

The National Remediation Framework



CRCCARE

*A safer, cleaner
environmental future*

National Roadshow

12 – 28 February 2019

NATIONAL NRF ROADSHOW – FEB 2019

- Welcome
- Speakers
- Purpose of the Roadshow
 - NRF overview, development, structure
 - Comment deadline 31 March 2019
- Housekeeping



NATIONAL ROADSHOW IN FEBRUARY 2019

DATES IN 2019:	CITY
12th Feb	Brisbane
13th Feb	Sydney
15th Feb	Darwin
19th Feb	Adelaide
21st Feb	Perth
25th Feb	Canberra
26th Feb	Melbourne
28th Feb	Hobart

PROGRAM

- Introduction
- Overview of the NRF
- (mini-break)
- Guidelines in the NRF
- Tea break
- Consultation to date
- Jurisdictional presentation by EPA
- Q and A



The National Remediation Framework

– towards harmonisation and a complete national guidance package



CRC CARE

*A safer, cleaner
environmental future*

Bruce Kennedy
CRC CARE

National consultation roadshow

February 2019

OUTLINE

CRC CARE

Harmonisation

National Remediation Framework

- background
- construction
- consultation
- acceptance/adoption
- maintenance



CRC CARE - COOPERATIVE RESEARCH CENTRE CONTAMINATION ASSESSMENT AND REMEDIATION OF THE ENVIRONMENT

Site owners/ industry



Government



Research providers

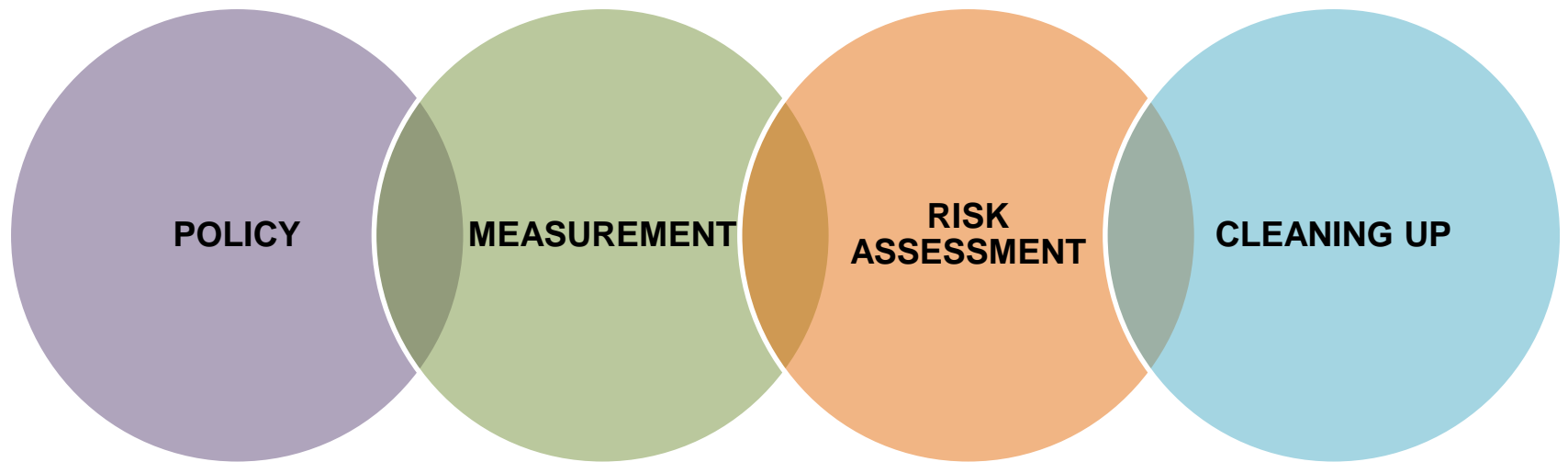


Service providers



CRC CARE

RESEARCH PROGRAM OVERVIEW



CRC CARE

GOALS include

- remediation which is cost effective and sustainable

GUIDANCE DEVELOPMENT

- **National Remediation Framework**
- priority contaminants
- flux-based approaches for management of groundwater
- title blight
- community engagement



DRIVERS

FOR REMEDIATION

Urban renewal/urbanisation

- legacy sites - petroleum / manufacturing / landfill / railway
- population pressures
- Infill development
- 60-80% of contaminated sites

De-industrialisation – future sites

- eg oil refineries, manufacturing plants

Community awareness

- increasing **accountability**
- higher **operating standards**

Improved **efficiency and effectiveness**

- economic, social and environmental benefits



THE AUSTRALIAN FEDERATION - UNIFORMITY AND/OR HARMONISATION?

UNIFORMITY

- Commonwealth - exclusive powers
eg defence, foreign affairs, currency, corporations, ...

Commonwealth environmental law premised on various powers, eg:

- **External affairs** power
 - [eg international treaties (World Heritage, Ramsar, Basel...) – international negotiation and domestic implementation]
- **Corporations** power
 - [eg *National Greenhouse and Energy Reporting Act 2007*]

THE AUSTRALIAN FEDERATION - UNIFORMITY AND/OR HARMONISATION?

STATE POWERS

- “residual’ powers” where the Constitution is silent
- eg urban planning, vehicle licensing, environmental protection, ...
- State law/regulation
- can take account of local conditions

WHY HARMONISATION?

- emergence of a national economy
- nationally consistent approaches
- minimise difficulties of understanding, implementation and compliance across jurisdictions
- transfer of best practice
- mutual recognition



HARMONISATION: THE MIDDLE GROUND

What and how...?

- from another sphere (accounting standards)
 - “...The goal is to find commonalities, identify critical requirements that need to be retained, and provide a common standard...”*
- the existence of Ministerial Councils over many decades is testament to the objective of achieving harmonisation
- States and Commonwealth working together
 - *Ministerial Councils eg COAG, NEPC, ...*
 - *NEPMs – eg Assessment of Site Contamination NEPM*
- facilitation by others
 - *Standards Australia – Australian Standards*
 - *NATA – laboratory accreditation*
 - *CRC CARE – National Remediation Framework*

SITE CONTAMINATION MATTERS

HARMONISATION

Land management and environmental protection

- States have their own approaches
- >30 state regulatory/guidance instruments (6 States)

Assessment of contamination

- harmonised national approach under the *NEPC Acts*
 - *National Environment Protection Measure*
 - cannot legally be extended to remediation [*NEPC Acts*]

Remediation and management of contamination

- State regulators suggested
 - a *national remediation framework*
 - NRF to complement the NEPM
 - CRC CARE to develop

[SCEW: priorities included “seamless environmental regulation” and adopted the NRF as a project in that portfolio]

NATIONAL REMEDIATION FRAMEWORK

Purpose

- **a nationally consistent approach** to contaminated site remediation and management
- **with the NEPM, a complete set of national guidance** for assessment, remediation and management of contaminated sites

Expected outcomes – facilitation of

- **protection of human health** and the **environment**
- **effective and efficient remediation**
- **net community benefit**

across jurisdictions

- **transfer of best practice**

Audience

- practitioners and regulators

NATIONAL REMEDIATION FRAMEWORK DEVELOPMENT

Guidance

- **practical outcomes based** – “how to ..., when to...”
- **modular/flexible** - individual elements may be updated over time
- **compatibility**
 - NRF principles
 - related requirements in the NEPM
 - will not impinge on the decision-making prerogatives of jurisdictions

Construction

- builds on current guidance and practice [cf original version of the NEPM]

Publication format

- web-based www.crccare.com

NRF Steering Group

- strategic direction and oversight

NATIONAL REMEDIATION FRAMEWORK

NRF STEERING GROUP - MEMBERSHIP

Site owners

- petroleum (AIP)
- mining
- Defence

Industry (remediation)

- Australasian Land and Groundwater Association ALGA
- Australian Contaminated Land Consultants Association ACLCA

Government

- States and Territories
- Commonwealth (Finance, Infrastructure, Defence)
- planning, health

Community

Related sectors

- construction



NATIONAL REMEDIATION FRAMEWORK

FOUNDATION WORK

Foundations - prior to guideline development 2012 - 2013

- frameworks review
- context and philosophy
- guidance mapping



<https://www.crccare.com/publications/technical-reports>

NATIONAL REMEDIATION FRAMEWORK SCHEMATIC

PHILOSOPHY	CONTEXT				
	Background	Jurisdictional arrangements	Legislative powers	Purpose of framework	Intended audience
	PRINCIPLES				
	Precautionary	Prevention		Risk management	
	Options hierarchy	Sustainability		National / international obligations	
	Polluter pays	Inter-generational equity		Waste minimisation	

NATIONAL REMEDIATION FRAMEWORK PRINCIPLES (COMPARE IGAE)

Precautionary

- careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment
- an assessment of the risk-weighted consequences of various options

Prevention

- avoid future contamination

Risk based

- human health and/or environmental risks commensurate with site use
- underpins environmental management

Options hierarchy

- treatment on-site, then off-site
- containment on-site, then off-site (landfill)

SUSTAINABILITY

Brundtland [1987]

- ‘...“the environment” is where we live; and “development” is what we all do’

Sustainability

- IGAE/NSESD [1992]
- state environmental protection legislation - objects clauses
- 2013 NEPM update

Integration/balancing environmental, economic and social aspects

- application at the project scale
- optimise footprint [*environmental, economic, social*]

Approaches

- *sustainability* [NRF] / *sustainable remediation* [SuRF] / *green* [USEPA]
- **NRF approach on sustainability:**
 - “... an integrated assessment of the environmental, economic, and social impacts of remedial activities, which meets the needs of the present without compromising the ability of future generations to meet their own needs”

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PRACTICE	GUIDANCE				

NATIONAL Remediation Framework

Consultation on individual guidelines

Draft guidelines

- NRFSG endorses each draft guideline for release for consultation
- prior to release, many required revision based on NRFSG comments

Consultation

with Government

- with advice from NRFSG government members

with Industry/Practitioners

- with advice from NRFSG industry members [including ALGA and ACLCA]
- www.crccare.com

with Public

- www.crccare.com
- *Remediation Australasia*

Further detail – see consultation presentation

NATIONAL REMEDIATION FRAMEWORK 'HARMONISATION' OF NRF AND UPDATES

'Harmonisation' of draft guidelines

2017 - 2018

- in relation to other draft guidelines
 - to ensure appropriate links between them
 - that each provide a complete approach
 - consistent terminology
- in relation to the NEPM
 - ensure compatibility and consistency with NEPM
- refine/update draft guidelines using feedback from previous consultation

Updated draft guidelines considered by NRFSG **October 2018**

NATIONAL REMEDIATION FRAMEWORK

TIMETABLE FOR CONSULTATION AND FINALISATION

Following harmonisation exercise

- updated draft guidelines further modified based on NRFSG comments **Oct 2018**
- complete package uploaded to CRC CARE website **Nov 2018**
- consultation period on complete package – start **Nov 2018**
- National roadshow – all capital cities **Feb 2019**
- **Submissions by** **31 March 2019**
- consideration of submissions/incorporation of weblinks **April/May 2019**
- consideration by NRFSG **mid-2019**

NATIONAL REMEDIATION FRAMEWORK

CONSULTATION AND FINALISATION

Submissions by 31 March 2019

Comments received:

- easily addressed
 - substantial, but not fundamental
 - fundamental (eg legislative changes)
- will be addressed
matter for judgement
park for future consideration

Resource toolbox

- eg flux (previously agreed by NRF Steering Group)

Publication: web-based www.crccare.com

NATIONAL REMEDIATION FRAMEWORK ADOPTION

The “path to adoption” of the Framework depends on

- credible expertise in its development and oversight
- involvement of stakeholders
 - directly (via Steering Group)
 - consultation input on draft guidelines
 - consultation on final package
- intersection with Governments
 - via jurisdictional representation on Steering Group
 - Heads of EPAs (HEPA)

Consideration of acceptance/adoption

- CRC CARE has written to HEPA
- HEPA will seek advice from NCEN (overlaps with NRFSG)

NATIONAL REMEDIATION FRAMEWORK

MAINTENANCE OF THE NRF

Maintenance of NRF and constituent guidelines

- this is the first version of the NRF
- “...the best feedback will happen after the NRF is implemented...”
- will need review/revision in the future
- future updates on an as-needs basis
- not protracted process
 - NRF is not a legal instrument
 - modular construction
- triggers for review – to be developed eg
 - changes to legislation
 - changes in technology/techniques [eg 3D characterisation(?)]
 - ...

Future carriage - possibilities

- CRC CARE / future iteration of CRC CARE
- government [HEPA or specific jurisdiction]
- “oversight” committee

NATIONAL REMEDIATION FRAMEWORK

- initiated by regulators
- extensive development process, including regulators and industry
- will provide practical advice to practitioners (and to regulators)
- will sit alongside state requirements
- does not intrude on state requirements



NATIONAL REMEDIATION FRAMEWORK

IMPLICATIONS AND BENEFITS

The NRF will

- provide a **structure** for thinking through remedial strategies
- provide more **rigorous approach** for considering issues
- **systematise practices** being applied to sites
- provide a **sustainable approach** to remediation and management
- provide **seamless linkages with the NEPM**

The NRF and the NEPM together will provide comprehensive guidance for assessment, remediation and management of contaminated sites in Australia

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PRACTICE	GUIDANCE				
	Remediation (action) plan Development		Remediation (action) plan Implementation		Post-remediation
	Regulatory considerations		Health and safety		Remediation validation and closure
	Remediation objectives		Stakeholder engagement		Long-term monitoring
	Remediation Options Assessment		Documentation and record-keeping		Auditing/third party review
	Technology Guides (13)				Institutional controls
	Cost-benefit and sustainability analysis				

Thank you!

Any burning questions?