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Australia & New Zealand Regulatory Update

29th Joint Technical Liaison Meeting

Innsbruck, Austria

April 3rd - 5th 2019

Presented by: ***Osama*** *Ali*

Company name: Caterpillar of Australia

Representing: CMEIG - Construction & Mining Equipment Industry Group

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Agenda

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- Regulatory Landscape
- Recent Developments and Focus Areas
- Standards & Regulations Development Activities

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Regulatory Landscape

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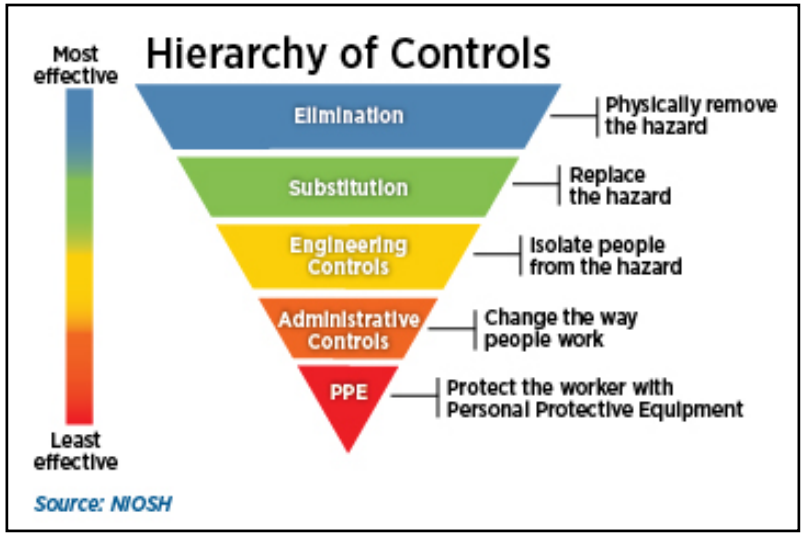
- A common regulatory aim throughout the region –

  Equipment free from risks to health and safety so far as is reasonably practicable

  - Regulators use *Codes of Practice, Guidelines, Bulletins, Other guidance* to convey expectations
  - May refer to standards as a benchmark, however aim is generally risk-based
  - Significant onus on end users to address health and safety risks

- Majority of states & territories now have harmonised Work Health & Safety (WHS) Laws
  - Reinforcing health & safety risk management focus
  - Broadened scope, stringent penalties, additional requirements
  - Emphasis on hierarchy of controls (fig.)
  - State/application-specific underlying guidance material
  - WA finalising adoption, VIC will not adopt*



- Other regulatory schemes also exist besides WHS

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Recent Developments & Focus Areas

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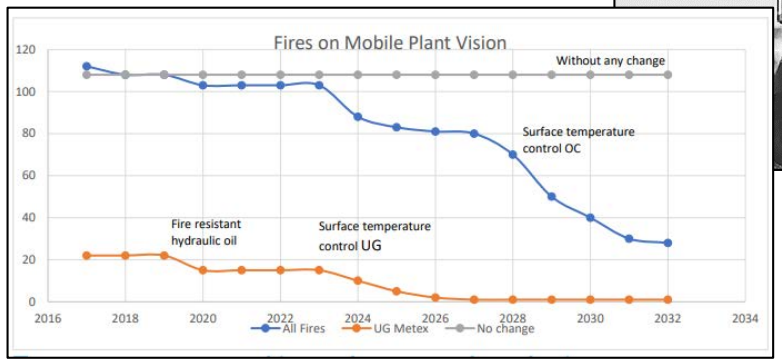
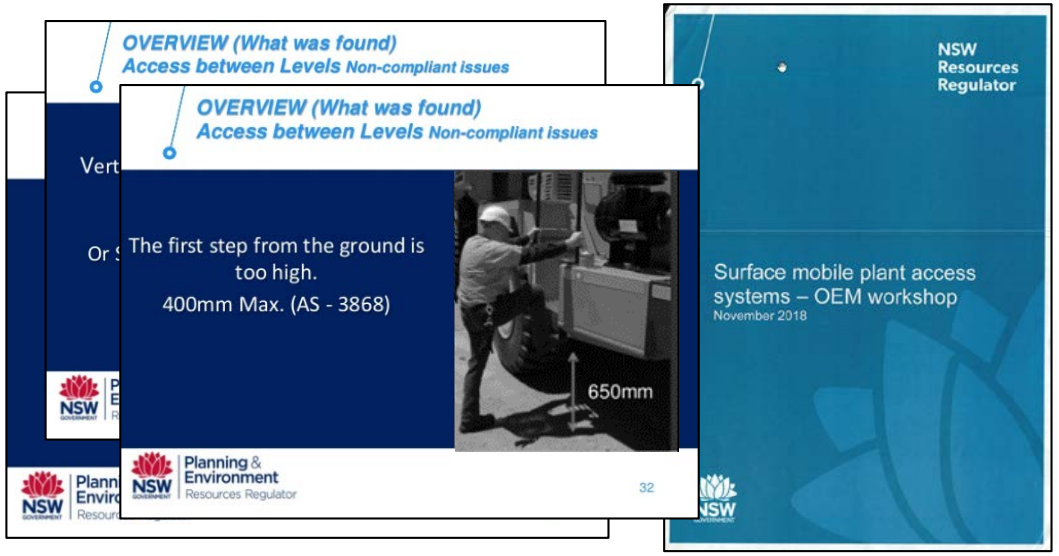
- SafeWork AU / WorkSafe NZ
  - AU - Model WHS review *"for the most part, working as intended … still settling"* (link)
  - AU - Publishing WHS guidance - duties of PCBU's (link)
  - NZ - Educating industry on HSWA (link)



- New South Wales Resources Regulator
  - **Discussion Paper -** Fires on Mobile Plant (link)
    - Aim - reducing incidence of fires on mobile plant in mines and quarries
    - UG coal precedent
    - Proposal to legislate fire resistant hydraulic fluids
    - Proposal to legislate surface temp. control (water jacketing - manifolds, turbos, exhaust)
  - **OEM Workshop** - Access Systems on EMM (link)
  - Revised MDG-41 published (link)
  - *Previously communicated* - Revised MDG-15 published (link)



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Recent Developments & Focus Areas

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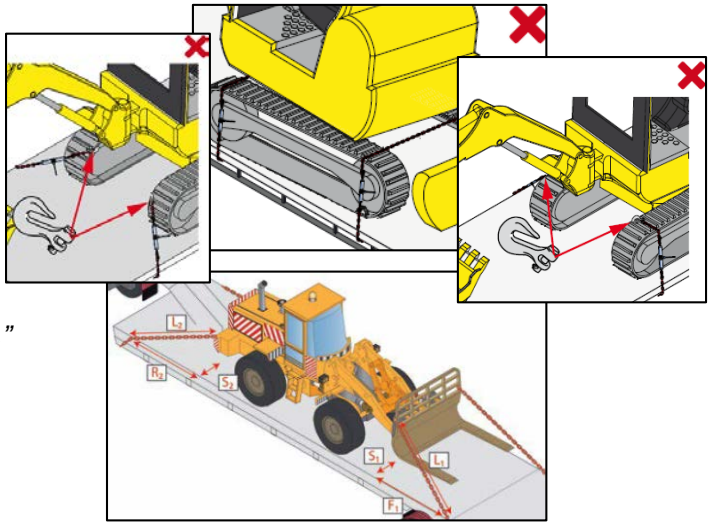

- National Transport Commission / Nat'l Heavy Vehicle Regulator
  - *Updated* Load Restraint Guide 2018 (link)
    - Load restraint criteria
    - Clarity re: position on tie-down using tracks
  - Chain of Responsibility (link)
    - 1 October 2018, Heavy Vehicle National Law amended –
      "…every party in the heavy vehicle transport supply chain has a duty to ensure the safety of their transport activities…"

- Queensland Resources Regulator
  - Respirable Crystalline Silica exposure (link)
  - Guideline – Earthmoving Equipment* Automation in QLD mines and quarries

- Department of Agriculture and Water Resources
  - Brown marmorated stink bugs – additional quarantine/biosecurity measures for '18 -'19 season (link)
  - Mandatory offshore/onshore treatment
  - Target risk countries – USA, Italy, Germany, France, Russia, Greece, Hungary, Romania, Georgia, Japan

- Department of the Environment and Energy
  - R134a phase down proceeding (link)

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Recent Developments & Focus Areas

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- NSW EPA – Diesel Engine Exhaust Emissions
  - 1st Jan 2018 onwards – NSW Government Resource Efficiency Policy in force (NSW govt. agency and govt. tenders – T4f where available) (link)
  - NSW Surface Coal Mines – est. implementation date 2H 2020+ (inclusive of lead time) (link)
  - Some ahead of regulatory drivers
    - By-user fleet emission reduction strategies, PM reduction strategies

- Australian Communications and Media Authority (ACMA)
  - *Anecdote – Chemist Warehouse (Perth, WA)*

  - Exemptions for CMEIG members (subject to adhering to certain conditions)
    - EMC (electromagnetic compatibility) (link)
    - Radio equipment (link)
    - Electromagnetic Radiation (link)

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Standards Development Activities

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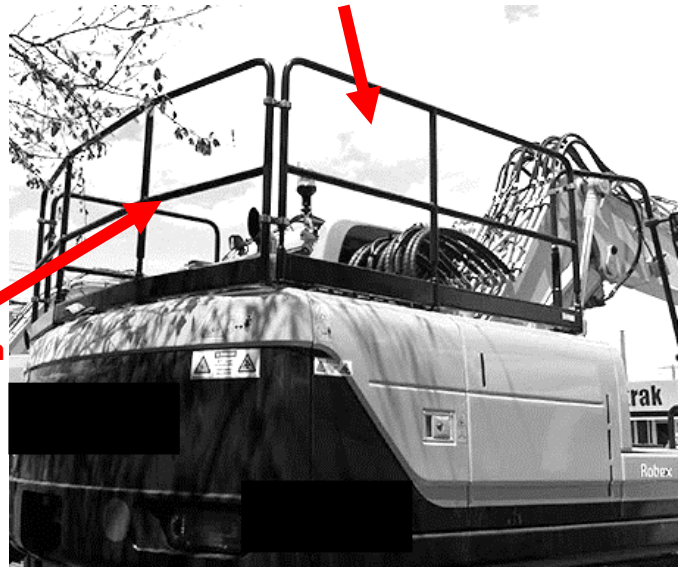
ISO 2867 MOD AU – AS 5327:2019

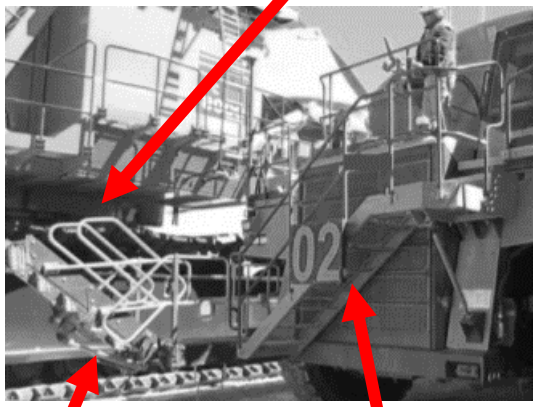
- 6 disparate AU references → 1 document, mostly aligned with, iterative to ISO 2867
- More detailed guidance in specific areas of concern, new mandatory requirements (1st step height, provision of guardrails, visibility & lighting)
- Public comment review completed 7th March 2019 - Technical content stabilised
- Est. publishing 2Q-3Q 2019

Guardrails – 'shall be provided' above # m
Replacing ISO 2867 Cl. 6.2.3



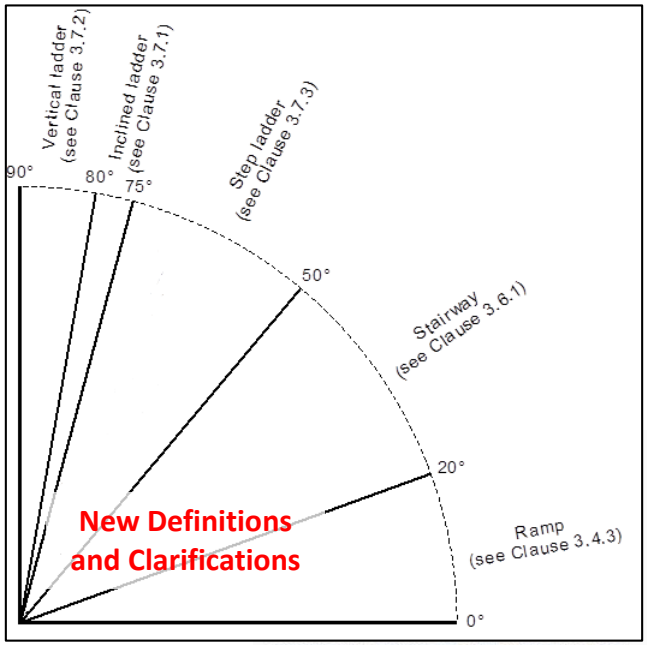
Visibility of access system hand/foot touch points

Powered access



1st Step Height @ 400mm

Access System Lighting



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Standards Development Activities

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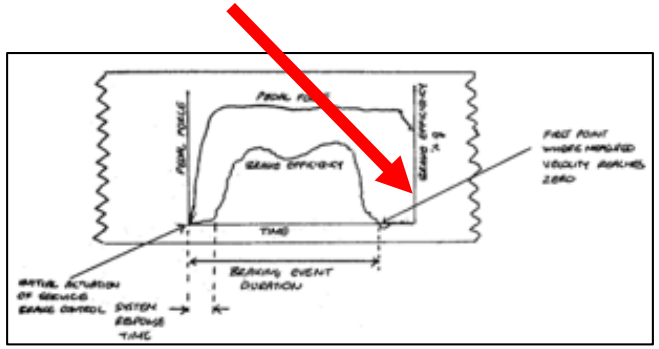
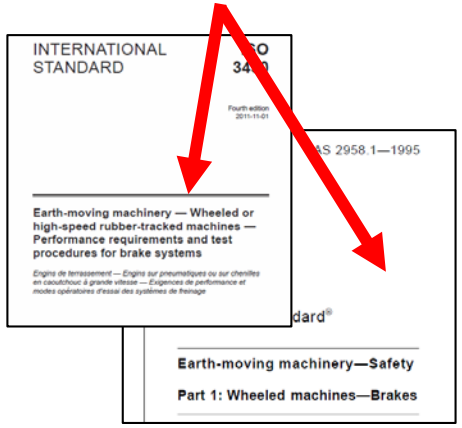
ISO 3450 MOD AU – AS XXXX:2019/2020

- Recognition of existing AU drivers for In-service brake testing
- Recognition of currently limited AU guidance, practical issues with current testing
  - Significant variability in measurement & results
  - Vague pass/fail criteria
- Work in progress
  - Re-alignment of similar AS and ISO standards
  - Practical guidance for in-service brake testing
  - Objective pass/fail criteria

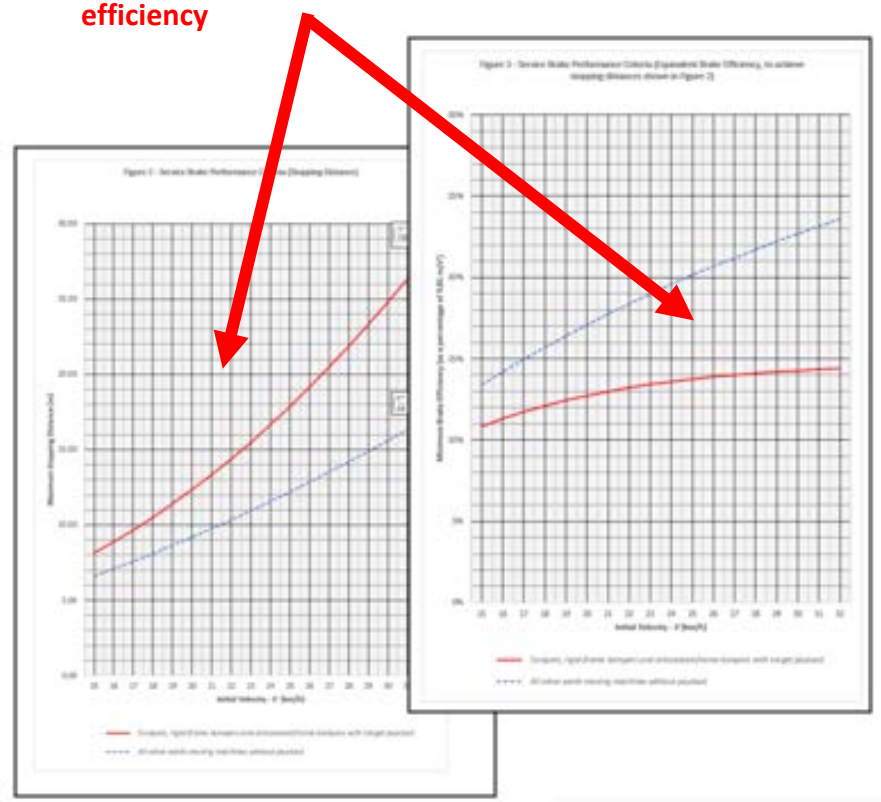
Guidance for in-service testing using g-sensor based automatic loggers



May replace ISO 3450 BSC annex in MOD AU



Min. in-service-test performance curves – presented as stopping distance and equivalent brake efficiency



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Standards Development Activities

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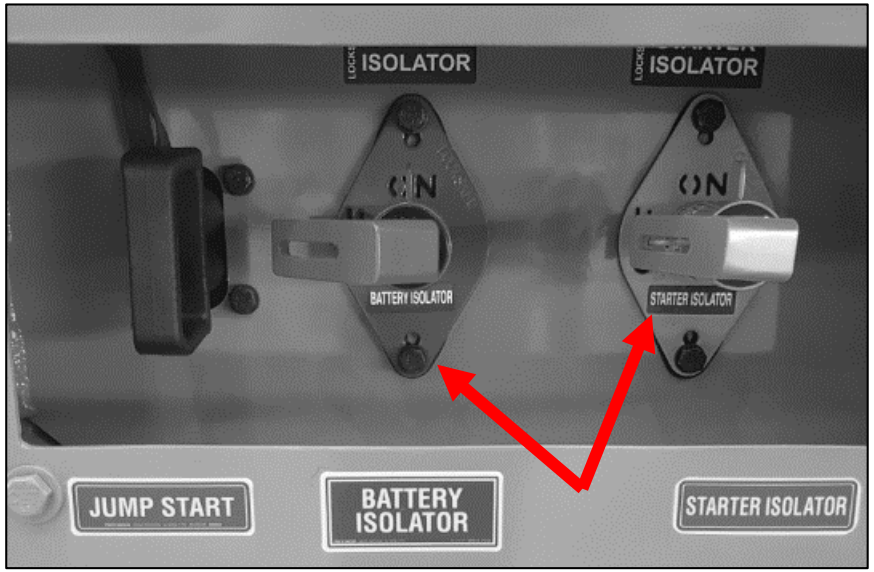
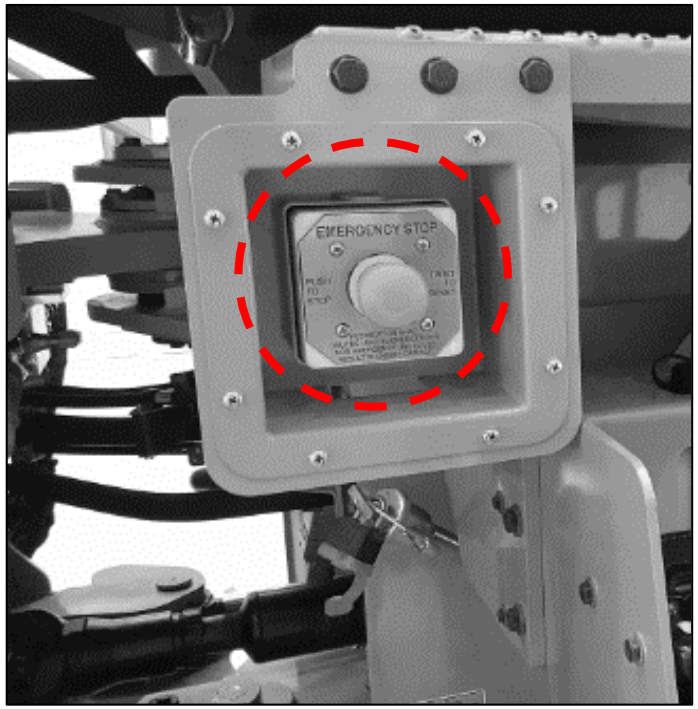
- Safety of (Lithium) battery-powered earthmoving machinery (UG-focused)
- UG coal diesel engine safety (incl. emissions)
- E-stops / double-pole battery & starter isolators





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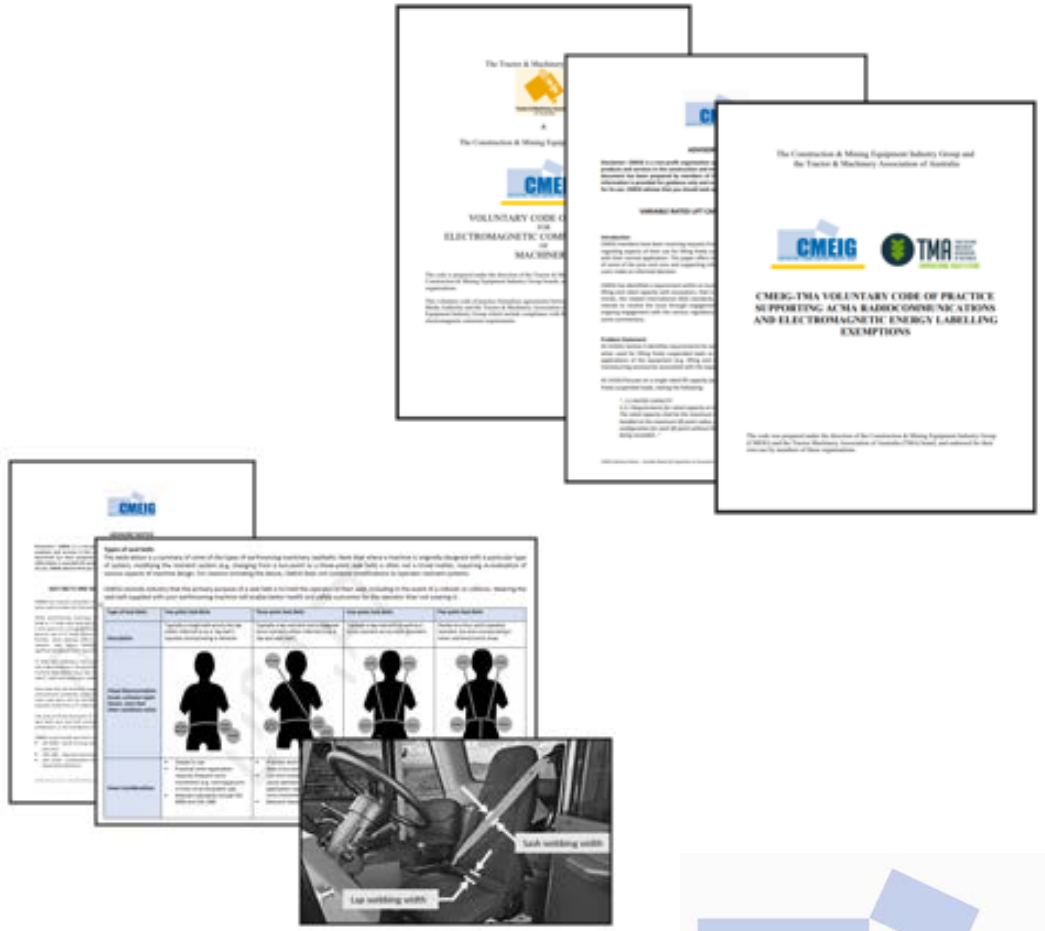
Activity Snaphot

- Mobile Equipment Fires - Response to NSW Resources Regulator Discussion Paper
- Voluntary Code of Practice - ACMA Radio/Emitter Labelling, EMC requirements
- Diesel Engine Emissions regulatory development
- Rated Load measurement on wheel loaders
- Variable load lifting, Rated capacity/overload warning systems on HEX (AS 1418.8)

Ongoing / Proposed Projects

- Australian Standards projects (ISO 2867 MOD AU, ISO 3450 MOD AU)
- Further AU standards, ISO alignment/review
- Clarification of seat belt types, guidance, 3” vs 2” webbing width
- Functional Safety of control systems on Earthmoving Machinery



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