

Old Murray Bridge Refurbishment Project

Environmental Protection

The Department for Infrastructure and Transport (the Department) is undertaking major refurbishment works on Old Murray Bridge.

As the first major bridge spanning the Murray River in South Australia, Old Murray Bridge is a significant State Heritage structure and requires major refurbishment to maintain its long-term structural integrity and enhance its visual amenity.

This South Australian Government funded project will increase the bridge's life span by an estimated 30 years.



Image: encapsulation in place

To minimise impacts to the community and maintain air, water and soil quality during the refurbishment works, the project is using an environmental containment and encapsulation system to capture waste materials from grit blasting and repainting activities. Waste materials are tested and transported to Environment Protection Authority (EPA) approved disposal facilities.

How is the project monitoring air, water and soil quality?

The environmental containment and encapsulation system is designed to Australian Standards for the management of hazardous paints and materials.

The project team undertakes detailed and ongoing risk management processes to identify and assess activities that can cause exposure to actual or potentially hazardous materials associated with the refurbishment works.

Prior to the commencement of the project, detailed air, water and soil testing was undertaken to determine a baseline for any materials present.

Air, water and soil samples will be continuously monitored throughout the project to provide assurance that works are being undertaken with minimal impacts to the environment or the public.

What is the environmental containment and encapsulation system and how does it work?

The environmental containment and encapsulation system is a fully sealed structure that ensures all particles arising from paint removal and application are captured, stored and transported within a controlled process that protects the public and environment.

The system consists of a scaffolding structure built around the work area, which has a protective skin applied to provide a controlled working environment and prevent the escape of particles from inside the encapsulated work areas.



Image: Scaffolding and Encapsulation under construction

The protective skin is a plastic seal that can only be entered through an airlock. A ventilation and exhaust filtration system is connected to the encapsulated area to create a negative pressure environment, which collects the particles in sealed containers.

These particles are tested and the containers transported to an EPA approved disposal facility with documented chain of custody.

In addition, steel panels are placed behind the protective skin to provide a physical barrier (and noise suppression) between the work areas and the public.

How are workers protected?



Image: Worker access through airlock system

All personnel accessing the encapsulated work areas while hazardous materials are being removed are required to undertake regular biological testing to ensure any exposure is managed appropriately.

These workers are supplied with (and must use) single use overalls, gloves, eye protection and respiratory masks with filters.

Workers are also required to shower and wash down at the end of each shift to prevent secondary contamination. Washing and cleaning facilities are provided onsite.



Image: Worker wearing Personal protection Equipment

Where can I find out more about the project?

To find out more about the project, provide feedback or register to receive project updates, please:

- call 1300 794 880
- visit www.dit.sa.gov.au/oldmurraybridge
- email dit.engagement@sa.gov.au
- scan the QR code

