

**Remedial treatment of Lot 839,  
Railway Parade at Bassendean**

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**Tower Corporation Pty Ltd**

**Report and recommendations of the  
Environmental Protection Authority**

**Environmental Protection Authority  
Bulletin 486  
December 1990**

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## **Background**

Remedial treatment of Lot 839, Railway Parade, Bassendean has been proposed by Tower Corporation Pty Ltd (the proponent).

The site contains various waste materials which can be traced to the site's historical land use i.e. metal foundry, since 1929. The site has always been used as an iron and steel foundry, processing scrap metal from any source available including mining waste, old railway carriages and fabrication off-cuts.

The foundry was closed in 1982 and most of the production plant was dismantled and removed. Since this time there has been negligible activity at the site. The site is currently in a derelict condition, the buildings having been partially demolished and vandalised.

The Environmental Protection Authority received a proposal for the remedial treatment of the site on 16 November 1989 and set a formal level of assessment as provided under the Environmental Protection Act, 1986. On 22 December, the Authority determined that the proposal should be assessed by a Consultative Environmental Review.

The Authority considers it worth noting that it received a petition from local residents in July 1990 which, in part, supported a proposed land rezoning to residential.

## **The site**

The proposed site is located in Bassendean approximately 10km north-east of the Perth Central Business District, and within 400 metres of the Bassendean railway station. The site is bounded by Scadden Street to the north, Railway Parade to the south, Collier Road and Iolanthe Street to the west and an industrial engineering works to the east (Figure 1).

## **The proposal**

A number of potential pollutants have been identified on the site. This includes some inorganic (e.g. lead, cadmium and chromium) and organic pollutants. It is proposed to rehabilitate the subject land to a state suitable for residential and/or commercial land use(s). Rehabilitation of the land will involve the removal of the foundry buildings and treatment or removal of the polluted material on the site.

Remedial treatment of the site will include the removal of the more obvious areas of potential pollution, these areas include: dust from the bag house facility; oil sludge pit(s) and any interconnecting drains; and the stormwater drainage system. Further to this, the proponent will sort and remove large items of metal found during any excavation works from various parts of the site and provide clean fill to ensure adequate cover of the site in conjunction with future development proposals.

Approximately 9,000 cubic metres of waste material has been specifically identified for on-site treatment and relocation. The proponent will ensure that the waste material is mixed with clean fill on the site to reduce potential pollutant levels to those considered acceptable for residential land use and as determined by the Environmental Protection Authority.

## **Potential environmental impacts assessed by the Environmental Protection Authority**

The Authority considers that the primary issue in this proposal is the remedial treatment of the site to ensure that there are no unacceptable environmental impacts associated with the proposal.

The demolition of the existing infrastructure can be adequately managed under other legislation e.g. Local Government legislation, legislation administered by the Health Department of WA and the Department of Occupational Health, Safety and Welfare.

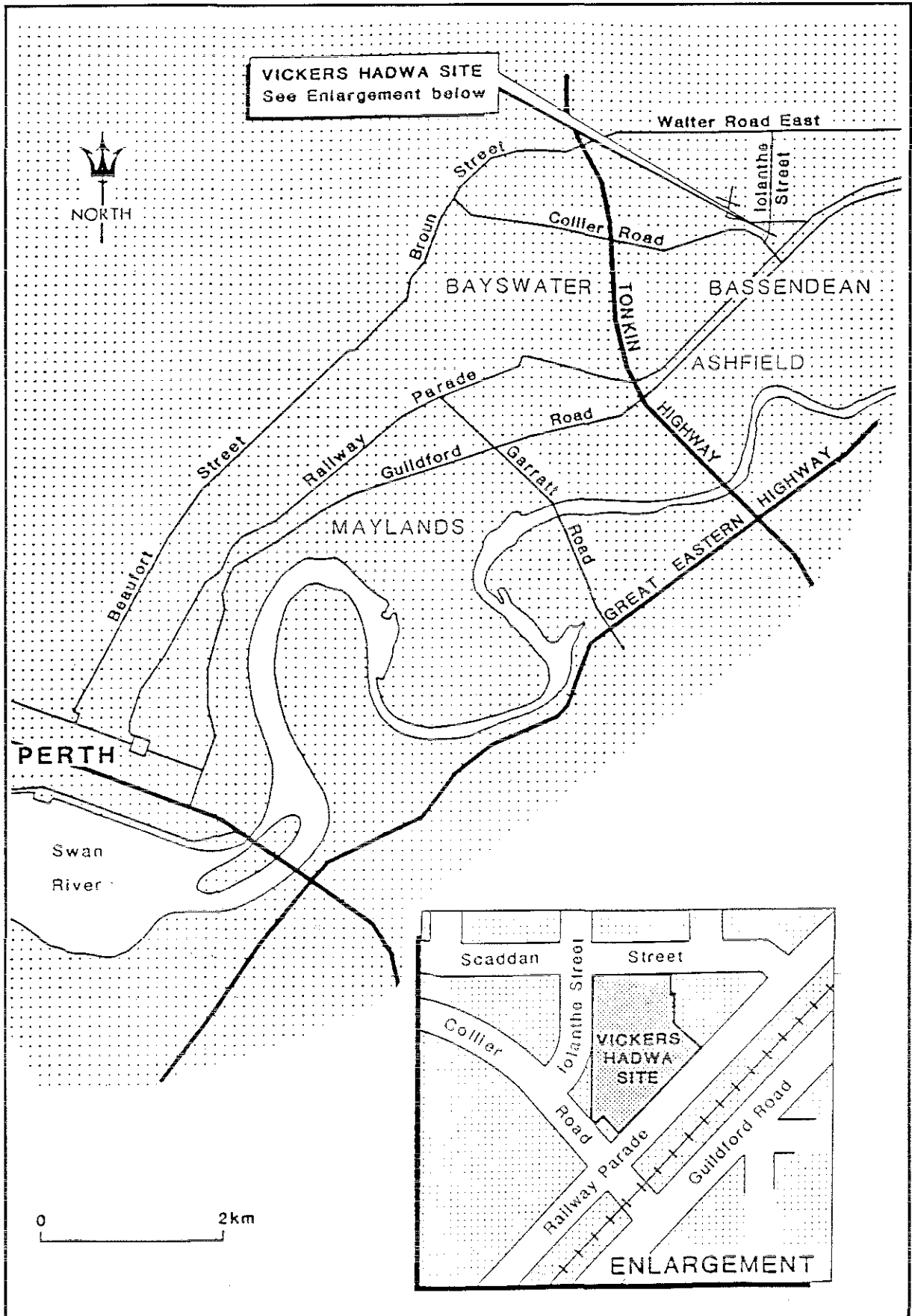


Figure 1: Location map.

The proposed treatment of some of the waste material by diluting it and leaving it on-site is one which could only be environmentally acceptable if it could be shown to have no unacceptable environmental impacts.

In this regard the Authority notes that:

- the waste materials have been on-site for a considerable time and have had time to stabilise and/or leach over that period. Leachate tests indicate that the waste materials now have a low potential to leach and cause unacceptable environmental impacts;
- groundwater test results indicate no significantly elevated levels of contaminants; and
- materials identified as having the greatest potential to cause unacceptable environmental impacts will be specifically removed from the site to an approved landfill site.

Accordingly, the Authority has considered the Consultative Environmental Review and based on its own investigations, the proponent's responses to issues raised during the environmental impact assessment and other information provided by the proponent and in the submissions, concludes that the proposal is environmentally acceptable.

## **Recommendation 1**

**The Environmental Protection Authority concludes that remedial treatment of Lot 839 Railway Parade Bassendean, as described in the proponents Consultative Environmental Review is environmentally acceptable, and that it could proceed subject to the commitments made by the proponent and the Authority's Recommendations in this Report.**

The Environmental Protection Authority considers that any approval for the proposal based on this assessment should be limited to five years. Accordingly, if the proposal has not been substantially commenced within five years of the date of this report, then such approval should lapse. After that time, further consideration of the proposal should occur following a new referral to the Authority.

Furthermore, the Authority notes that during the detailed implementation of proposals, it is often necessary or desirable to make minor and non-substantial changes to the designs and specifications which have been examined as part of the Authority's assessment. The Authority believes subsequent statutory approvals for this proposal could make provision for such changes, where it can be shown that the changes are not likely to have a significant effect on the environment.

In assessing this proposal and the proposed land use for the site (residential and commercial), the Authority considered that appropriate clean-up levels would need to adequately reflect these land uses.

Accordingly, the Authority considers that the waste material to be treated on-site should be adequately identified during the on-going site works and that a proposal for its on-site treatment (mixing) should be provided to the EPA for final approval and determination of appropriate clean-up criteria.

## **Recommendation 2**

**The Environmental Protection Authority recommends that the proponent more accurately identify the location, composition and amounts of the waste materials, proposed for on-site treatment, during other approved site activities and provides a waste treatment management plan, to the satisfaction of the EPA, before proceeding with the treatment.**

The disposal of any waste material from the site must be carried out in accordance with the requirements of the Health Department of WA as well as the EPA.

The Authority's role in the waste disposal activities of this proposal is to ensure that the waste, identified as having the potential to cause unacceptable environmental impacts, is removed from the proposed site as proposed in the CER. Furthermore, the Authority is also responsible for ensuring that the Health Department's approved landfill site is capable of containing the waste material such that it is prevented from causing an unacceptable environmental impact.

### **Recommendation 3**

**The Environmental Protection Authority recommends that the proponent should ensure that the removal and disposal of all waste material from the site is carried out to the satisfaction of the Environmental Protection Authority on advice from the Health Department of WA.**

## **Conclusion**

The Authority received 6 separate submissions on this proposal during the consultation days held on the 29 and 30 October 1990. Generally the submissions indicated that there was no major reason to reject the proposal, as proposed in the CER, subject to the proponent meeting the requirements of other Government Departments (as determined under their respective statutory powers) and the Town of Bassendean (Appendix 1).

# **Appendix 1**

**Town of Bassendean's submission**







## TOWN OF BASSENDEAN

48 Old Perth Road, Bassendean 6054

Our Ref: SCA000839 SD:YF  
Your Ref: 14/90/VO11

Environmental Protection Authority  
1 Mount Street  
PERTH WA 6000

ATTENTION: Mr. S. Watson

Dear Sir,

**EXPEDITED ENVIRONMENTAL IMPACT ASSESSMENT - REMEDIAL  
TREATMENT OF LOT 839 RAILWAY PARADE, BASSENDEAN - OWNER:  
TOWER CORPORATION PTY LTD**

I refer to your letter and attached report received on the 22nd October, 1990 regarding the above.

Although it is appreciated that there may be a considerable backlog of proposals requiring assessment, the restricted consultation period is totally unsatisfactory. It is disappointing that the Authority has not afforded the Council sufficient time for proper consideration and evaluation of the environmental consequences of the proposal.

In view of the information presented to the Council, it is preferred that all contaminated soil be completely removed from the site. However, following an informal meeting of Council members to enable Tower Corporation and consultants to present the review document, I advise that the Council would be prepared to support in principle the proposed method of treatment as outlined in the Consultative Environmental Review dated the 18th September, 1990, subject to the following:-

1. Further soil sampling and testing being implemented following the removal of all existing structures on the site, and the results confirming that the dilution process remains the most acceptable method of treatment. A subsequent approval then being issued to allow for the earthworks to commence.
2. The contaminated soil being diluted with clean imported soil, and not existing soil on the site;
3. The approval of the Environmental Protection Authority; and

4. The approval of the Waterways Commission.

Further, the following comments and concerns are brought to the Authority's attention for consideration:-

1. The site is subject to rezoning from General Industry to Residential R40. As such, concern is raised over the contaminated material remaining on site with the anticipated end land use being high density residential development, particularly in view of the requirements imposed on nearby landowners to remove contaminated soils for industrial purposes. For this reason, the highest possible standards are required to be achieved;
2. The Council is not satisfied that the soil sampling methods necessarily reflect all contaminants on the site;
3. Groundwater levels may, in peak times, rise considerably higher than those mentioned in the report and as such concerns are raised that the groundwater may become polluted. In this regard ongoing monitoring is required;
4. During the course of the works, the owner should be required to ensure a high level of public awareness through information brochures and personal contact. Public communications should be established to enable enquiries to be directed to the owner. Further works are to be carried out at times acceptable to the Council;
5. In regards to demolition, the Council will require the requirements of the Department of Occupational Health Safety and Welfare (D.O.S.H.W.A.) to be strictly adhered to. The demolition should be carried out during the winter period and under close supervision of D.O.S.H.W.A. to minimise risk of asbestos fibre and dust movement;
6. The Council may require independent soil sampling and testing following the remedial works indicating satisfactory results prior to any subdivision or new development;
7. The disposal of all rubble and industrial scrap from the site, including the areas that have been subject to filling, will be required. The method of collection and disposal of waste is to be established and agreed to;
8. Disposal of groundwater associated with the installation of services is to be to the satisfaction of the Water Authority of W.A. and the Waterways Commission;
9. Entry to the site for haulage vehicles associated with site demolition will be restricted to Iolanthe Street with vehicle movements south of Scaddan Street; and

10. To assist Council in assessing future soil sample findings, further information and clarification is required in respect to the contamination threshold values, and levels that are considered acceptable for high density residential development.

I trust that the matters raised are useful and will be taken into careful consideration by the Hon. Minister for the Environment.

Yours faithfully,



*for* STEPHEN GOODE  
TOWN CLERK/GENERAL MANAGER

30th October 1990

c.c. Town Corporation Pty Ltd