



Environmental Regulations Pertaining to Rail: Developing Best Practice

Michael Charles

**(Project Leader & Deputy Program Leader Economic,
Social & Environmental Sustainability)**

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Aims of presentation

- 1) To lead into the following panel discussion (get everybody thinking).
- 2) To provide an introduction to the Rail CRC's *Environmental Regulations* project.
- 3) To present some of the major findings from our preliminary research.
- 4) Discuss 'what next'.



About the *Environmental Regulations* project

- Aims to determine the impacts and costs of current lack of regulatory harmonization.
- Project concentrates on GHGs, particulates and noise, i.e., rail and associated activities in the existing rail corridor.
- Doesn't deal with rail infrastructure provision.
- Potential to lead to a case for development of a single national framework (in future work).
- 12 months (ending December 2008).



Outputs

- *Issues Paper* (available)
 - Presentation based on this output.
- *Inventory* (forthcoming)
 - Picture of current regulatory situation.
- *Stakeholder Views Report* (forthcoming)
 - Ascertaining the way forward.
 - Self-regulation, co-regulation or government-led? (discussed later)





Rationale

- Little information regarding the nature and extent of inconsistencies in environmental legislation and regulation impacting on Australian railway operations.
- Need for comprehensive understanding of status quo before dealing with reform.



General overview

- General perception from interviews that existing regulatory regimes are inconsistent.
- Need for harmonization in 3 areas:
 - Structure of environmental legislation (framework).
 - Administration of regulatory process.
 - The regulations.





The main problems

- Evidence of unnecessary cost to industry with repetitive administrative processes in multiple jurisdictions (application, approval, reporting, etc).
- Repetitive and inefficient environmental regulation, in addition to incompatibility between adjacent jurisdictions.
- Multiplicity of regulatory regimes and styles of regulation covering rail operations (both rolling stock and track).
- Multiplicity of regulation and regulatory practice for different individual environmental aspects (such as noise, vibration, dust, emissions, etc).



Contextual overview

- To understand the broader context, need to understand three main type of regulation:
 - *Self-regulation*: a firm will regulate its own activities, or will adhere to practices resulting from industry-led reform.
 - *Co-regulation*: responsibilities for regulatory development, implementation and/or enforcement are shared between industry and government.
 - *Government-led reform*: government drives reform process, though it will consult with industry (to varying degrees).



Putting dysfunction into context

- It's easy to just talk about problems at a general level.
- A better understanding of the problems can be achieved by looking at some specific examples.
- 4 vignettes (2 noise; 2 dust – in four different States).





Vignette #1 – Locomotive noise in NSW

- DECC's Environmental Protection Licences (under *PEO ACT*).
- Unmodified locomotives continually operating on the network and pre-dating Act do not require DECC approval, though newer locos do.
- Stringent noise specifications.
- Example:
 - RailCorp "44" class locos from 1957 still used.
 - Other operator's locos built in 1995 and 50% more powerful banned from network, though fewer GHG and particulate emissions.
- One operator forced to use trucks instead of its locomotives.



Vignette #2 – Rail corridor noise in SA

- Local Council urban development plans are not consistent with existing rail operations in the Adelaide Hills.
- No standardization of Local Council development applications (DAs).
- ARTC receives noise complaints from residents of new developments; SA EPA involved.
- Wheel squeal on curved track sections a major issue on freight line.
- Noise monitoring equipment installed at ARTC cost; frequency and severity measured, no dB limits.



Vignette #3 – Dust in WA

- Under the WA Mines Act 2004, no safety requirements pertaining to transport of materials by rail.
- Train operators do not currently need a licence to operate in WA (as, e.g., in NSW).
- Complaints regarding dust (and noise) made to Rio Tinto, but no current regulatory obligation to mitigate dust.
- Rio Tinto introduced self-regulatory measures for corporate responsibility reasons.





Vignette #4 – Coal dust in Queensland

- QR needs to address fugitive coal dust according to Environmental Protection Act (1994), overseen by EPA.
- Need to minimize ‘harm’ – an ambiguous and subjective term.
- Dust considered a ‘nuisance’ and regulated as such.
- Emissions from QR trains did not exceed quantitative air quality standards.
- Yet operations a source of dust contributing to environmental nuisance, and thus ‘harm’.



Forces of change – what will help or hinder?

■ Forces Driving Change

- 1. Growing political involvement in environmentalism
- 2. Calls for national transport policy and consistency
- 3. Growing task of railways
- 4. Calls for more optimal harmonization of government rail regulation
- 5. Calls for self-regulation by rail industry
- 6. Need to mitigate climate change

■ Forces Against Change

- 1. Existing government regulation of external environmental issues, i.e., noise and energy
- 2. Problems with abatement of external environmental issues, i.e., noise and energy
- 3. Jurisdictional rigidity resulting from the federal system of government
- 4. Rail industry fragmentation
- 5. Regulatory fragmentation of rail in safety accreditation, access, economy, OH&S and environment



Towards harmonization?

- Could potentially be achieved by:
 - Working toward overcoming industry fragmentation through appropriate forms of industry cooperation on the matter of regulation (leading to guides to leading practice).
 - Strengthening industry's capacity to self-regulate by moving beyond quantitative regulatory targets.
 - Strengthening industry's calls for more optimal government frameworks, processes and regulations.





Why bother?

- It's in the rail industry's best interest to work towards change (regardless of the form intended).
- *Industry should lead the debate; not follow or merely be consulted (lessons from emissions trading debate).*
- Rail industry wants to improve competition (a more perfect market with less informational asymmetry) *and* highlight into 'green' credentials.
- 'Efficient rail' as a brand.



Where to now?

- The *Stakeholder Views Report* will attempt to determine what reform model has most support.
- *Self-regulation?*
- *Co-regulation?*
- *Government-led reform?*
- *A mixture?*
- Pros & cons associated with all options





Concluding remarks

- To conclude, there are several worthwhile and feasible options to improve current environmental regulation, policy and practice.
- It stands to reason that a complete renewal of existing environmental regimes is not required.
- ‘Get involved’ and let your organization have its say in shaping the future.





Questions & contacts

- For further information about this project, please contact *myself* or *Rachel Ryan* (contact details provided on full version of paper).
- I would be very glad to answer your questions.

