
Defence Materials Laboratory

Location

Cordite Avenue MARIBYRNONG, Maribyrnong City

Municipality

MARIBYRNONG CITY

Level of significance

-

Heritage Listing

Vic. War Heritage Inventory

Statement of Significance

Last updated on - February 27, 2000

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Of State historical significance as a key part of Australia's wartime arsenal, the integrated explosives ammunition and ordnance factory complexes which were erected in the Maribyrnong area following Federation of the Australian Colonies. Along with the Government Clothing Factory South Melbourne, Woollen Mills in Geelong, Rifle Factory in Lithgow, Footscray Ammunition Factory and Ordnance Factory, and the Explosives Factory Maribyrnong, the Materials Research Laboratory demonstrates the newly arrived independence of the Federated Australia. While perceived foreign threats encouraged armament the new Federal Government sought to ensure self-sufficiency in supplies for the armed forces.

(Criterion A4) The testing and scientific investigation of new materials and products was an essential part in ensuring an adequate defence program for Australia. MRL played the paramount role in this process. (Criterion F1) Surviving landscape elements including mature trees and garden beds, contribute to the historical character of the place.

Construction dates	1950,
Hermes Number	125592
Property Number	

Physical Description 1

Originally part of explosives factory Maribyrnong, comprising large group of predominantly red brick buildings north of Cordite Avenue. The two storey gatehouse and control tower provides a suitable military entrance to the complex, executed in dark clinker bricks with steel hopper sash windows. The other buildings range in date from the 1920s to 1990s, with the majority of the Second World War era. These characteristic structures are typical Commonwealth public works department architecture featuring fed face bricks in English and colonial bond, occasionally as brick veneer, with concrete lintels, occasional and sparing string courses, steel hopper sash windows and hipped and gabled corrugated iron clad roofs. Some more distinctive process-buildings to the north have been inherited from the Explosives Factory, as the Laboratories have progressively expanded to take up parts of the former Explosives Factory site, particularly to the north east. (Plan shows current boundaries between sites.

The surrounding landscape contains mature exotic trees and remnants of garden beds which reflect the efforts of Defence personnel to beautify the surroundings. Trees were also used on many munitions sites as a safety measure, designed to catch flying debris from potential explosions. Elms and Oaks are evident near the complex with later native revegetation work near the river bank.

Physical Conditions

Good

Integrity

Generally intact although considerable recladding to eliminate asbestos roofing material has been undertaken. A row of defence department residences in Cordite Avenue have been demolished.

Physical Description 2

Part of the major defence industries in north Maribyrnong.

Historical Australian Themes

Thematic context

Australian Principal Theme Providing for the common defence

PAHT Subtheme: Going to war

Local Theme Maribyrnong Ordnance Factory

Physical Description 3

Creation date(s): 1950 c.

Heritage Significance *state*

Map (Melway) 27 H7

Boundary description

The southern portion of the Maribyrnong Explosives Factory complex on the north side of Cordite avenue running west to the Maribyrnong River

Local Government Area: City of Maribyrnong

Ownership Type Commonwealth (corporatised?)

Veterans Description for Public

The Defence Materials Laboratory, on Cordite Avenue, is a research facility that has been part of the operation of the Explosives Factory Maribyrnong since its inception in the early twentieth century. The Materials Research Laboratories originated in 1910 as a chemicals advisory laboratory run by a small team of three scientists, headed by Marcus Bell. Situated in the Victoria Barracks, the laboratory provided research assistance to government and industry, with particular emphasis on defence. Following a visit to defence factories overseas during the First World War, Bell and members of the newly formed Arsenal Branch were able to develop plans for a research laboratory for an Australian Arsenal.

The new research building was built on a site south of the Cordite Factory at Maribyrnong in 1922. In 1924, it became known as the Munitions Supply Laboratory, providing scientific services to government departments in a range of research areas, including chemistry, physics, metallurgy, explosives and defence, however it achieved recognition as a leader in the field of meteorology, the science of measurement. In 1936, a separate meteorology section was established to provide testing of substances of all kinds and for the calibration of instruments.

During the Second World War the Munitions Supply Laboratory had a vital role in Australia's defence, testing munitions, including items captured from the enemy. In the war years staff numbers peaked at 1150, a large proportion of whom were women recruited for war work in the laboratory.

While munitions operations were scaled down after the war, the emphasis on defence continued, with service to industry reintroduced. The name was changed to Defence Research Laboratories in 1948 and to Defence Standards Laboratories in 1953, when it became part of the new Research and Development Branch of the Department of Supply. From the late 1950s the laboratories and their equipment were modernised and extended. A number of new laboratory blocks were built, additions were made to the original buildings and a building from the Explosives Factory was remodelled for explosives and ammunition research.

Gradually the emphasis on defence was replaced by an expansion in services to industrial technology, which was reflected by a further name change in the 1970s, to the 'Materials Research Laboratories'. The Laboratories have assisted with variety of projects, including investigations into the failure of the King Street Bridge in 1962, early work on xerography (photocopying), environmental protection, and the restoration of the cannons jettisoned from the *Endeavour* by Captain Cook.

The site comprises of a large group of predominantly red brick buildings north of Cordite Avenue. The two storey gatehouse and control tower provides a suitable military entrance to the complex, executed in dark clinker bricks with steel hopper sash windows. The other buildings range in date from the 1920s to 1990s, with the majority dating from the Second World War. These characteristic structures are typical Commonwealth public works department architecture featuring fed face bricks in English and colonial bond, occasionally as brick veneer, with concrete lintels, occasional and sparing string courses, steel hopper sash windows and hipped and gabled corrugated iron clad roofs. Some more distinctive process-buildings to the north have been inherited from the Explosives Factory, as the Laboratories have progressively expanded to take up parts of the former Explosives Factory site, particularly to the north east.

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This place/object may be included in the Victorian Heritage Register pursuant to the Heritage Act 2017. Check the Victorian Heritage Database, selecting 'Heritage Victoria' as the place source.

For further details about Heritage Overlay places, contact the relevant local council or go to Planning Schemes Online <http://planningschemes.dpcd.vic.gov.au/>