GOVERNMENT OF WESTERN AUSTRALIA

Environmental Protection Authority

Environmental Protection Act 1986

Section 43A

NOTICE OF DECISION TO CONSENT TO AMEND A REFERRED PROPOSAL DURING ASSESSMENT

PERSON TO WHOM THIS NOTICE IS GIVEN

Murchison Hydrogen Renewables Pty Ltd (ACN:650 922 062)
Level 45, 108 St Georges Terrace
PERTH WA 6000

PROPOSAL TO WHICH THIS NOTICE RELATES:

Murchison Hydrogen Renewables Project
Assessment No. 2339

Pursuant to s. 43A of the *Environmental Protection Act 1986* (EP Act), the Environmental Protection Authority (EPA) gives approval to the assessment of the proposal being completed in respect of the proposal as amended in accordance with the proponent's request:

- Renaming of the Power to X (PtX) plant to the Power to Ammonia (PtA) plant.
- Renaming of the ammonia export facility to the marine export facility.
- Relocation and realignment of proposed PtA plant, solar farm, access road, and marine export facility.

Proposal elements

- Increase in the size of the proposed development envelope from 85,883.4 hectares (ha) to 89,555.3 ha (3,671.9 ha increase) and removal of defined activity areas in favour of indicative activity areas within the development envelope. The change includes:
    - a decrease in the indicative Access Road Area of 1,812.5 ha from 5,455 ha to 3,642.5 ha
    - an increase in the indicative Marine Area of 290.8 ha from 566.7 ha to 857.5 ha
    - a decrease in the indicative PtA area of 349 ha from 953.1 ha in the previously defined PtX area to 604.1 ha
    - an increase in the indicative Solar Farm Area of 340 ha from 10,448.2 ha to 10,788.2 ha
    - an increase in the indicative Wind Farm Area of 5,202.9 ha from 68,460.1 ha to 73,663 ha
    - removal of the 0.4 ha estuarine area.
- Increase in the size of the proposed disturbance footprint for wind turbines by 0.7 ha per turbine, from 0.2 ha to 0.9 ha per turbine.

- Increase in the total maximum clearing of wind turbines from 140 ha by 330 ha, totalling 470 ha.
- Reduce the Solar Farm disturbance footprint by 3,000 ha, totalling a 7,000 ha disturbance footprint.
- Incorporation of 900 ha of proposed power transmission infrastructure.
- Increase clearing for the PtA permanent plant footprint by 139 ha, from 242 ha to 381 ha.
- Addition of 6 ha of clearing for a laydown area at coastal site within the PtA plant area.
- Increased proposed length of access roads by 400 km from, 1,200 km to 1,600 km, resulting in an increase in proposed clearing of 440 ha, from 960 ha to 1,400 ha.
- Increase onshore pipeline length by 4,500 m, from 2,500 to 7,000 m resulting in an increase in temporary clearing of 31.5 ha, from 11.5 ha to 43 ha.
- Increase length of seawater intake 555 m, from 150 m to 705 m.
- Increase brine outfall pipeline by 880 m, from 350 m to 1,230 m
- Reduced benthic disturbance for the seawater intake and brine outfall pipeline by 0.1 ha, from 2.5 ha to 2.4 ha.
- Increase length of subsea cryogenic ammonia export pipeline by 350 m within the horizontal directional drilling (HDD) tunnel (1,750 m total) and an additional length along the sea floor of 850 m, at an increased depth of 17 m (37 m total). Resulting in a decrease in proposed benthic disturbance by 3 ha from 6.6 ha to 3.6 ha.
- Alterations to proposed marine export facility including:
    - increased distance from shoreline by 1,200 m, from 1,400m to 2,600 m
    - increased maximum depth of 12 m, from 25 m to 37 m
    - increased swing arm radius of export facility by 620 m, from 330 m to 950 m
    - increase vessel manoeuvring area (radius) of facility by 1,720 m, from 780 m to 2,500 m.
- Increase benthic disturbance of Support Craft Option 1 – Coastal by 12 ha, from 4 ha to 16 ha.
- Increase dredging for Support Craft Option 1 by 55,000 m^3, from 80,000 m^3 to 135,000 m^3.
- Removal of Support Craft Option 2 located at Kalbarri.

Construction elements

- Removal of clearing for wind turbine temporary construction footprints (2.1 ha per turbine) totalling 1,470 ha.
- Reduce proposed temporary clearing (laydown area) for the PtA plant by 151.5 ha, from 180 ha to 30 ha.
- Remove 50 ha of clearing attributed to the temporary laydown for the solar farm.
- Addition of temporary laydown area for nine proposed substations totalling 9 ha.
- Addition of a standalone construction accommodation facility of 59 ha.
- Changes to marine tunnelling/HDD/trenching include:

    - an additional length of 350 m, from 1,400 m to 1,750 m with an additional depth of 9 m, from 20 m to 29 m deep for pipelines to the marine export facility
    - the additional length consists of 1,000 m subsea length (HDD) to a depth of 29 m for the pipelines to brine discharge infrastructure
    - the additional length includes up to 700 m tunnelling to a water depth of approximately 20 m to the seawater intake structure.
- Changes to terrestrial tunnelling/HDD/trenching:
    - an increase of pipeline length of 4,500 m, from 2,500 m to 7,000 m, for the onshore pipeline corridor between the PtA plant and the shoreline infrastructure hub
    - the increased pipeline length includes 1,000 m of trenched pipelines for ammonia and brine between coastal PtA site to HDD entrance
    - the increased pipeline length includes up to1,500 m of trenched seawater pipeline from PtA stie to shoreline pump station.

Operational elements

- Reduce number of wind turbines by 178, from 700 to 522 units, with no change in the total 3.7 GW production.
- Increase proposed renewable energy generation capacity from 5.2 GW to 6.2 GW (1.0 GW increase) due to increased solar output from 1.5 GW to 2.5 GW.
- Addition of flares and vents to the PtA site.

Proposal element with greenhouse gas emissions

- Increase in estimated scope 1 greenhouse gas emissions associated with land use change from not greater than 86,315 tonnes CO2-equivalent per annum to close to 100,000 tonnes CO2-equivalent per annum.

The amended proposal content document and figures are attached.

SUMMARY OF REASONS:

- Renaming of the ammonia plant and export facility is administrative and does not alter the assessment.
- The relocation and realignment of proposed PtA plant, access roads, solar farm and marine export facility does not significantly alter the scope of assessment, and the Environmental Scoping Document (ESD) works remain adequate to identify environmental values and assess environmental impacts.
- The change from set activity areas to indicative areas decreases the certainty of impact locations for specific activities. However, the change increases the flexibility of the proposal to avoid or minimise impacts to significant environmental values during assessment, whilst providing the required context for intended works. Where areas have changed, works required by the ESD still apply, enabling adequate consideration of impacts during assessment.
- Greater definition of the project design has resulted in an overall permanent clearing reduction of 1,191 ha. This includes, but is not limited to, proposed increases in clearing from larger wind turbines, the increased size of the access road and clearing reductions from solar farm layout. The overall reduction for direct disturbance of environmental values is appropriate and the remaining direct, indirect and cumulative impacts will be assessed.

- The inclusion of power transmission infrastructure is appropriate as the entire proposal must be referred for assessment by the EPA in accordance with EPA Instructions and template: How to identify the content of a proposal. Works required by the ESD apply and are likely to be sufficient to identify impacts to environmental values and enable the EPA to complete their assessment.
- The increase to the PtA extent represents plant design changes and incorporation of required bushfire protection zones. The required ESD investigations remain adequate to identify proposed impacts and apply to the revised extent. It is appropriate to incorporate bushfire protection zone extents so the EPA can consider the total cumulative impact of the proposal.
- Overall temporary clearing extent would be reduced by 1,566 ha by removing wind turbine construction footprints and temporary laydown areas for the solar farm and PtA plant, and including the additional elements such as temporary laydown areas for substations and construction accommodation. The change is considered appropriate with potential to improve environmental outcomes by reducing the total area required for disturbance.
- The additional terrestrial and marine pipeline lengths are consistent with the relocation of the PtA, seawater intake brine outfall and marine export facility and additional impacts can be considered during assessment consistent with the requirements of the ESD.
- Increases to the length of marine intake and outfall pipelines may alter the impacts of the proposal, however, the investigations required by the ESD ensures that impacts can be appropriately considered for assessment.
- Alterations to the marine export facility because of improved project engineering design redefine the elements proposed for assessment. The ESD and EPAs Instructions on how to prepare an Environmental Review Document (ERD Instructions) requirements remain adequate to capture environmental values for consideration during assessment.
- Detailed engineering design has also led to changes associated with the Support Craft Facility Option 1 – Coastal. These changes will increase direct disturbance to the benthic environment and dredging volume, resulting in an increase in environmental impacts. However, the impacts can still be adequately assessed based on the requirements of the ESD.
- Removal of Support Craft Facility Option 2 – Kalbarri is appropriate as it increases the certainty of impact locations and activities being considered for assessment and likely improves outcomes within the Kalbarri locality.
- Overall proposed marine benthic disturbance would increase by 8.9 ha including reductions in required marine pipeline disturbance and increased marine export facility footprint. The change will increase direct impacts to the marine environment, however, the requirements of the ESD and ERD Instructions remain adequate to ensure information is provided to the EPA enabling their assessment.
- The total volume of proposed dredging would increase to reflect other amendments associated with the marine environment. As dredging impacts were already identified and scoped for assessment, the required ESD works apply to the greater proposed disturbance and is likely sufficient to provide the EPA with the required information to complete their assessment.
- The reduction in number of wind turbines reflects an increase in turbine size and is consistent with the increase in turbine disturbance footprint. The impacts of the

change would still be captured by the required ESD works and wind generated energy remains consistent with the original proposal. The change has potential to alter environmental outcomes for visual amenity values which will be considered during assessment.

- An increase in electricity generation from renewable sources (solar) is unlikely to significantly alter the proposal or introduce new environmental factors or values for assessment.
- The addition of PtA vents and flares is appropriate as the facility would require the infrastructure for production and safety purposes and the entire proposal must be referred for assessment by the EPA in accordance with EPA Instructions and template: How to identify the content of a proposal. The impacts of this infrastructure will be captured by the requirements of the ESD and ERD Instructions, including visual impacts and noise assessment.
- The increase in predicted scope 1 greenhouse gas emissions would be captured by the works required by the ESD and can be still considered during assessment. In the event of reaching 100,000 tonnes of CO2-equivalent per annum, the EPA may require further information, and the proposal would be subject to the federal safeguard mechanism requirements.
- There are no new environmental factors likely to be significantly impacted as a result of the proposed amendment.
- The EPA considers the amended proposal to be substantially the same character as the existing referred proposal. The EPA considers that the amendment may be a significant amendment if the proposal were already approved, but that the EPA has enough information to reasonably proceed with assessment of the amended proposal without performing any additional functions at this stage.

EFFECT OF THIS NOTICE:

1. The assessment of the proposal is to be completed in respect of the proposal as amended in accordance with the decision set out in this notice.

2. The proposal as amended in accordance with this notice is taken to have been referred to the EPA under s. 38 of the EP Act.

RIGHTS OF APPEAL:

There are no rights of appeal under the EP Act in respect of this decision.

Darren Walsh
Delegate of the Environmental Protection Authority
CHAIR

24 January 2025

Attachment 1- Amended proposal content document and figure/s showing the new approved proposal

Table 1: General proposal content description

Proposal title	**Murchison Green Hydrogen Project** (formerly Murchison Hydrogen Renewables Project)
Proponent name	Murchison Hydrogen Renewables Pty Ltd as trustee for the Murchison Hydrogen Renewables Trust
Short description	The Proposal will use combined onshore wind and solar energy of approximately 6-gigawatt (GW) capacity to produce green hydrogen, which will be converted to an estimated 2 million tonnes per annum (Mtpa) of green ammonia for export to emerging green energy markets. The Proposal is located within the Shire of Northampton, Western Australia (WA), approximately 20 km north of Kalbarri. The Proposal comprises the following major components: – A wind and solar farm with a combined installed capacity of up to 6.2 GW – A Power-to-Ammonia (PtA) facility that will use electrolysis to produce green hydrogen, which will then be converted into ~2 Mtpa of green ammonia – A marine export facility including pipelines, a single-point mooring and a support craft facility.

Table 2: Proposal content elements

Proposal element	Location / description	Existing Proposal extent, capacity, or range	Proposed amendment	Combined extent, capacity, or range
Physical elements				
Development Envelope	Figure 1	Maximum extent of 85,883.4 ha, inclusive of: Access Road Area – 5,455 ha Marine Area – 566.7 ha PtX Area – 953.1 ha Solar Farm Area – 10,448.2 ha Wind Farm Area – 68,460.1 ha Estuarine Area – 0.4 ha	Additional total area of **3,672.2 ha**. **Removal of defined extents for activity areas.** Estuarine Area – **removed from proposal**	Maximum extent of **89,555.3 ha**. **Indicative extents of activity areas:** **Access Road Area – 3,642.5 ha** **Marine Area – 857.5 ha** **PtA Area – 604.1 ha** **Solar Farm Area – 10,788.2 ha** **Wind Farm Area – 73,663.0 ha**

Proposal element	Location / description	Existing Proposal extent, capacity, or range	Proposed amendment	Combined extent, capacity, or range
Wind turbines	Figure 2	140 ha permanent footprint, including native vegetation clearing, within the development envelope. Permanent footprint of 0.2 ha per turbine.	Additional **330 ha** of permanent footprint including native vegetation clearing. Additional permanent footprint of up to **0.7 ha**	**470 ha** permanent footprint, including native vegetation clearing, within the development envelope. Permanent footprint of **0.9 ha** per turbine
Solar farm	Figure 2	Up to 10,000 ha permanent footprint.	Reduction of **3,000 ha.**	Up to **7,000 ha** permanent footprint.
Power Transmission infrastructure	Contained within the Development Envelope (Figure 1)	Nil.	Up to **900 ha** of clearing.	Up to **900 ha** of clearing.
PtA plant Includes: - Desalination plant - Electrolysers - Ammonia plant - Battery storage system - Substation - Ammonia chiller and storage tanks - Onshore support facilities	Figure 2	242 ha permanent footprint plus 181.5 ha temporary construction area.	**Increase of 139 ha** of permanent footprint. **Removal of 181.5 ha** of temporary construction area. **Additional 6 ha Laydown at Coastal site (temporary)**	**381 ha** permanent footprint (total clearing). **6 ha laydown at Coastal site (temporary)**
Access roads and other supporting infrastructure	Figure 2 (Contained within the Development Envelope [Figure 1])	Approximately 1200 km of roads, including a main access road from the highway to the PtA plant. Total clearing of approximately 960 ha.	Additional **400 km** of roads. Additional clearing of **440 ha**.	**Up to 1,600 km** of roads, including a main access road from the highway to the PtA plant. Total clearing of **up to 1,400 ha.**
Onshore pipeline corridors including shoreline infrastructure hub	Figure 2 (Contained within the Development	Approximately 2,500 m of onshore pipeline corridor between shoreline	Increase of pipeline length **of 4,500 m.** **Increase in temporary clearing**	Approximately **7,000 m** of onshore pipeline corridor between shoreline

Proposal element	Location / description	Existing Proposal extent, capacity, or range	Proposed amendment	Combined extent, capacity, or range
	Envelope [Figure 1])	infrastructure hub and PtA plant. Total temporary clearing of approximately 11.5 ha.	**of approximately 31.5 ha.**	infrastructure hub and PtA plant. Total temporary clearing of approximately **43 ha**.
Seawater intake and discharge pipe	Figure 2 (Contained within the Development Envelope [Figure 1])	Disturbance of up to **2.5 ha** of benthic habitat within the 566.7 ha Marine Area. Intake pipeline approximately 150 m from shoreline. Brine outfall pipeline approximately 350 m from shoreline.	Decrease of **0.1 ha** of benthic habitat disturbance. Increase of **555 m** length of intake pipeline. Increase of **880m** length of brine outfall pipeline.	Disturbance of up to **2.4 ha** of benthic habitat within the **857.5 ha** Marine Area. Intake pipeline approximately **705 m** from shoreline. Brine outfall pipeline approximately **1,230 m** from shoreline.
Cryogenic ammonia export pipeline	Figure 2 (Contained within the Development Envelope [Figure 1])	~ 1,400 m subsea length to a depth of approximately 20 m. Disturbance of up to 6.6 ha of benthic habitat within the 566.7 ha Marine Area.	Additional subsea length of **350 m** and additional 850 m along the sea floor with an additional **17 m** of depth. Decrease of **3.0 ha** of benthic habit disturbance.	**1,750 m pipeline in HDD tunnel, which emerges onto the seabed and then runs along the sea floor for 850 m, at a depth of approximately 37 m.** Disturbance of up to 3.6 ha of benthic habitat within the **858 ha** Marine Area.
Marine export facility	Figure 2 (Marine Area)	Located in water depth of approximately 20 – 25 m, ~1,400 m from shore. Swing basin radius of approximately 330 m Vessel manoeuvring area of approximately 780 m. Disturbance of up to 4 ha of benthic habitat within the	Increased in depth of **17 m,** increased distance from shore of **1,200 m.** Increase in swing basin radius of **620 m**. Increase in vessel manoeuvring area of **1,720 m**	Located in water depth of approximately **37 m, 2,600 m** from shore. Swing basin radius of approximately **950 m**. Vessel manoeuvring area of approximately **2,500 m.** Disturbance of up to 4 ha of benthic

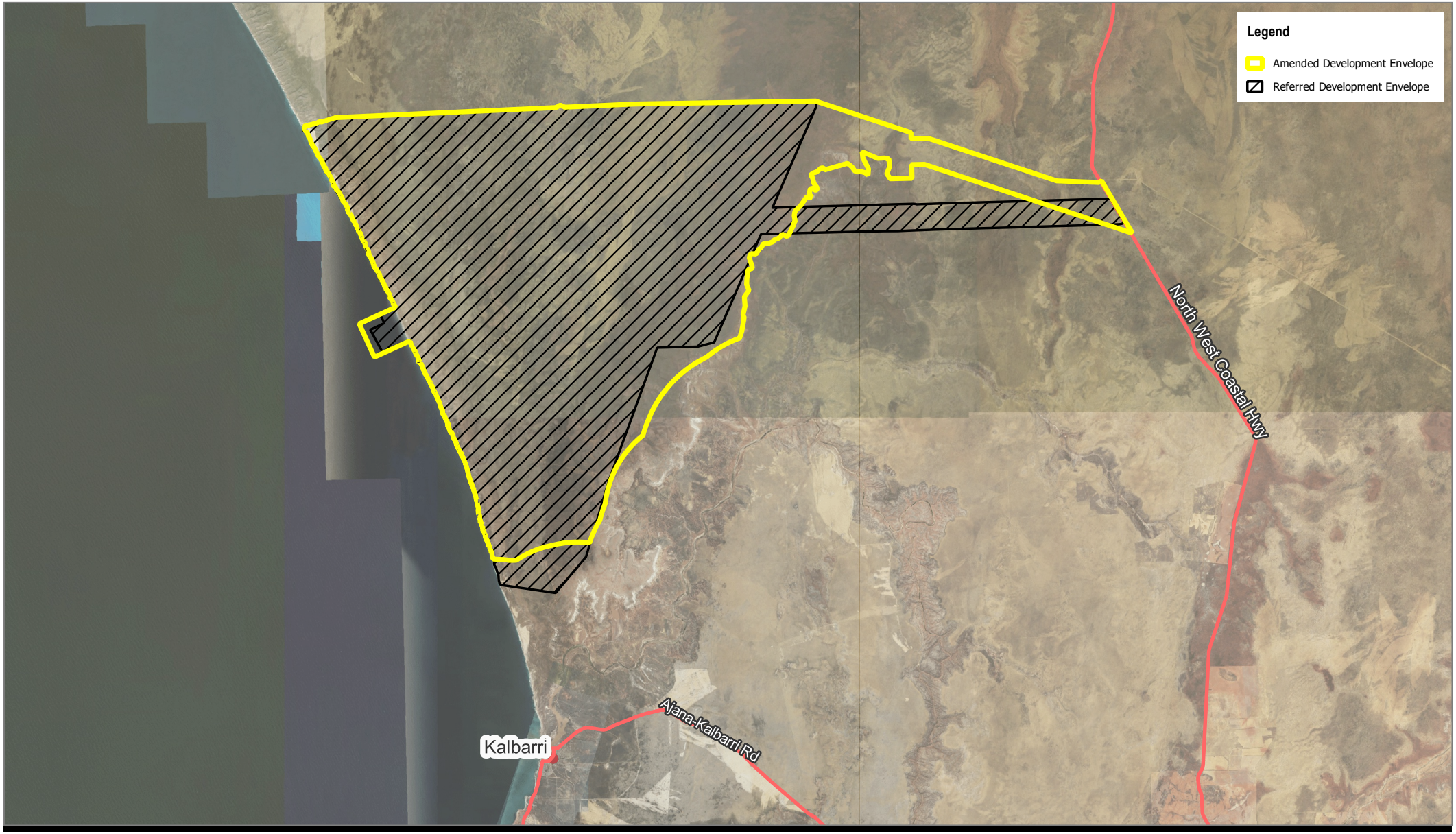
Proposal element	Location / description	Existing Proposal extent, capacity, or range	Proposed amendment	Combined extent, capacity, or range
		566.7 ha Marine Area.		habitat within the **858 ha** Marine Area.
Support Craft Facility Option 1 - Coastal	Figure 2 (Marine Area)	Disturbance of up to 4 ha of benthic habitat within the 566.7 ha Marine Area. Dredging within the maximum combined pipeline dredge extent of 80,000 m^3.	Increase of **12 ha** of benthic habitat disturbance. Increase of dredging require of **55,000 m^3**.	Disturbance of up to **16 ha** of benthic habitat within the **857.5 ha** Marine Area. Dredging within the maximum combined pipeline dredge extent of **135,000 m^3**.
Support Craft Facility Option 2 - Kalbarri	n/a	Berth infrastructure for support vessels. Dredging requirement to maintain channel at 50 m width.	**Removed from proposal.**	**Removed from proposal.**
Construction elements				
Temporary laydown areas and construction footprints	Laydown areas will be located at multiple locations across the DE.	Construction footprint of up to 2.1 ha per turbine (total 1,470 ha temporary construction footprint for wind farm). 181.5 ha of laydown for PtA plant. 50 ha temporary laydown for the solar farm.	**Removal** of construction footprint per turbine of **2.1 ha** (i.e. no temporary construction footprint for wind farm), **removal of 151.5 ha** temporary laydown area for PtA plant, **removal of 50 ha** temporary laydown for the solar farm. **Addition of 9 ha** of temporary laydown areas for nine substations.	**9 ha of temporary laydown for the substations.** **30 ha temporary laydown for PtA Plant**
Construction accommodation	Within Development Envelope	Included within 181.5 ha temporary laydown for PtA plant.	Standalone facility up to **59 ha**.	Up to **59 ha**.
Tunnelling/HDD/trenching - marine	Dual ammonia export pipelines, marine communications, seawater intake	Up to approximately 1,400 m subsea length to a water depth of approximately 20 m	Additional length of **350 m** with an additional **9 m** of depth.	Up to **1,750 m** subsea length (HDD) emerging at a water depth of approximately 29 m

Proposal element	Location / description	Existing Proposal extent, capacity, or range	Proposed amendment	Combined extent, capacity, or range
	and discharge pipelines.	for pipelines to marine export facility.		for pipelines to marine export facility. **Up to 1,000m** subsea length (HDD) to a water depth of approximately **29 m** for pipelines to brine discharge structure. **Up to 700 m** tunnelling to a water depth of approximately 20m to seawater intake structure.
Tunnelling/HDD/trenching - terrestrial	From PtA plant to shoreline	Approximately 2,500 m of onshore pipeline corridor between shoreline infrastructure hub and PtA plant. Open trenching will require stockpiling of fill. Pipes/transmission lines to be surrounded by engineered material and backfilled. Trenchless construction where open trenches are not feasible.	Increase of pipeline length of **4,500 m.** Up to an additional **1,000 m** trenched ammonia and brine pipelines from coastal PtA site to the HDD entrance. Up to an additional **1,500 m** trenched seawater pipeline from shoreline pump station to coastal PtA site.	Approximately **7,000 m** of onshore pipeline corridor between shoreline infrastructure hub and PtA plant. **Up to 1,000 m trenched ammonia and brine pipelines from coastal PtA site to the HDD entrance.** **Up to 1,500 m trenched seawater pipeline from shoreline pump station to coastal PtA site.**
Seawater intake	Figure 2 (Marine Area)	Vertical risers drilled into seabed. Ground anchors and seabed preparation.	No change.	No change.
Brine discharge	Figure 2 (Marine Area)	Vertical risers drilled into seabed. Ground anchors and seabed preparation.	No change.	No change.
Dredging / Blasting	Figure 2 (Marine Area)	Dredging / blasting requirements dependent on extent of seabed obstacles.	No change.	No change.

Proposal element	Location / description	Existing Proposal extent, capacity, or range	Proposed amendment	Combined extent, capacity, or range
Operational elements				
Wind energy production	Figure 2 (Wind Farm Area)	700 turbines Total 3.7 GW	Reduction of turbines by **178**.	Up to **522 turbines** Total 3.7 GW
Solar farm energy production	Figure 2 (Solar Farm Area)	1.5 GW.	Increase of **1.0 GW**	**2.5 GW**
PtA plant Includes: - Desalination plant - Electrolysers - Ammonia plant - Battery storage system - Substation - Ammonia chiller and storage tanks - Onshore support facilities.	Figure 2 (PtA Area)	Electrolyser - capacity of 3.0 GW - 6 GLpa of desalinated water demand Ammonia production plant - 2 Mtpa	No change	No change.
Ammonia export	-	Approximately 2 Mtpa ~ Weekly vessel movements	No change.	No change.
Total permanent terrestrial clearing	-	11,342 ha	Reduction of 1191 ha	10,151 ha
Total temporary terrestrial clearing	-	1713 ha	Reduction of 1566 ha	147 ha
Total benthic communities and habitat clearing	-	17.1 ha	Increase of 8.9 ha	26.0 ha
Total dredging volume	-	80,000 m^3	Increase of 55,000 m^3	135,000 m^3

Proposal element	Location / description	Existing Proposal extent, capacity, or range	Proposed amendment	Combined extent, capacity, or range
Proposal elements with greenhouse gas emissions				
Construction elements:				
Scope 1	Scope 1 GHG emissions associated with construction are not expected to be greater than 86,315 tCO2-e per annum (assuming 5.5 year construction period), which places the Proposal below the 100,000 tonnes CO2-e per annum threshold, as defined under the Australian Government's Safeguard Mechanism. Estimate to be calculated during assessment.		Scope 1 GHG emissions (associated with land use changes and use of plant and equipment for construction) are expected to be **close to the 100,000 tonnes CO2-e per annum threshold**, as defined under the Australian Government's Safeguard Mechanism. Estimate to be calculated during assessment.	
Scope 2	None.		None.	
Scope 3	Emissions during manufacturing and construction of facility and equipment will be calculated during assessment stage.		Emissions during manufacturing and construction of facility and equipment will be calculated during assessment stage.	
Operation elements:				
Scope 1	Scope 1 GHG emissions associated with operation are not expected to be greater than 40,000 tCO2-e per annum (taking a conservative approach with respect to cleared vegetation and no rehabilitation following construction considered), which places the Proposal below the 100,000 tonnes CO2-e per annum threshold, as defined under the Australian Government's Safeguard Mechanism.		Scope 1 GHG emissions associated with operation are not expected to be greater than 40,000 tCO2-e per annum (taking a conservative approach with respect to cleared vegetation and no rehabilitation following construction considered), which places the Proposal below the 100,000 tonnes CO2-e per annum threshold, as defined under the Australian Government's Safeguard Mechanism.	
Scope 2	None		None	
Scope 3	Scope 3 GHG emissions associated with the transport of ammonia by sea tanker are estimated at no greater than 288,489 tCO2-e/yr. Offset of 5,300,000 tCO2 emissions annually		Scope 3 GHG emissions associated with the transport of ammonia by sea tanker are estimated at no greater than 288,489 tCO2-e/yr. Offset of 5,300,000 tCO2 emissions annually	
Rehabilitation				
Areas temporarily cleared for laydown will be rehabilitated following construction. Final closure and rehabilitation following cessation of operations.				

Proposal element	Location / description	Existing Proposal extent, capacity, or range	Proposed amendment	Combined extent, capacity, or range
Commissioning				
Integration pipeline: pressure testing and disinfection of construction works. Reuse of water where practical, sourced from potable supply. Water neutralised and discharged to marine environment using direct discharge.				
Decommissioning				
Removal of all above-surface infrastructure following cessation of operations. Below-ground infrastructure to be decommissioned and left in situ. Seawater intake and brine outfall will be cut to below seabed surface, removed, and disposed of.				
Other elements which affect extent of effects on the environment				
Proposal time*	Maximum project life	30+ years (construction + operations).	No change.	30+ years (construction + operations).
	Construction phase	Approximately 5.5 years including pre-construction phase.	No change.	Approximately 5.5 years including pre-construction phase.
	Operations phase	25+ years.	No change.	25+ years.
	Decommissioning phase	Estimated 5 years post operations.	No change.	Estimated 5 years post operations.



Paper Size ISO A4

0 10 20 km

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Map Projection: Mercator Auxillary Sphere
Horizontal Datum: GDA 2020
Grid: MGA Zone 50

MURCHISON GREEN HYDROGEN

Murchison Hydrogen Renewables Pty Ltd

Murchison Green Hydrogen Project

Amended Development Envelope

Project No. **12553823**
Revision No. **A**
Date. **29/04/2024**

FIGURE 1

Print Date: 29 April 2024

Data Source: WANow
Created By: Tristan Sleigh

Paper Size ISO A4

0 10 20 km

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Map Projection: Mercator Auxillary Sphere
Horizontal Datum: GDA 2020
Grid: MGA Zone 50

MURCHISON GREEN HYDROGEN

Murchison Hydrogen Renewables Pty Ltd

Murchison Green Hydrogen Project

Amended Indicative Site Layout

Project No. **12553823**
Revision No. **A**
Date. **08/11/2024**

FIGURE 2

Data Source: WANow
Created By: Tristan Sleigh