Methylcyclopentadienyl Manganese Tricarbonyl (MMT) – PROPOSED STANDARD

[For incorporation in] Industrial Chemicals Environmental Management (Register) Instrument 2022

Schedule 5 – Relevant industrial chemicals that are likely to cause harm to the environment.

The risk management measures including prohibitions and restrictions apply to the relevant industrial chemical; and a mixture containing such a chemical.

The proposed standard is based on information from National Industrial Chemicals Notification and Assessment Scheme (NICNAS) chemical assessment report on Methylcyclopentadienyl Manganese Tricarbonyl (MMT).

Please note that this proposed standard applies only to chemicals with industrial uses. Other chemical applications, such as for veterinary or medicinal uses, are outside the scope of the Industrial Chemicals Environmental Management Standard (IChEMS) and are managed under separate regulatory frameworks.

Definitions for terms contained in this proposed standard may be found in the *Industrial Chemicals Environmental Management (Register) Act 2021*, *the Industrial Chemicals Environmental Management (Register) Instrument 2022*, *the Industrial Chemicals Environmental Management (Register) Principles 2022*, or in the Glossary of IChEMS terms.

Relevant industrial chemical	**Intent and explanatory notes**
Chemical name: Manganese, tricarbonyl[(1,2,3,4,5-.eta.)-1-methyl-2,4-cyclopentadien-1-yl]- (MMT) CAS number: 12108-13-3	Synonyms: MMT, Methylcyclopentadienyl manganese tricarbonyl, Methylcymantrene, AK-33X, Antiknock-33, CI-2, Combustion Improver-2 (trade name).
End uses or generalised end uses	**Intent and explanatory notes**
(a) Fuel additive (anti-valve seat recession and octane booster).	The standard will only apply to use of the chemical as a fuel additive.

	The standard specifies an end use for MMT as it's primarily used as a multifunctional fuel additive, and is the most likely exposure pathway to the envrionment. The Commenwealth risk assessment only considers the use of MMT as an octane booster and anti-valve seat recession (AVSR) fuel additive.
Risk management measures including prohibitions and restrictions	**Intent and explanatory notes**
(a) This entry comes into effect on 1 January 2026	The commencement date is 6 months after the planned addition to the IChEMS register.
(b) The chemical (whether on its own or in mixtures) must be managed according to the IChEMS Minimum Standards.	Available online. As agreed on 4 November 2022 by Commonwealth, State and Territory environmental regulators. STANDARD 1 – INFORMATION AND AWARENESS Obtain, share, and use information on the environmental risks of industrial chemicals to ensure that any persons handling the chemical throughout the supply chain are aware of these risks, and enabled to undertake activities using industrial chemicals in an environmentally safe manner. For introducers (importers and manufacturers) and reformulators, this includes a requirement to develop and provide information to the supply chain about the environmental risks of the industrial chemical, when used for the purpose for which it was manufactured. STANDARD 2 – RISK MANAGEMENT PLANNING Identify risks and develop, assess, evaluate and monitor control measures. STANDARD 3 – HARM MINIMISATION CONTROLS Apply practicable control measures to eliminate risks, then reduce risks that cannot be eliminated, then manage residual risks using best available techniques and best environmental practices. STANDARD 4 – ENVIRONMENTALLY SAFE STORAGE Store and contain industrial chemicals in an environmentally safe manner.

	STANDARD 5 – EFFECTIVE RESPONSES TO INCIDENTS Plan for and respond effectively and promptly to industrial chemical incidents. STANDARD 6 – ENVIRONMENTALLY RESPONSIBLE WASTE MANAGEMENT Implement waste management for industrial chemicals in an environmentally safe manner in line with the waste hierarchy and local requirements.