	Location	Limitation or maximum extent	Physical Elements			Clearing of vegetation in good to excellent condition	Figure 1	No more than 3,014 ha within the 19,645 ha terrestrial development envelope.	Clearing of landward samphire	Figure 1	No more than 863 ha within the 19,645 ha terrestrial development envelope.	Clearing of coastal samphire	Figure 1	No more than 330 ha within the 19,645 ha terrestrial development envelope.	Clearing of foraging habitat for the Pilbara leaf-nosed bat	Figure 1	No more than 3,254 ha within the 19,645 ha terrestrial development envelope.	Clearing of foraging habitat for the northern coastal free-tailed bat	Figure 1	No more than 1,186 ha within the 19,645 ha terrestrial development envelope.	Clearing of foraging habitat for the northern quoll	Figure 1	No more than 80 ha within the 19,645 ha terrestrial development envelope.	Operational elements			Discharge of bitterns, including desalination plant bitterns	Figure 2	Up to 5.5 GL/a with a specific gravity no more than 1.25 via diffuser into the designated Low Ecological Protection Area shown in Figure 2.
Proposal element	Location	Limitation or maximum extent																																																												
Physical Elements																																																														
Clearing of vegetation in good to excellent condition	Figure 1	No more than 2,319 ha within the 15,667 ha terrestrial development envelope.																																																												
Clearing of landward samphire	Figure 1	No more than 854 ha within the 15,667 ha terrestrial development envelope.																																																												
Clearing of coastal samphire	Figure 1	No more than 296 ha within the 15,667 ha terrestrial development envelope.																																																												
Clearing of foraging habitat for the Pilbara leaf-nosed bat	Figure 1	No more than 2,562 ha within the 15,667 ha terrestrial development envelope.																																																												
Clearing of foraging habitat for the northern coastal free-tailed bat	Figure 1	No more than 1,132 ha within the 15,667 ha terrestrial development envelope.																																																												
Clearing of foraging habitat for the northern quoll	Figure 1	No more than 64.5 ha within the 15,667 ha terrestrial development envelope.																																																												
Operational elements																																																														
Discharge of bitterns, including desalination plant bitterns	Figure 2	Up to 3.6 GL/a with a specific gravity no more than 1.25 via diffuser into the designated Low Ecological Protection Area shown in Figure 2.																																																												
Proposal element	Location	Limitation or maximum extent																																																												
Physical Elements																																																														
Clearing of vegetation in good to excellent condition	Figure 1	No more than 3,014 ha within the 19,645 ha terrestrial development envelope.																																																												
Clearing of landward samphire	Figure 1	No more than 863 ha within the 19,645 ha terrestrial development envelope.																																																												
Clearing of coastal samphire	Figure 1	No more than 330 ha within the 19,645 ha terrestrial development envelope.																																																												
Clearing of foraging habitat for the Pilbara leaf-nosed bat	Figure 1	No more than 3,254 ha within the 19,645 ha terrestrial development envelope.																																																												
Clearing of foraging habitat for the northern coastal free-tailed bat	Figure 1	No more than 1,186 ha within the 19,645 ha terrestrial development envelope.																																																												
Clearing of foraging habitat for the northern quoll	Figure 1	No more than 80 ha within the 19,645 ha terrestrial development envelope.																																																												
Operational elements																																																														
Discharge of bitterns, including desalination plant bitterns	Figure 2	Up to 5.5 GL/a with a specific gravity no more than 1.25 via diffuser into the designated Low Ecological Protection Area shown in Figure 2.																																																												
5. Flora and Vegetation																																																														
5-1	<p>The proponent shall ensure that the following outcomes are achieved:</p> <p>(3) no direct impacts or indirect impacts to any known locations of the sterile, potentially rare or novel <i>Tecticornia</i> Taxa, identified within <i>Phoenix – Detailed Flora and vegetation survey for the Mardie project</i> (June 2020), unless the CEO has confirmed by notice in writing that further investigations have demonstrated that that the specimens represent adequately widespread species such that disturbance of the known specimens would not be inconsistent with EPA’s objective for Flora and Vegetation;</p> <p>(4) no disturbance associated with the proposal to more than 30% of the currently mapped extent (256 ha) of the ‘landward’ <i>Tecticornia</i> vegetation described in <i>Mardie Project – Response to Submissions</i> (March 2021), until the CEO has confirmed by notice in writing that:</p> <p>d. the additional <i>Tecticornia</i> vegetation mapped in the supplementary surveys is sufficiently widespread in the region that clearing of up to 854 ha of this vegetation would not be inconsistent with the EPA’s objectives for Flora and Vegetation.</p>	<p>The proponent shall ensure that the following outcomes are achieved:</p> <p>(3) no direct impacts or indirect impacts to any known locations of the sterile, potentially rare or novel <i>Tecticornia</i> Taxa, identified within <i>Phoenix – Detailed Flora and vegetation survey for the Mardie project</i> (June 2020) and <i>Phoenix – Detailed flora and vegetation survey for the Mardie Salt Project Optimisation and Quarry Area (November 2021)</i>, unless the CEO has confirmed by notice in writing that further investigations have demonstrated that that the specimens represent adequately widespread species such that disturbance of the known specimens would not be inconsistent with EPA’s objective for Flora and Vegetation;</p> <p>(4) no disturbance associated with the proposal to more than 30% of the currently mapped extent (256 ha) of the ‘landward’ <i>Tecticornia</i> vegetation described in <i>Mardie Project – Response to Submissions</i> (March 2021), until the CEO has confirmed by notice in writing that:</p> <p>d. the additional <i>Tecticornia</i> vegetation mapped in the supplementary surveys is sufficiently widespread in the region</p>																																																												



Condition Number	Original Condition	Updated Condition
		that clearing of up to 863 ha of this vegetation would not be inconsistent with the EPA's objectives for Flora and Vegetation.
5-2	The proponent shall conduct targeted pre-clearance surveys of all areas of vegetation mapped as AcAjTE, Tspp or TtSvTc in <i>Phoenix – Detailed Flora and vegetation survey for the Mardie project</i> (June 2020).	The proponent shall conduct targeted pre-clearance surveys of all areas of vegetation mapped as AcAjTE, Tspp or TtSvTc in <i>Phoenix – Detailed Flora and vegetation survey for the Mardie project</i> (June 2020), <i>Phoenix – Detailed flora and vegetation survey for the Mardie Salt Project Optimisation and Quarry Area</i> (2021).
5-3	The proponent shall not clear in any area of AcAjTE, Tspp or TtSvTc vegetation as mapped in <i>Phoenix – Detailed Flora and vegetation survey for the Mardie project</i> (June 2020), until the CEO has confirmed by notice in writing that:	The proponent shall not clear in any area of AcAjTE, Tspp or TtSvTc vegetation as mapped in <i>Phoenix – Detailed Flora and vegetation survey for the Mardie project</i> (June 2020) and <i>Phoenix – Detailed flora and vegetation survey for the Mardie Salt Project Optimisation and Quarry Area</i> (November 2021), until the CEO has confirmed by notice in writing that:
6. Benthic Communities and Habitat Monitoring and Management Plan		
6-1	The proponent shall ensure the implementation of the proposal achieves the following outcomes: (1) direct impacts to coastal samphire (as defined in the <i>Mardie Project – Response to Submissions March 2021</i>) of no more than 7.2% of the extent within the study area identified in Figure 3;	The proponent shall ensure the implementation of the proposal achieves the following outcomes: (1) direct impacts to coastal samphire (as defined in the <i>Mardie Project – Response to Submissions March 2021</i>) of no more than 8.2% of the extent within the study area identified in Figure 3;
Appended Figures		
Figure 1	Figure 1: Proposal location and development envelopes	Figure to be replaced with new figure showing expanded development envelopes
Figure 2	Figure 2: Marine levels of environmental protection	Figure to be replaced with new figure showing expanded development envelopes and new areas of Low and Moderate Ecological Protection
Figure 3	Figure 3: Intertidal benthic communities and habitat study area	Figure to be replaced with new figure showing expanded development envelopes
	All co-ordinates are in meters, listed in Map Grid Australia Zone 51 (MGA Zone 51) datum of Geocentric Datum of Australia 1994 (GDA94) Spatial data depicting the figures in this schedule are held by the Department of Water and Environmental Regulation as follows: <ul style="list-style-type: none"> Development envelopes and Indicative Footprint (Figure 1) – DWERDT468947 Marine Levels of Environmental Protection (Figure 2) – DWERDT468947 Intertidal BCH study area (Figure 3) – DWERDT468968 Dredging areas of influence (ZoMI and ZoHI) (Figure 4) – DWERDT468959 	All co-ordinates are in meters, listed in Map Grid Australia Zone 51 (MGA Zone 51) datum of Geocentric Datum of Australia 1994 (GDA94) Spatial data depicting the figures in this schedule are held by the Department of Water and Environmental Regulation as follows: <ul style="list-style-type: none"> Development envelopes and Indicative Footprint (Figure 1) – Revised shapefiles provided Marine Levels of Environmental Protection (Figure 2) – Revised shapefiles provided Intertidal BCH study area (Figure 3) – DWERDT468968 Dredging areas of influence (ZoMI and ZoHI) (Figure 4) – DWERDT468959



Condition Number	Original Condition				Updated Condition				
Schedule 2: Proponent Residual Impacts and Risk Management Measures – Mardie Project (Condition 14)									
	Project	Value and Timeframe	Responsibility to implement	Cost	Project	Value and Timeframe	Responsibility to implement	Cost	
	Project A Mapping of the original and current extent of Samphire and Algal mat on the west Pilbara Coast.	\$1500,000 prior to commencement of construction	Proponent	\$1500,000	Project A Mapping of the original and current extent of Samphire and Algal mat on the west Pilbara Coast.	\$1,575,000 prior to commencement of construction	Proponent	\$1,575,000	
	Project B Identify and quantify the potential effects of sea level rise on mangroves, samphire and algal mat on the west Pilbara Coast.	\$500,000 prior to the commencement of construction.	Proponent	\$500,000	Project B Identify and quantify the potential effects of sea level rise on mangroves, samphire and algal mat on the west Pilbara Coast.	\$525,000 prior to the commencement of construction.	Proponent	\$525,000	
	Project C (i) Identify the ecological roles, values and functions of algal mat on the west Pilbara Coast	\$500,000 prior to the commencement of construction	Proponent	\$500,000	Project C (i) Identify the ecological roles, values and functions of algal mat on the west Pilbara Coast	\$525,000 prior to the commencement of construction	Proponent	\$525,000	



Table 1 – Original

Proposal element	Location	Limitation or maximum extent
Physical Elements		
Clearing of vegetation in good to excellent condition	Figure 1	No more than 2,319 ha within the 15,667 ha terrestrial development envelope.
Clearing of landward samphire	Figure 1	No more than 854 ha within the 15,667 ha terrestrial development envelope.
Clearing of coastal samphire	Figure 1	No more than 296 ha within the 15,667 ha terrestrial development envelope.
Clearing of foraging habitat for the Pilbara leaf-nosed bat	Figure 1	No more than 2,562 ha within the 15,667 ha terrestrial development envelope.
Clearing of foraging habitat for the northern coastal free-tailed bat	Figure 1	No more than 1,132 ha within the 15,667 ha terrestrial development envelope.
Clearing of foraging habitat for the northern quoll	Figure 1	No more than 64.5 ha within the 15,667 ha terrestrial development envelope.
Operational elements		
Discharge of bitterns, including desalination plant bitterns	Figure 2	Up to 3.6 GL/a with a specific gravity no more than 1.25 via diffuser into the designated Low Ecological Protection Area shown in Figure 2.



Table 2 – Updated

Proposal element	Location	Limitation or maximum extent
Physical Elements		
Clearing of vegetation in good to excellent condition	Figure 1	No more than 3,014 ha within the 19,645 ha terrestrial development envelope.
Clearing of landward samphire	Figure 1	No more than 863 ha within the 19,645 ha terrestrial development envelope.
Clearing of coastal samphire	Figure 1	No more than 330 ha within the 19,645 ha terrestrial development envelope.
Clearing of foraging habitat for the Pilbara leaf-nosed bat	Figure 1	No more than 3,254 ha within the 19,645 ha terrestrial development envelope.
Clearing of foraging habitat for the northern coastal free-tailed bat	Figure 1	No more than 1,186 ha within the 19,645 ha terrestrial development envelope.
Clearing of foraging habitat for the northern quoll	Figure 1	No more than 80 ha within the 19,645 ha terrestrial development envelope.
Operational elements		
Discharge of bitterns, including desalination plant bitterns	Figure 2	Up to 5.5 GL/a with a specific gravity no more than 1.25 via diffuser into the designated Low Ecological Protection Area shown in Figure 2.



Table 3 - Original

Project	Value and Timeframe	Responsibility to implement	Cost
Project A Mapping of the original and current extent of Samphire and Algal mat on the west Pilbara Coast .	\$1,575,000 prior to commencement of construction	Proponent	\$1,575,000
Project B Identify and quantify the potential effects of sea level rise on mangroves, samphire and algal mat on the west Pilbara Coast .	\$525,000 prior to the commencement of construction.	Proponent	\$525,000
Project C (i) Identify the ecological roles, values and functions of algal mat on the west Pilbara Coast	\$525,000 prior to the commencement of construction	Proponent	\$525,000

