Decision Report

Application for Works Approval

Part V Division 3 of the *Environmental Protection Act 1986*

Works Approval Number	W3031/2025/1
Applicant	Meneghello Galvanizing Pty Ltd
ACN	008 897 729
File number	APP-0030037
Premises	Meneghello Galvanizing Pty Ltd 8 Richardson Street KWINANA Legal description Part of Lot 3 on Deposited Plan 414483 Certificate of Title Volume 2950 Folio 344 As defined by the premises maps attached to the issued works approval
Date of report	12 May 2026
Decision	Works approval granted

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1. Decision summary

This decision report documents the assessment of potential risks to the environment and public health from emissions and discharges during the construction and operation of the premises. As a result of this assessment, works approval W3031 has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this decision report, the Department of Water and Environmental Regulation (the department; DWER) has considered and given due regard to its regulatory framework and relevant policy documents which are available at https://dwer.wa.gov.au/regulatory-documents.

2.2 Application summary and overview of premises

On 19 July 2025, the applicant submitted an application for a works approval to the department under section 54 of the *Environmental Protection Act 1986* (EP Act).

The application is to undertake construction and commissioning works relating to the construction of a category 48A – metal finishing premises at the premises. The premises is approximately 1.7 east of Kwinana.

The premises relates to the category and assessed production / design capacity under Schedule 1 of the *Environmental Protection Regulations 1987* (EP Regulations) which are defined in works approval W3031. The infrastructure and equipment relating to the premises category and any associated activities which the department has considered in line with *Guideline: Risk Assessments* (DWER 2020) are outlined in works approval W3031.

3. Premises overview

Galvanising (hot dip galvanising) is the process of coating iron, steel or ferrous materials with a thin layer of zinc, by immersing the metal in a molten bath of zinc at a temperature of about 450°C. This gives objects a coating of zinc which is highly resistant to corrosion and abrasion.

Galvanising operations are conducted in a building with automatic and manually operated monorail system to move items to be galvanized through the entire process.

The process of galvanising at this facility involves:

- Degreasing of metal objects in hot alkali solution to remove contaminants (cleaning);
- Pickling within a dilute solution of hydrochloric acid to remove rust from metal surface;
- Fluxing within hot zinc ammonium chloride solution to remove remaining oxides and creates a protective layer;
- Drying in a chamber to reduce molten zinc splatter and reduce fumes during galvanising;
- Galvanising in a zinc kettle (size 15.3 metres long, 2.25 metres wide and 3.2 metres deep) containing molten zinc at 450°C; and
- Quenching in a tank of ambient temperature water to bring the steel temperate down. After this steel is lowered into a passivating solution and left to dry.

Objects lowered into the molten zinc kettle cause the emission of the galvanising white fume which is mainly from the decomposition of the flux. Fumes can contain components such as hydrogen chloride, ammonia, ammonium chloride, zinc oxide, zinc and other particulate

material. Dipping into the zinc kettle occurs at approximately 10-to-15-minute intervals throughout a shift and the facility typically operates 24 hours a day, 5 days a week. The facility may operate for up to 7 days a week.

Fumes can be reduced by ensuring that the item to be dipped is dried after being removed from the flux bath prior to being dipped in the zinc kettle.

Dense fumes of ammonia and ammonium chloride are generated as objects are dipped into the zinc kettle. Emissions are captured by a fume hood and directed to a baghouse for treatment prior to discharge.

4. Planning Approval

The City of Kwinana granted Development Approval (DA Application Number DA8989.5) on 22 May 2024.

The delegated officer notes the granted development approval includes the following conditions relating to emissions and discharges:

- Stormwater drainage from roofed and paved areas must be contained and disposed of on site.
- The lot being paved and drained to comply with the following requirements:
    a) All regularly trafficked areas to be sealed and drained to comply with the City of Kwinana's 'Specification for Pavement and Drainage of Trafficable Areas'.
    b) All storage and/or lay down areas to be sealed and drained to comply with the City of Kwinana's 'Specification for Pavement and Drainage of Non-Trafficable Areas'; and,
    c) Unused portions of the lot to remain unused and suitably landscaped/covered to prevent dust lift-off.
- No wash down of plant or equipment shall occur on site, unless carried out over an approved wash down area/s that is connected to a wastewater treatment system approved by the City of Kwinana.
- Storage of chemicals and liquids shall be within bunded impervious areas capable of containing spillages and be connected to an appropriate disposal system.

The granting of this works approval does not imply any authority for other statutory approvals required and the applicant must ensure they seek all required approvals necessary for the operation of the premises.

5. Air Emissions

Air emissions may occur during both the construction, commissioning and operation of the proposed premises. During the construction phase, emissions will be limited to fugitive dust generated by earthworks, material handling and vehicle movements. Construction works will occur over a limited timeframe and the majority of works occur within the shed.

During the operational phase, air emissions will arise from:

- Pre-treatment activities (degreasing, pickling, stripping and fluxing)
- Hot-dip galvanising operations involving immersion in molten zinc
- Associated internal vehicle movements

Identified air pollutants include particulate matter (including zinc oxide dust), hydrogen chloride vapour, ammonia and ammonium chloride, zinc, volatile organic compounds and steam.

Emissions will be controlled through full enclosure of emission sources, extraction under negative pressure, treatment via wet fume scrubbers and a baghouse filtration system fitted to the galvanising kettle, with the baghouse designed to achieve a guaranteed clean gas dust concentration of less than 10 mg/Nm^3. All treated emissions will be discharged via authorised stacks fitted with monitoring ports compliant with AS 4323.1, and the applicant has committed to air emissions monitoring in accordance with relevant DWER guidance.

6. Noise Emissions

Noise emissions associated with the proposed metal galvanising facility may occur during both construction, commissioning and operational phases. Construction noise will be temporary and generated by earthworks, concrete works and the operation of construction plant and vehicles, and will be managed in accordance with the Environmental Protection (Noise) Regulations 1997, the DWER Draft Guideline on Environmental Noise for Prescribed Premises (2016) and the City of Kwinana Construction Noise Guidelines, with works generally limited to standard daytime hours.

Main noise sources from the premises (with estimated decibel levels) include

- Scrubber fan (estimated 84dB)
- Chimney (estimated 66db at 1m from chimney outlet during high-speed operation)
- Baghouse fan (estimated 81dB at 1m from chimney outlet)

7. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk Assessments* (DWER 2020).

To establish a risk event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

7.1 Source-pathways and receptors

7.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises construction and operation which have been considered in this decision report are detailed in Table 1 below. Table 1 also details the control measures the applicant has proposed to assist in controlling these emissions, where necessary.

Table 1: Proposed applicant controls

Emission	Sources	Potential pathways	Proposed controls
Construction			
Dust	Construction of shed and installation of all associated equipment, including sump as well as onsite vehicle movements	Air / windborne pathway	• The use of water sprays from a water cart and/or by hand to dampen materials in exposed areas to suppress dust or using a suppressant such as dustex or hydromulch. Unused portions of the lot will remain unused and suitably landscaped/covered to prevent dust lift-off. • Only water and other approved suppressants from approved sources will be used for dust suppression. • All activities that produce dust emissions must be within the limits outlined in DWER's *Draft Dust Emissions Guidelines 2021*. • All areas of disturbed land should be stabilised to ensure that the disturbed area exposed at any time is kept to a practical minimum to prevent exceedance of dust standards. • The Site Manager shall maintain close control of works with dust creating potential. • At the completion of site works and before vacating the site, the Site Manager should ensure that the construction site is stable with minimal risk of dust lift-off or sediment run-off. • A target of zero visible dust at the boundary of the site to be enforced through continuous supervision of activities by the Site Manager.

Noise		Air / windborne pathway	• The operation of machinery, equipment, plant and vehicles shall be certified to be within the limits of the following:
			  ○ DWER Draft Guideline on Environmental Noise for Prescribed Premises 2016 (DoER,2016).
			  ○ Environmental Protection (Noise) Regulations 1997.
			  ○ Environmental noise practices set out in Sections of AS 2436-2010: Guide to Noise and Vibration Control on Construction, Maintenance and Demolition Sites.
			• Construction activities will occur during normal construction hours (7.00 am and 7.00 pm Monday to Saturday) Where possible, activities that could result in elevated noise levels will be scheduled during normal construction hours.

Commissioning			

Emission	Sources	Potential pathways	Proposed controls
Noise	Commissioning of premises including testing acid pickling, flux baths and galvanising kettle	Air / windborne pathway	• The operation of machinery, equipment, plant and vehicles shall be certified to be within the limits of the following: o DWER Draft Guideline on Environmental Noise for Prescribed Premises 2016 (DoER,2016). o Environmental Protection (Noise) Regulations 1997.
Water containing zinc and other metal sludge		Overland runoff or seepage	• Storage of chemicals and liquids will be within bunded impervious areas capable of containing spillages and be connected to an appropriate disposal system • The bunded area will be constructed from non-porous materials and be able to contain at least 110% of the largest stored container's volume
Operation			
Fumes and gases which may include Hydrogen Chloride, Zinc, Ammonium Chloride, Volatile Organic Compounds (VOCs)	Operation of metal galvanising facility, including, degreasing, pickling, water rinses, pre-flux and galvanising kettle baths	Air / windborne pathway	• Ensuring items that are dipped in the molten zinc kettle are dried after being removed from the flux bath and prior to being dipped in the zinc kettle. • Emissions generated from degreasing, stripping and pickling are captured by wet scrubber system. • Acidic air leads to the scrubber where Hydrogen Chloride is absorbed into the scrubbing liquid and recycled into the pickling baths. • Emissions generated from dipping into the zinc kettle are captured by a fume hood and directed to a baghouse for treatment prior to discharge. • The pre-treatment enclosure is maintained at negative pressure to ensure maximum volume of air is extracted. • Pre-treatment room is fully enclosed, besides entry/exit doors for material handling and personnel doors for access • Fume extraction and air filtration systems with be efficiently operational. • Emissions will only occur at authorised discharge points. • Baghouse maintained with ID fan to ensure air extraction is operational and a broken bag detector. • Baghouse stack will include the installation of a stack monitoring port that is compliant with AS4323.1 • Management and maintenance of baghouses including.

Emission	Sources	Potential pathways	Proposed controls
			○ Sensor checks and maintenance ○ Regular check of pressurized air (cleaning and alarming) ○ Regular check of differential pressure of filter (condition of bags and alarming) ○ Regular check of broken bag detector (condition of bags and alarming) • Air quality monitoring undertaken annually in accordance with AS4323.1, testing will include. ○ Total Matter Particulates (TMP) ○ Halogens (Cl) ○ Halides (HCL) ○ Metal (Zn) ○ Ammonia (NH_3)
Process Sludge		Overland runoff or seepage	• Sludge disposed of by a suitably qualified contractor • Degreasing (and all other pretreatment tanks) are located in an enclosed pretreatment room that sits within a large concrete pit that is fully bunded and sealed with pumps available to pump any spilt acids/caustic back into the tanks or acid storage tanks. • Flux treatment plant to process the sludge or a waste contractor will collect straight from the flux tank • Galvanising kettle is drossed to remove build up or zinc/iron that is formed on bottom of the kettle, will be placed into a mould until solid and stored undercover until sold to a recycler
Water containing zinc and other metal sludge		Overland runoff or seepage	• Accumulated water from the drier will be pumped and contained within an IBC. • Hot water heaters using hot water are within a closed loop recirculating system, any pressure relief liquid is captured within a bund. • Chemicals stored and handled in accordance with the following. ○ AS 1940: The Storage and Handling of Flammable and Combustible Liquids. ○ AS 3780: The Storage and Handling of Corrosive Substances.
Zinc Oxide dust		Air / windborne pathway	• Baghouse extraction system that during steel immersion has a fully enclosed fume enclosure that stays permanently fixed over the kettle. • Drying oven to ensure the steel is dry and warm prior to the galvanising process, which reduces zinc

Emission	Sources	Potential pathways	Proposed controls

			smoke
			• Stopping production if ventilation system is dysfunctional
			• Zinc ash will be stored in ash drums covered from the weather and sold to suppliers
			  ○ The ash is placed in steel 44-gallon drums (located in a small workspace within the fume enclosure) and when cool the drums are taken out and wrapped in plastic to protect them from the weather.
			• Zinc Ash (Recycling)
			  ○ Metal reclaim furnace located on site to reclaim zinc metal from floating ash created during galvanising process
			  ○ Zinc Ash reclaimer will be connected to the baghouse ensuring all zinc smoke is directed to baghouse and captured

Noise	Metal galvanising operation including metal handling, unloading and associated vehicle movements	Air / windborne pathway	• Adherence to DWER Draft Guideline on Environmental Noise for Prescribed Premises 2016 and Environmental Protection (Noise) Regulations 1997. • All equipment is located within shed. • Any equipment chosen for installation which may have an excessive noise emission should include the addition of noise control techniques such as the installation of suitable attenuators, lagging of ducting/pipes and orientation of inlet/outlets vents away from the closest boundary. • Selection of plant, equipment and vehicles to limit noise emission where possible. • All plant, equipment and vehicles on site to be kept properly serviced and fitted with appropriate mufflers • Plant, equipment and vehicles found to produce excessive noise to be removed from the site or stood down until repairs or modifications can be made. • Nighttime operations will be undertaken with minimal use of vehicles within the site, including those fitted with reversing sounds. • Conduct regular noise monitoring to not exceed guideline limits • Installation of a complaints registry

7.1.2 Receptors

In accordance with the *Guideline: Risk Assessment* (DWER 2020), the Delegated Officer has excluded the applicant's employees, visitors, and contractors from its assessment. Protection of these parties often involves different exposure risks and prevention strategies and is provided for under other state legislation.

Table 2 and Figure 1 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises *(Guideline: Environmental Siting* (DWER 2020)).

Table 2: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	**Distance from activity / prescribed premises**
Residential Premises/ Homesteads/ Hospitals	1.7 km east of the premises boundary
Golf Course - Kwinana Golf Club	1.21 km east of the premises boundary
Industrial Premises	Directly adjacent the premises to the North, South and West
Environmental receptors	**Distance from activity / prescribed premises**
Threatened Ecological communities – Sedgelands in Holocene dune swales of the southern Swan Coastal Plain – Buffer zone only	Within buffer zone
Bushforever	546m East of the premises boundary
Underlying groundwater	Max groundwater level 3.62m below ground level
RIWI Act Cockburn Groundwater Area	Within the Cockburn Groundwater Area

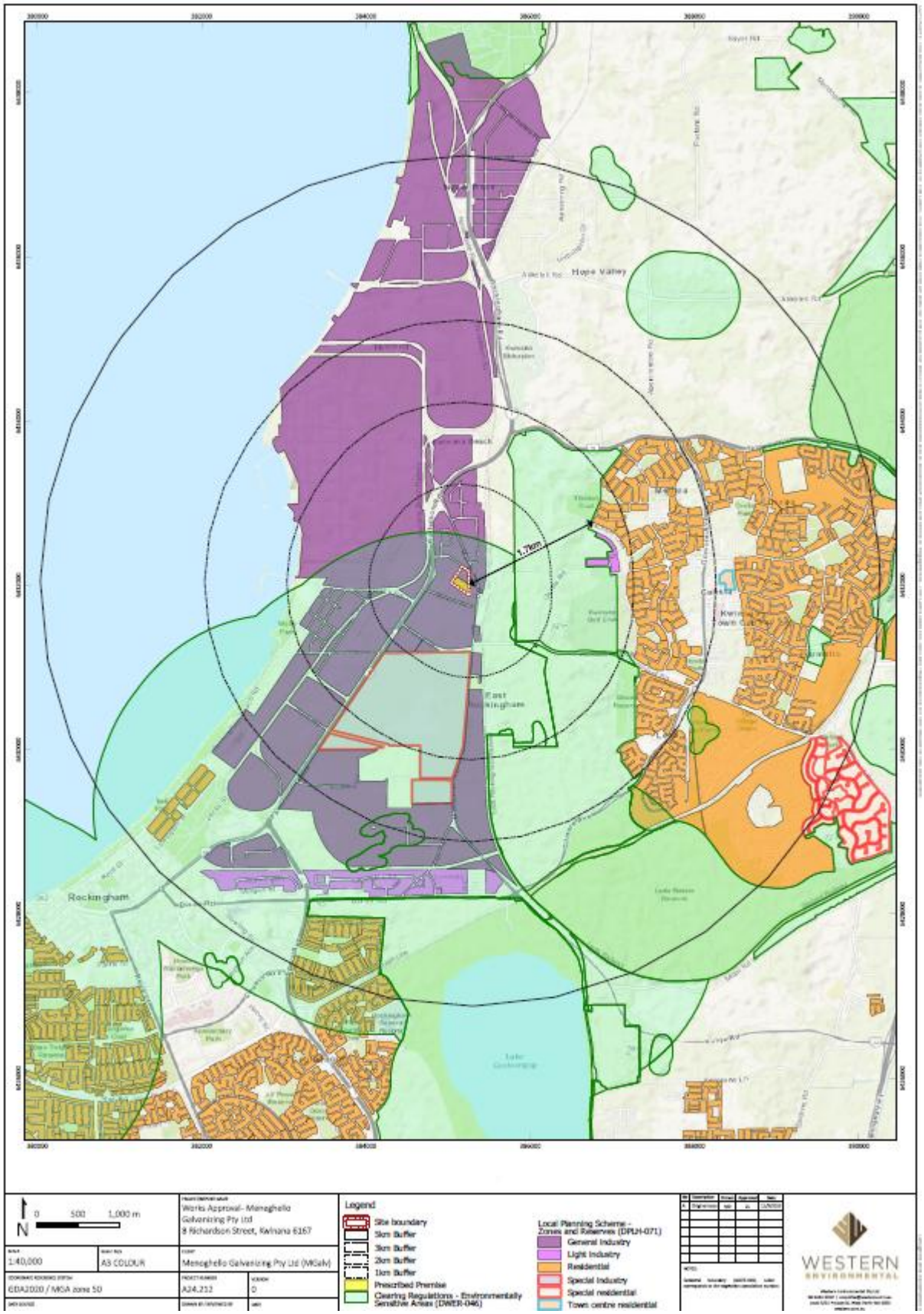

Figure 1: Distance to sensitive receptors

7.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for each identified emission source and takes into account potential source-pathway and receptor linkages as identified in Section 7.1. Where linkages are in-complete they have not been considered further in the risk assessment.

Where the applicant has proposed mitigation measures/controls (as detailed in Section 7.1), these have been considered when determining the final risk rating. Where the delegated officer considers the applicant's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the works approval as regulatory controls.

Additional regulatory controls may be imposed where the applicant's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 3.

Works approval W3031/2025/1 that accompanies this decision report authorises construction and commissioning only. The conditions in the issued works approval, as outlined in Table 3 have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

A licence is required to authorise emissions associated with the operation of the premises i.e. Metal galvanising. A risk assessment for the operational phase has been included in this decision report, however licence conditions will not be finalised until the department assesses a licence application.

Table 3: Risk assessment of potential emissions and discharges from the premises during construction, commissioning and operation

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions [2] of works approval	Reasoning
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
Construction								
Construction of shed and installation of all associated equipment, as well as onsite vehicle movements	Dust	Air / windborne pathway causing impacts to health and amenity	Residences from 1.7 km East Industrial premises immediately adjacent	Refer to Section 3.1	C = Minor L = Unlikely **Low Risk**	Y	N/A	Given the nature of the proposed works and the applicant's noise and dust controls the delegated officer does not expect noise and dust emissions to cause significant impacts.
	Noise			Refer to Section 3.1	C = Minor L = Unlikely **Low Risk**	Y		
Commissioning and operation								
Commissioning of premises including testing acid pickling, flux baths and galvanising kettle	Noise	Air/windborne pathway causing impacts to health and amenity	Residences from 1.7 km East Industrial premises immediately adjacent	Refer to Section 3.1	C = Minor L = Unlikely **Low Risk**	Y	Condition **1**	The delegated officer considered the applicant's proposed noise attenuation is appropriate to mitigate the risk of noise amenity impact at nearby sensitive receptors and has applied the noise attenuation measures as infrastructure controls in the works approval.
	Water containing zinc and other metal sludge	Overland runoff or seepage potentially causing disturbance or impacting water quality	Ground water 3.62 mbgl TEC within proximity Bushforever 546m East	Refer to Section 3.1	C = Moderate L = Unlikely **Medium Risk**	N	Conditions **1**, 7, **8, 9 and 10**	The delegated officer considered the applicant's proposed controls to locate process chemicals within bunding sufficiently mitigate against the risk of contamination of land and stormwater and loss of containment events therefore imposed the applicant's controls as construction and operational requirements in the works approval. Where the applicant did not provide suitably clear specifications for bunding the delegated officer determined it appropriate to refer to AS 1940 in setting conditions to ensure requirements are sufficiently clear and enforceable. The Environmental Protection (Unauthorised Discharges) Regulations 2004 and the general provisions of the EP Act apply in relation to causing pollution, should contaminated water be discharged to the environment from any containment bunding. The works approval does not provide authorisation

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions [2] of works approval	Reasoning
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
								for discharge of contaminated water to the environment.
	Hydrogen Zinc Ammonium Chloride, Zinc fumes and VOCs	Air / windborne pathway causing impacts to health and amenity	Residences from 1.7 km East	Refer to Section 3.1	C = Moderate L = Unlikely **Medium Risk**	N	Conditions **1**, 7, **8, 12 and 13**	The delegated officer considered the applicant's proposed controls to capture all fumes from the pretreatment and galvanising process within the included wet scrubber and baghouse systems therefore imposed these applicant's controls as construction and operational requirements in the works approval. Additional controls have been implemented into the works approval to ensure that no visible fumes are to cross the boundary of the premises and emissions monitoring during environmental wet commissioning to ensure that pollution controls systems are adequate and provide insight for assessment for ongoing operation under a licence that is required to be applied for.
Operation of metal galvanising facility, including, degreasing, pickling, water rinses, pre-flux and galvanising kettle baths	Hydrogen Zinc, Ammonium Chloride fumes, VOCs	Air / windborne pathway causing impacts to health and amenity	Residences from 1.7 km East Industrial premises immediately adjacent	Refer to Section 3.1	C = Moderate L = Unlikely **Medium Risk**	Y	Condition **1**	The delegated officer had regard to the applicant's air quality information provided. Given the predicted low levels and pollutant containment and treatment, emissions from the baghouse and wet scrubber are considered to have a medium risk of causing air quality impacts to nearby sensitive receptors. The delegated officer elected to include stack monitoring requirements on the premises in order to verify emissions and the assessed risk. Conditions have therefore been included in the works approval requiring: • The exhaust stack for the baghouse and scrubber must be fitted with a sampling port that meets requirements of AS 4323.1 for the purpose of emission monitoring. • Monitoring of the emissions from the baghouse and wet scrubber is undertaken during commissioning and results are reported to the department. Once this more specific air emissions monitoring has been gathered during the works approval time limited operations phase, it can be used to inform assessment and conditions within a future licence application to ensure risks of impacts are minimised.
	Process Sludge	Overland runoff or seepage potentially causing	Ground water 3.62 mbgl	Refer to Section 3.1	C = Moderate L = Unlikely	Y	Condition **1**	The delegated officer considers the applicants proposed controls to collect any process sludge on site in bunded, impervious containment which is then removed off site by licensed contractors for treatment or disposal sufficient in

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions [2] of works approval	Reasoning
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
		disturbance or impacting water quality	TEC within proximity Bushforever 546m East		**Medium Risk**			mitigating the risk of contamination to land and therefore imposed the applicants controls as construction and operational requirements in the works approval. The Environmental Protection (Unauthorised Discharges) Regulations 2004 and the general provisions of the EP Act apply in relation to causing pollution, should contaminated water be discharged to the environment from any containment bunding. The works approval does not provide authorisation for discharge of contaminated water to the environment.
	Water containing zinc and other metal sludge	Overland runoff potentially causing ecosystem disturbance or impacting surface water quality	Ground water 3.62 mbgl TEC within proximity Bushforever 546m East	Refer to Section 3.1	C = Moderate L = Unlikely **Medium Risk**	Y	Condition **1**	The delegated officer considered the applicant's proposed controls to locate process chemicals and hydrocarbons within bunding sufficiently mitigate against the risk of contamination of land and stormwater and loss of containment events therefore imposed the applicant's controls as construction and operational requirements in the works approval. Where the applicant did not provide suitably clear specifications for bunding the delegated officer determined it appropriate to refer to AS 1940 in setting conditions to ensure requirements are sufficiently clear and enforceable. The Environmental Protection (Unauthorised Discharges) Regulations 2004 and the general provisions of the EP Act apply in relation to causing pollution, should contaminated water be discharged to the environment from any containment bunding. The works approval does not provide authorisation for discharge of contaminated water to the environment.
	Zinc Oxide dust	Air/windborne pathway causing impacts to health and amenity	Residences from 1.7 km East Industrial premises immediately adjacent	Refer to Section 3.1	C = Moderate L = Unlikely **Medium Risk**	Y	Condition **1**	The delegated officer considered the applicants proposed design controls for the capture of zinc oxide fumes from the zinc kettle and galvanising process. These are considered critical for mitigating the risk of air emissions impacting sensitive receptors in proximity to the premises and therefore determined to implement the works approval holders proposed controls as infrastructure controls on the works approval. This is to ensure the necessary infrastructure is established to enable all air emissions to be effectively captured and treated prior to discharge to air.
Metal galvanising operation including metal handling, unloading and	Noise	Air/windborne pathway causing impacts to health and amenity	Residences from 1.7 km East Industrial	Refer to Section 3.1	C = Minor L = Unlikely **Low Risk**	Y	N/A	The delegated officer considers that given the premises has a separation distance of over 1.7 km to the nearest public receptor, and is located within an industrial area, there is a low risk of noise emissions impacting the amenity of the public

Risk events					Risk rating [1] C = consequence L = likelihood	Applicant controls sufficient?	Conditions [2] of works approval	Reasoning
Sources / activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Applicant controls**				
vehicles movement			premises immediately adjacent					therefore specific noise controls are not specified within the works approval. The delegated officer noted the City of Kwinana development approval contains conditions relating to operational aspects of the premises and that the applicant is also required to comply with the Noise Regulations. Construction requirements replicate the applicant's proposed sound power levels based on manufacturer information. In the event that noise emissions are identified to be a concern during the time limited operations phase, the department may revise the control measures within the works approval and/or require additional information to inform a future licence for ongoing operations at the facility.

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk Assessments* (DWER 2020).

Note 2: Proposed applicant controls are depicted by standard text. **Bold and underlined text** depicts additional regulatory controls imposed by department.

Note 3: Conditions 2-7 and 9 to 15 are all department-imposed conditions required for compliance reporting, authorising environmental commissioning and associated emissions, and general complaint and record keeping requirements.

8. Consultation

Table 4 provides a summary of the consultation undertaken by the department.

Table 4: Consultation

Consultation method	Comments received	Department response
Application advertised on the department's website on 20 November 2025	1 public response was received on the 3 December 2025, with comments as outlined below. 1. Requesting application complete extensive air emissions modelling for all regulated pollutants 2. Requesting design details for water treatment specific to neutralisation of alkaline/acidic effluent 3. Requesting a hazardous waste management plan be submitted 4. Requesting a noise assessment be submitted to show compliance at nearest sensitive receptors 5. Requesting a cumulative impact analysis for additive effects of the proposed plant on existing industrial air quality envelope 6. Requesting enhanced community consultation, including two public	1. The department considered that the application contained sufficient information to undertake a risk assessment. The department has included conditions for air emissions verification within the works approval. This will provide further information during the assessment of the licence and ensure operation is compliant with relevant DWER guidelines. 2. The department considered water treatment during the process. The applicant stated that the scrubber liquid is returned back into the pickling process for use and functions as a closed loop with no wastewater discharge to sewer or environment. All other wastewater from pretreatment tanks is stored on site within IBCs and then removed by licensed contractors for off-site treatment and disposal. This information was considered sufficient to undertake a risk assessment. 3. The department considered hazardous waste where it has been stated that all wastes will be segregated by waste type, stored in dedicated containment areas that are bunded, impervious and undercover, spent process waste is contained then removed offsite by licensed contractors for off-site treatment or disposal. The department considered the information submitted sufficient to undertake a risk assessment. 4. Noise emissions have been considered in the risk assessment (Table 4). Key design controls have been specified in the works approval as regulatory requirements (Condition 1) requiring all equipment located within an enclosed shed, this combined with separation distance of 1.7km to the nearest sensitive receptor gives the department the view that noise emissions can be adequately managed under the Environmental Protection (Noise) Regulations 1997. The department considered the information submitted sufficient to undertake a risk assessment. 5. The department notes that all significant emission sources have been identified, Effective pollution control technology has been incorporated at source, Emissions are discharged via dedicated stacks/chimneys at heights above roof level to promote dispersion, and monitoring infrastructure compliant with AS 4323.1 has been

	information sessions, posting of all technical reports and dedicated enquiry hotline	incorporated into the design. Given the low residual emission concentrations following treatment, the absence of sensitive receptors in close proximity, and the established industrial setting of the site, dispersion modelling to assess cumulative impacts was not considered necessary to demonstrate protection of environmental values or compliance with relevant air quality guidelines. Should DWER consider that cumulative air quality modelling is required at a later stage such as during assessment of the licence application for ongoing operation this can be undertaken once flow rates, and emission parameters are confirmed. The works approval has incorporated the requirement for emission monitoring and reporting during commissioning of the premises. 6. The department notes it is not a specific requirement in the context of Part V of the EP Act for community engagement to occur. The department conducted consultation on the application in accordance with Guideline: Industry Regulation Guide to Licensing and advertised the application on 20 November 2025 for public comment. The department's decision is published online.
Local Government Authority advised of proposal on 20 November 2025	None received.	N/A
Applicant was provided with draft documents on 21 April 2026 and 6 May 2026.	The Applicant submitted a response to drafts on 29 April 2026 and 7 May 2026.	The department's responses to the matters raised in provided in Appendix 1.

9. Decision

The delegated officer has determined that the proposal to construct a hot dip galvanising plant on the premises does not pose an unacceptable level of risk to public health or the environment. This determination is based on the following:

- the infrastructure being established within a building with concrete flooring and suitable bunding on the premises;
- the infrastructure being constructed in accordance with relevant standards with an appropriate ventilation system; and
- there being sufficient separation distance to residential receptors to minimise the likelihood of adverse off-site impacts from the construction and operation of the proposed infrastructure

The applicant's containment, operational and monitoring controls are considered critical to maintaining an acceptable level of risk of environmental impacts, and in accordance with the *Guidance Statement: Setting Conditions* (DER 2015) have been imposed on the works approval as infrastructure controls for construction, and operational controls for commissioning. The delegated officer determined to apply additional controls in the works approval to verify that emissions from the installed baghouse aligned with the assessed emissions to confirm the assessed risk of air quality impact remain acceptable. These include:

- installation of Australian Standard sampling ports on the baghouse stack; and
- monitoring of operational parameters during commissioning

A licence will be required to authorise operation of the constructed infrastructure. Licence conditions will not be finalised until the department assesses a future licence application. The department will consider information reported in the Environmental Compliance Report and Commissioning Report in assessing an application.

Works Approval W3031/2025/1 that accompanies this report authorises construction and commissioning only. The conditions in the issued works approval, as outlined in the above risk table have been determined in accordance with the Guideline: Risk Assessment (DWER 2020b).

10. Conclusion

Based on the assessment in this decision report, the delegated officer has determined that a works approval will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia
2. Department of Water and Environmental Regulation (DWER) 2019a, *Guideline: Industry Regulation Guide to Licensing*, Perth, Western Australia
3. DWER 2019b, *Guideline: Air emissions (DRAFT)*, Perth, Western Australia
4. DWER 2020a, *Guideline: Environmental Siting*, Perth, Western Australia
5. DWER 2020b, *Guideline: Risk Assessments*, Perth, Western Australia
6. Meneghello Galvanizing Pty Ltd, 2025, *Application for a works approval under the Environmental Protection Act 1986 dated*, *18 July 2025*, Perth, Western Australia
7. Meneghello Galvanizing Pty Ltd, 2025, *Supporting Documentation,* dated, 18 July 2025,

Perth, Western Australia

8. Meneghello Galvanizing Pty Ltd, 2025, *Response to RFI*, *dated, 22 October 2025*, Perth, Western Australia

Appendix 1: Summary of applicant's comments on risk assessment and draft conditions

Condition	Summary of applicant's comment	Department's response
Decision Report – Section 3 Works Approval – Table 1, Table 3	Clarification given that building is not fully enclosed, an open wall is present for steel input and output. Area where the activities will create emissions have the following; • fixed fume enclosure over the zinc kettle is connected to the baghouse • fully enclosed pre-treatment enclosure with negative extraction through the scrubber. • Clarity that fume enclosure is not always fully enclosed, required opening to remove items post dipping process • Wording updates to make it clear the galvanizing kettle is not connected to the baghouse via ducting, that the fume enclosure above the galvanising kettle is connected to ducting that travels to the baghouse. Updates to premises information that dipping into the zinc kettle will occur every 10-15 minutes. Information provided that bunds for pretreatment tanks do not have pumps inbuilt, manual pumps will be available to use as required when spills are present. Updates to infrastructure dimensions • All pre-treatment tanks to be 3.2m deep, to update any that are stating 3.3m or 3.66m • Quench tank depth to be changed from 3.30m to 3.35m • Passivation tank depth to be changed from 3.30m to 3.35m Updates to proposed sound power level for the scrubber systems and baghouse, clarity required that its manufactures design and may not reflect actual outputs. Information required of baghouse stack and scrubber chimney heigh	The delegated officer considered the information to be minor clarifying details which do not alter the risk assessment. The requested/required updates and changes as relevant have been made.

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	provided. Update to acid storage tanks, previously 5 x 55m^3, now 5x 60m^3	
Decision Report – Section 5	Requesting removal of drying of steel components as an activity that will create emissions Clarification that air emissions will occur from the operation of forklifts but all other material handling onsite is done by crane system that will not create emissions Request to specify a limit instead of a range for clean gas dust concentration, change from 5-10mg/Nm^3 to less than 10mg/Nm^3	The delegated officer considered the information to be minor clarifying details which do not alter the risk assessment. The requested/required updates and changes as relevant have been made.
Decision Report – Table 1	Changes to applicant proposed controls • Removal of the terms "completely" and "all" that relate to drying items post dipping in the zinc kettle and capture of emissions from the hot dip galvanising process Requesting clarity added to make it clear that the extraction are related to the pre-treatment enclosure. Requesting clarity that the pre-treatment room is fully enclosed except for entry/exit doors for material handling and personnel doors. Requesting updates for clarity that regular checks are performed through sensors in built into the infrastructure. Clarification given that flux treatment plant will be collected by a waste contractor straight from the tank itself. Clarification given that the dryer does not get washed down so no waste water from washdown will occur, will have bunded trays that catch any drips which are then pumped into a IBC as required. Information provided that the inspection platform has been removed from the design of the plant in favour for extra length within the dryer, request to remove this infrastructure item. Clarification that hot water heaters will not contain anti corrosion additives as they can damage heat exchangers, will be a close system that just uses hot water. Clarification of the wording "Baghouse extraction system out of a fully enclosed fume enclosure that stays permanently fixed over the kettle" that	The delegated officer considered the information to be minor clarifying details which do not alter the risk assessment. The requested/required updates and changes as relevant have been made. It is noted that double dipping is proposed to occur on site which will result in the baghouse fume enclosure to not be fully enclosed at times, the delegated officer has found it suitable to add requirements during commissioning for air emissions testing onsite to ensure pollution control equipment is suitable and aid with assessment of an associated licence application for ongoing operation.

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	the fume enclosure is raised to sweep zinc ash off the kettle and further open to allow items to be removed. Will be fully enclosed during the dipping process unless double dipping is to occur. Request removal of applicant control of provided acoustic enclosures as stated it will not be applicable to infrastructure on site.	
Decision Report – Table 3	Updates to incorrect referral to "power plant" in sampling port requirements	The delegated officer noted these corrections and updated the decision report to correctly reference the correct infrastructure.
Decision Report – Figure 1	Updates to incorrect formatting and referencing of figures	The delegated officer noted these corrections and updated the decision report to correctly reference the relevant figures.
Decision Report – 7.1.2	Updates to incorrect formatting and text misplacement	The delegated officer noted these corrections and updated the decision report
Works Approval – Cover Page	Update of the plant production capacity to the plant design capacity of 120,000 tonnes per annum	The delegated officer considered the information to be minor clarifying details which do not alter the risk assessment. The requested/required updates and changes as relevant have been made.
Works Approval – Condition 3	Information provided that not all items of infrastructure require an engineer sign off, all items will provide a Certificate of Compliance and Completion confirming that the items of infrastructure, or component(s) thereof as specified in Condition 1, have been constructed in accordance with the relevant requirements outlined in Condition 1.	The delegated officer noted this and updated the wording to "relevant plant operator and/or fitter"
Works Approval - Condition 4, 13	Request of correct referencing to conditions	The delegated officer noted these corrections and updated the works approval
2nd Draft Consultation (TBA)		
Condition	**Summary of applicant's comment**	**Department's response**
Works Approval – Table 1 (Galvanising Shed)	The building is not fully enclosed and has a full open wall for steel input/output. Request to remove this requirement or make an allowance for "the northern side of the building (excluding pre-treatment area) to remain fully open for operational purposes"	The delegated officer notes this and the proposed premises layout design, and has accepted these changes on the basis that effective emission management is maintained. Should emissions not be adequately controlled, additional licence conditions may be imposed.
Works Approval – Table 1 (Zinc Kettle)	The fume enclosure is only fully enclosed during immersion. Sides lift for ash skimming and end doors open during double dipping and when jigs pass through. Request to change to "The galvanising kettle must be fitted	The delegated officer noted this and updated the wording to "The galvanising kettle must be fitted with a fixed fume enclosure that is able to be fully enclosed and is connected to

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	with a fixed fume enclosure that is able to be fully enclosed and is connected to the baghouse"	the baghouse"
Works Approval – Table 2 (Baghouse)	Request to correct typo of minimum stack height of 1.83 m to 18.3 m	The delegated officer noted this correction and updated the works approval
Works Approval – Table 3 (Galvanising Shed)	The building is not enclosed or under negative pressure. Please delete the entire condition stating "Doors and windows are closed during the hot dip process unless the building is maintained under sufficient negative pressure…" for the Galvanising Shed	The delegated officer noted this and updated the condition to read "All doors and windows must be closed (except the northern side of the building) during the hot dip process"
Decision Report – Page 2 (Air Emissions)	Request to remove the word "enclosed". Change to "within the shed" or "within the building".	The delegated officer noted this and updated the wording to "within the shed"