



## Environmental Protection Authority

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Mr Roger Stephens  
WA Limestone  
277-279 Collier Road  
**BAYSWATER WA 6053**

Your Ref:  
Our Ref: CMS15265  
Enquiries: Danielle Griffiths, 6145 0831  
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Dear Mr Stephens

**NOTICE UNDER SECTION 39A(3)**  
***Environmental Protection Act 1986***

**PROPOSAL:** Concrete Batching Plant  
**LOCATION:** WA Limestone - Lot 2 Collier Road Bayswater WA 6053  
**PROPONENT:** WA Limestone  
**DECISION:** Not Assessed: Public Advice Given

The Environmental Protection Authority (EPA) understands that you wish to undertake the above proposal which has been referred to the EPA for consideration of its potential environmental impact.

This proposal raises a number of environmental issues. However, the overall environmental impact of the proposal is not so significant as to require assessment by the EPA, and the subsequent setting of formal conditions by the Minister for Environment under Part IV of the *Environmental Protection Act 1986*. Accordingly, the EPA has determined not to assess this proposal.

Nevertheless, the EPA has provided the attached advice to you as the proponent, and other relevant authorities, on the environmental aspects of the proposal.

The EPA's decision to not assess the proposal is open to appeal. There is a 14-day period, closing 4 April 2016, during which, on payment of the appeal fee, an appellant may ask the Minister to consider directing the EPA to reconsider this decision or conduct a formal assessment.

Information on the outcome of the appeals process is available through the Appeals Convenor's website, [www.appealsconvenor.wa.gov.au](http://www.appealsconvenor.wa.gov.au), or by telephoning 6467 5190 after the closing date of appeals.

Yours sincerely



Anthony Sutton  
Director  
Assessment and Compliance Division

Delegate of the Chairman of the Environmental Protection Authority  
Under Notice of Delegation No. 33 published 17 December 2013

21 March 2016

Encl: Public Advice

**PUBLIC ADVICE UNDER SECTION 39A(7)  
ENVIRONMENTAL PROTECTION ACT 1986**

**CONCRETE BATCHING PLANT – LOT 2, 277-279 COLLIER ROAD, BAYSWATER**

**Summary**

Ransberg Pty Ltd WA Premix proposes to construct a “wet-mix” concrete batching plant with an average production capacity of 135 m<sup>3</sup>/day of ready-mixed concrete (the proposal), located on Lot 2, 277-279 Collier Road, Bayswater (Attachment 1 and 2). The plant has a maximum production capacity of 500 m<sup>3</sup>/day, which would only occur up to two days per year.

The proposal was advertised for public comment and the Environmental Protection Authority (EPA) notes that 24 public comments were received. Of those, 22 requested that the proposal be found environmentally unacceptable (API Category B) and two requested the proposal be assessed through a public environmental review. The matters raised through the comments included:

- Inadequate separation distance to residential, recreational and commercial food precincts;
- Inconsistent with the generic buffer in EPA guidance;
- Concerns with increased traffic/truck movements;
- Concerns with health and amenity impacts associated with dust and noise from this noxious industry;
- Inconsistent daily production rates;
- Failure to acknowledge Joan Rycroft Reserve as a sensitive land use;
- Impacts of dust deposition to the main drain system; and
- Concerns that flyash may be used.

The EPA has considered the proposal in accordance with the requirements of the *Environmental Protection Act 1986* (EP Act) and the *Environmental Impact Assessment Administrative Procedures 2012*. In making its decision on whether to assess the proposal, the EPA considered the 10 aspects of the significance test as set out in clause 7 of the *Environmental Impact Assessment Administrative Procedures 2012*:

1. values, sensitivity and quality of the environment which is likely to be impacted;
2. extent (intensity, duration, magnitude and geographic footprint) of the likely impacts;
3. consequence of the likely impacts (or change);
4. resilience of the environment to cope with the impacts or change;
5. cumulative impacts with other projects;
6. level of confidence in the prediction of impacts and the success of proposed mitigation;
7. objects of the Act, polices, guidelines, procedures and standards against which a proposal can be assessed;
8. presence of strategic planning policy framework;

9. presence of other statutory decision-making processes which regulate the mitigation of the potential effects on the environment to meet the EPA's objectives and principles for EIA; and
10. public concern about the likely effects of the proposal, if implemented, on the environment.

In considering the potential direct and indirect impacts of the proposal on Human Health, Air Quality and Atmospheric Gases, and Amenity the EPA has had particular regard to:

- the use of a 'wet-mix' batching plant;
- the mitigation strategies proposed by the proponent to avoid and minimise impacts, for example:
  - enclosure of all main plant components;
  - multi layers of dust control;
  - noise cladding and/or locating 'noisy' areas below ground;
  - covering conveyors;
  - restricting deliveries to between 7 am and 7pm; and
  - real-time dust monitoring linked to a real-time alert system.
- the air quality impact assessment and additional modelling indicating the proposal would comply with the current relevant ambient air quality criteria; and
- the acoustic assessment indicating the proposal would comply with *Environmental Protection (Noise) Regulations 1997*.

In summary, although the proposal raises a number of environmental issues, the EPA considers that the likely environmental effects of the proposal are not so significant as to warrant formal assessment. The EPA is of the view that the potential impacts of the proposal can be adequately managed by the proponent's mitigation and management measures.

It is also noted that other statutory processes can be used to regulate and implement the mitigation and management measures in the referral documentation, including the requirement to construct and operate the concrete batching plant through a Part V Division 3 Works Approval and Registration and planning approvals.

## **1. Environmental Factors**

The EPA has identified the following preliminary environmental factors relevant to this proposal:

- a) Human Health;
- b) Air Quality and Atmospheric Gases; and
- c) Amenity.

There were no environmental factors, including the interaction between the environmental factors, that were determined to have significant environmental impacts that would require formal assessment under Part IV of the EP Act. The EPA considers that the mitigation of the potential effects on the environment can be regulated by other

statutory decision-making processes and through the implementation of proponent commitments and best practice measures in accordance with this advice.

## 2. Relevant Policy and Guidance

The EPA has given due consideration to the following relevant published EPA policies and guidelines, noting that other published policies and guidelines pertaining to this proposal were considered but not determined to be relevant:

### a) Human Health

- Guidance Statement No.3, *Separation Distances between Industrial and Sensitive Land Uses*, June 2005, Environmental Protection Authority Western Australia

### b) Air Quality and Atmospheric Gases

- Guidance Statement No.3, *Separation Distances between Industrial and Sensitive Land Uses*, June 2005, Environmental Protection Authority Western Australia
- Guidance Statement No.55, *Implementing Best Practice in proposals submitted to the Environmental Impact Assessment process*, December 2003, Environmental Protection Authority Western Australia

### c) Amenity

- Guidance Statement No.3, *Separation Distances between Industrial and Sensitive Land Uses*, June 2005, Environmental Protection Authority Western Australia
- Environmental Assessment Guideline No. 13, *Consideration of environmental impacts from noise*, September 2014, Environmental Protection Authority Western Australia

## 3. Advice and Recommendations regarding Environmental Issues

### a. Human Health and Air Quality and Atmospheric Gases

The EPA's objective for Human Health is *to ensure that human health is not adversely affected.*

The EPA's objective for Air Quality and Atmospheric Gases is *to maintain air quality for the protection of the environment and human health and amenity, and to minimise the emission of greenhouse and other atmospheric gases through the application of best practice.*

The proposal is located within an area zoned General Industry of TPS 24. To the west of the site is an industrial chemical manufacturing facility and the City of Bayswater Water Transfer station, and to the east are general industrial uses. To the south is a building waste concrete-crushing facility and directly north is Joan Rycroft Reserve. The nearest sensitive land use is located immediately north of the site and the nearest sensitive residential premise is located approximately 250 metres (m) from the closest point of the plant and trafficable areas within the premises (140 m from the boundary of the site), towards the north.

Dust emission mitigation and minimisation measures include the following:

- the concrete batching plant is a wet mix plant which eliminates dust emissions from agitator truck loading;
- the proposed material transfer system reduces the need for front end loader movements;
- construction of a fence along the boundary between the site and Abel Westchem premises;
- enclosed aggregate building design with filtered exhaust from the extraction system;
- covered conveyors to minimise wind driven dust emissions during transfer from the storage building to the batching building;
- continuous real-time dust monitoring linked to a real-time alert system;
- multi layers of dust control (sprinklers, hoses, street sweepers etc);
- manual overrides of automatic dust control equipment to provide additional dust suppression if required; and
- should all of the above measures fail and dust emissions cannot be effectively controlled, the activity or portion of the plant causing the excessive dust will be shut down.

The proponent initially undertook two baseline air quality monitoring programs at the site for a period of 12 months. The proponent then conducted modelling for two scenarios, incorporating the results from the baseline monitoring, to allow for assessment of cumulative impacts. Scenario 1 was designed to represent a maximum daily production rate of 500m<sup>3</sup> (which is proposed to only occur 1 to 2 days per year), while Scenario 2 represented a typical daily production rate of 135m<sup>3</sup>.

The proponent's air quality impact assessment concluded that the proposed operation will comply with the relevant ambient air quality criteria:

- **Dust deposition:** Cumulative annual average dust deposition rates at the identified sensitive receptors for both scenarios are predicted to be below the relevant designated compliance criterion of 4 g/m<sup>2</sup>/month. The incremental contribution from the proposed plant for both scenarios is predicted to be minimal (<0.1 g/m<sup>2</sup>/month).
- **Total Suspended Particulates (TSP):** For both scenarios, the 24-hour (Kwinana Environmental Protection Policy area C – residential) and annual average TSP concentrations (NHMRC) are predicted to be well below the most relevant ambient air quality guidelines at all modelled sensitive receptors. The predicted cumulative 24-hour and annual average TSP concentrations for both scenarios at the sensitive receptors are below 106 µg/m<sup>3</sup> (criteria is 150 µg/m<sup>3</sup>) and 53 µg/m<sup>3</sup> (criteria is 90 µg/m<sup>3</sup>), respectively.
- **PM10:** The maximum 24-hour average PM<sub>10</sub> concentrations will comply with the adopted NEPM criteria of 50 µg/m<sup>3</sup> that allows up to five exceedances in a year. Maximum 24-hour average PM<sub>10</sub> concentrations are predicted to exceed the adopted criteria for Scenario 1 (maximum 500 m<sup>3</sup>/day throughput) but at less than five times per year. No exceedances were predicted for Scenario 2.

The EPA considers that the appropriate standard for airborne particulates, as a health based criterion, is the National Environmental Protection (Ambient Air Quality)

Measure (NEPM). Additionally, the EPA understands that flyash is not proposed be used at this concrete batching plant.

The assessment of a proposed concrete batching plant under Guidance Statement No.3 - *Separation Distances between Industrial and Sensitive Land Uses* (GS 3) can be undertaken using a generic buffer, or where the separation distances proposed are smaller than the generic buffer, site specific studies can be undertaken to demonstrate that a smaller buffer distance is acceptable. In accordance with GS 3, the proponent undertook a site specific air quality assessment. The EPA noted that the relevant 'residential' sensitive receptors were identified in the air quality assessment. The EPA noted that consideration should be given to Joan Rycroft Reserve as a sensitive receptor.

The proponent provided further information regarding the consideration of Joan Rycroft Reserve as a sensitive receptor, explaining that:

1. the criteria used for determining dust impacts was 24-hour criteria and this is more applicable to locations with permanent use (house) rather than temporary use;
2. multiple factors must occur simultaneously in order for there to be a risk of impact within the reserve; and
3. there are no buildings or facilities, except for a public toilet, within the reserve that provide the potential for persons to remain within the reserve for extended periods.

The EPA undertook a peer review of the proponent's air quality assessment and consideration of sensitive receptors. The peer reviewer considered that the exceedances reported in the proponent's air quality assessment at the sensitive 'residential' premises are not statistically significant from the NEPM guideline. Thus, the risk of adverse health effects associated with PM<sub>10</sub> concentrations equal to the NEPM guideline concentration are the same as those implied/tolerated by the guideline value.

The peer reviewer noted that the contribution to the daily average concentration will depend on the time people spend at the reserve and the intensity of the activity which may result in increased respiration rates and whether or not there is a risk of adverse health effects manifesting, depends on a number of other factors, e.g. health status and age. The peer reviewer concluded that although there is a potential for exposure at higher concentrations of PM<sub>10</sub> by users of Joan Rycroft Reserve compared with the concentrations at the selected receptor concentrations, the incremental risk to health would be immaterial.

The EPA noted that the dust concentrations might be elevated on the reserve and for completeness of the exposure assessment requested additional information from the proponent on the predicted 24-hour average PM<sub>10</sub> concentrations at the playground and the cricket pitch on Joan Rycroft Reserve. The predicted concentrations at the playground for the two scenarios (average/maximum) under which the plant may operate indicates no exceedances of the NEPM criteria. No exceedances were predicted at the cricket pitch under the average throughput for the plant and two exceedances predicted under the maximum throughput. These concentrations comply with the adopted NEPM criteria for PM<sub>10</sub> that allows up to five exceedances in a year.

The Department of Environment Regulation (DER) have advised that the proposal would require regulation under the *Environmental Protection Regulations 1997* as it

meets the definition of Category 77 in Schedule 1. It further explained that concrete batching is subject to the *Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998*. In consideration of the above, the DER advised that the proposed concrete plant can be adequately regulated under Part V, Division 3 of the EP Act.

The EPA understands that the proponent must comply with the State Administrative Tribunal (SAT) Order of 15 July 2014, which specifies 25 conditions, including stringent conditions relating to the management, controlling and reporting of dust. Although, this Order is for a different plant design, the proponent still intends to comply with the conditions despite environmental improvements to the design of the plant.

### *Summary*

Having particular regard to:

- the air quality impact assessment and the additional modelling results predicting that the proposal would comply with the current relevant ambient air quality criteria at all sensitive receptors (Joan Rycroft Reserve and at the residential area);
- the advice from the peer reviewer that the incremental risk to health would be immaterial;
- the maximum rate of production of 500 m<sup>3</sup>/day only occurring one to two days per year; and
- the proposed mitigation and minimisation measures,

the EPA considers that the proposal can meet the EPA's objectives for Human Health and Air Quality and Atmospheric Gases, and that the likely environmental effects of the proposal are not so significant as to warrant formal assessment provided that the proposal is implemented in accordance with the referral documentation. It is noted that the impacts to air quality can also be regulated under Part V, Division 3 of the EP Act and through the *Environmental Protection (Concrete Batching and Cement Product Manufacturing) Regulations 1998*. Additionally, the compliance of the SAT Order would provide further confidence that the criteria would be met. The EPA considers that this approach is consistent with the objectives of EAG 9.

### **b. Amenity (noise)**

The EPA's objective for Amenity factor is *to ensure that impacts to amenity are reduced as low as reasonably practicable*.

The proposal is located on Collier Road within an area zoned General Industry of TPS 24. To the west of the site is an industrial chemical manufacturing facility and the City of Bayswater Water Transfer station, and to the east are general industrial uses. To the south is a building waste concrete-crushing facility. Approximately 150 m to the east lies Tonkin Highway.

The nearest sensitive premises, as defined the *Environmental Protection (Noise) Regulations 1997* (Noise Regulations), is located approximately 250 m from the closest point of the plant and trafficable areas within the premises (140 m from the boundary of the site), towards the north. It is understood that the plant will operate between 0600 and 1800 hrs Monday to Saturday.

Noise mitigation and minimisation measures include the following:

- truck movements/deliveries will not commence until after 7am;
- limited use of the front end loader;
- the main components of the plant are enclosed;
- installation of noise cladding; and
- the location of 'noisy' areas below the ground.

The proponent conducted modelling of noise emissions associated with the proposal and assessed compliance with the Noise Regulations at the nearest noise sensitive receivers. Based on the noise modelling, the proponent concluded that the proposal would be compliant with the assigned noise levels of the Noise Regulations for 500 m<sup>3</sup>/day production.

Furthermore, the DER have advised that the proposal could be considered under Part V of the EP Act and adequately regulated through the works approval and licensing processes.

### *Summary*

Having particular regard to:

- the acoustic assessment indicating the proposal would comply with *Environmental Protection (Noise) Regulations 1997*;
- the restriction of truck movements/deliveries to after 7am; and
- the mitigation and minimisation measures,

the EPA considers that the proposal can meet the EPA's objectives for Amenity and that the likely environmental effects of the proposal are not so significant as to warrant formal assessment provided that the proposal is implemented in accordance with the referral documentation. It is noted that the impacts to noise can also be regulated through the *Environmental Protection (Noise) Regulations 1997*. The EPA consider that this approach is consistent with the objectives of EAG 9.

Attachment 1 – Proposal Location



Attachment 2 – Proposed Layout

