

PROPOSED MIA CONTAINMENT AREA INFORMATION

1. INTRODUCTION

The purpose of this appendix is to provide background information about existing conditions at the proposed MIA Containment Area. This area does not form part of the subject site of the PER, but as it is proposed to be used for the management of lightly contaminated material from Helena East and the Southern Embankment a description of the land is presented herein.

2. SITE DESCRIPTION

The proposed MIA Containment Area is considered in the context of its suitability to accept material excavated from Helena East and the Southern Embankment.

2.1 Land Tenure and Proposed Land Use

As described in Table 1 of the PER document (Section 2.1), the proposed MIA Containment Area comprises approximately 2ha of the Meat Industry Authority (MIA) saleyards to the east of Helena East. This area lies within Lot 14241 on Plan 27672, Reserve 42712 (as at 15/12/05).

The WA MIA saleyards site is located east of Lloyd Street and south of Clayton Street as shown on Figure 2. The westernmost portion of the MIA site has been used in the past as a waste disposal area. This land was previously owned by the Western Australian Government Railways (WAGR) and it was used as an asbestos and general industrial waste dump. The waste including the asbestos currently covers an approximate area of 2ha to an average depth of 1m resulting in an estimated volume of 12,000m³.

It is proposed that waste material produced as a result of remedial works at Helena East and the Southern Embankment is deposited in the MIA Containment Area as an alternative to landfilling large quantities of low-level contaminated soil.

It is anticipated that the MIA will continue to use the sale yards until the end of 2006. After this time, MIA will allow MRA access to the western portion of the MIA site for the purpose of constructing a containment area and depositing soil prior to the relocation of MIA (pers comm. Neil Parry, MRA 7/12/05). The MRA is in the process of developing a Memorandum of Understanding (MOU) with the WA MIA to secure the site when it becomes available, and to provide for early access prior to it being sold to the MRA so that Helena East remediation works are not held up. Mr Neil Parry of MRA has indicated (pers comm. Neil Parry, MRA 22/2/06; Appendix 1) that MRA is hoping to finalise the MOU by the end of April.

2.2 Historical Site Uses

The proposed MIA Containment Area (Figure 2 of the PER) comprises the western portion of the sheep and cattle saleyard area that was established around 1910. An abattoir was built on the saleyards site soon after, but was later (mid-1990s) separated and sold off for redevelopment as a brickworks, now operated by Austral Bricks.

Investigations (ENV 2002a, 2003a) have revealed that waste materials buried over the last 50 years by the former WAGR/Westrail underlie a large proportion of the proposed Containment Area. These materials include foundry sands, ash, clinker and cinders. Also located in the central portion of the proposed Containment Area is a former asbestos dump created in the 1980s by Westrail. This former asbestos dump contains brake linings and marked bags of lagging.

Based on a review of historical aerial photographs, a detention basin that currently exists at the southern end of the proposed Containment Area was built during the 1980s. Prior to the 1980s the proposed Containment Area was occupied by cattle holding pens (ENV, 2002a).

Following the take over of the operation of the saleyards site by MIA in the mid 1990s, much of the area encompassed by the proposed Containment Area was covered by hardstand for trucks, a truck wash down bay and solids settling area.

2.3 Current Site Condition

The proposed MIA Containment Area is a narrow, flat portion of land located at the western edge of the saleyards site adjacent to the eastern boundary of the Area B, C, and D and Area E Precincts (which includes the WAPS site) and a brickworks operated by Austral Bricks. Animal holding yards and truck unloading areas abut the eastern edge of the proposed Containment Area.

The northern part of the proposed Containment Area contains an office and stand of trees with much of the rest of the site covered by hardstand for trucks to turn around and unload animals. A truck wash down bay and solids settling area is located centrally in the proposed Containment Area with a detention basin situated at the far southern end. It has been noted that all surface water on the MIA Containment Area drains to the detention basin with extra water pumped to the Hazelmere settling ponds on the southern side of Helena River (ENV 2003a).

Photos of the proposed MIA Containment Area in its current state are presented in Appendix 3 of the PER.

2.4 Surrounding and Onsite Land Use

The proposed MIA Containment Area is surrounded by the following land uses:

- North Saleyards to be redeveloped for commercial use subject to the MIA-MRA Cabinet Decision.

- South Brickworks (Austral Bricks).
- East Saleyards to be developed for commercial use subject to the MIA-MRA Cabinet Decision.
- West WAPS site to be used for WAPS activities and commercial activities (Area B, C, and D), portion of Austral brickworks site.

The containment area is located within a commercial/light industrial area with the closest residential areas situated approximately 350m to the north across Railway Parade and approximately 650m to the south near Stirling Crescent.

2.5 Site Drainage

The proposed MIA Containment Area is for the most part covered by hardstand and stormwater drainage is directed via drains to the basin located at the southern end of the containment area.

2.6 Non-Indigenous Heritage

The proposed MIA Containment Area lies on the western side of the abattoir and saleyards site and contains no Heritage buildings and is not subject to any non-indigenous heritage issues.

The entire saleyards site has remained relatively unchanged for much of the last century. The saleyard was established around 1910 and an abattoir was built soon after. The main changes to the MIA site have come through minor improvements and by separation of approximately half of the site (abattoir section) for redevelopment as brickworks.

Land in the northern and western areas was once owned and used by the WAGR and its successor, Westrail. The northern section was used primarily for flashbutt welding whilst the western boundary was along a rail spur that turned back into the Westrail site. In the mid 1990s the MIA purchased these areas from Westrail.

3. SITE CONTAMINATION

Previous investigations of the MIA site, including the proposed Containment Area comprise the following:

- Meat Industry Authority Site – Preliminary Site Investigation (ENV, 2002a).
- Meat Industry Authority Site – Detailed Site Investigation (ENV, 2003a).

Those reports indicate that a total of 43 locations were tested at the MIA Containment Area.

3.1 Soil Contamination

Soil contamination identified by previous environmental assessments of the site mainly comprise heavy metals associated with Waste Fill, and asbestos-containing materials associated with an asbestos dump.

The MIA site is ex-WAGR land and was used for the disposal of Waste Fill. On the basis of onsite investigations ENV (2003a) estimated that approximately 12,000m³ of Waste Fill material was present in the containment area. The Waste Fill, where sampled by ENV (2003a), is characterised by levels of metals (including arsenic, copper, lead, manganese, mercury, nickel, and zinc) that exceed the EILs and in some instances the HIL-F criteria for copper and lead.

A dedicated asbestos disposal area is also located in the central part of the containment area. Asbestos is present as loose, bagged and stacked asbestos products, and as loose fibres within the overlying waste fill. Asbestos fibres (as distinct from bulk asbestos products visible waste in the dump) were detected in 25% of the sample locations. Most asbestos was identified as chrysotile, with crocidolite and amosite also detected at two locations. Based on the available results, the concentration of asbestos fibres ranges from 0.002% to 1.1% by volume.

Some minor hydrocarbon and dieldrin (an organochlorine pesticide) impact at concentrations equal to or less than the EILs was detected in the detention basin at the southern end of the site.

3.2 Groundwater Contamination

Investigations by ENV (2003a) at the saleyards site included the installation of several groundwater monitoring bores, two of which were installed in the MIA Containment Area. The bores were installed at northern (MW3) and southern (MW6, near the detention basin) ends of the site, respectively. Monitoring Bore MW3 was installed through ash and cinder of the Waste Fill.

Monitoring of the two bores by ENV (2003a) revealed the presence of nickel concentrations in bore MW6 greater than the Fresh Water and Drinking Water Guidelines. No other contaminants exceeding these guidelines were detected in the two bores at the MIA Containment Area. Samples were also analysed for TPH, VOCs and organochlorine/organophosphorous pesticides.