

## A1.5 Identification of effective and affordable opportunities for addressing pollutants from industrial catchments

### Background

There is growing evidence that industrial use areas contribute more pollutants to Melbourne's rivers, wetlands and bay than other land uses (Pettigrove, 2018). Numerous sources of pollutants arise from industrial areas via direct runoff into stormwater drains, poor onsite practices, accidental spills, illegal dumping, illegal sewerage connections to stormwater drains and broken infrastructure. Common industrial pollutants include heavy metals, hydrocarbons, oil and grease, faecal matter, solvents, detergents and pesticides. It is important to better understand the major pathways of industrial pollutants into waterways to enable the identification of efficient and effective ways of managing this pollution and preventing ecological and social impacts on local environments.

### Approach

This project aims to identify effective and affordable opportunities for addressing pollutants from industrial catchments. Specifically, to:

- identify the key pollutants associated with industrial estates in the Melbourne Water region
- identify current structural (e.g. engineered pollution spill capture and treatment) and non-structural (e.g. improved business practices) treatment options for industrial pollution
- identify and trial the most promising industrial pollution treatment options in the laboratory and in the field



Source: <https://www.eecenvironmental.com>



Pollution from industrial estates can be addressed using non-structural (e.g. Behaviour change, education and enforcement) and/or structural solutions (e.g. engineered pollution capture and treatment) which can remove pollutants at the source prior to discharge.

### Progress to date

A background literature review on industrial pollutants, their typical sources, and potential management actions is now complete. Laboratory trials of potential structural treatment solutions are underway, with field trials scheduled to start late 2020.

### Expected Outcomes

- A summary of current international control/treatment options for addressing pollutants from industrial estates
- Identification of effective ways to reduce pollutants entering waterways from industrial estates, using both structural or non-structural approaches

### Project Team

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### Expected Completion End 2023

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**Reference** Pettigrove, V. (2018) *Pollution Issues in the Melbourne Water Region and Options for their Management*. Technical Report No. 88. Centre for Aquatic Pollution Identification and Management, The University of Melbourne, Melbourne, Victoria.