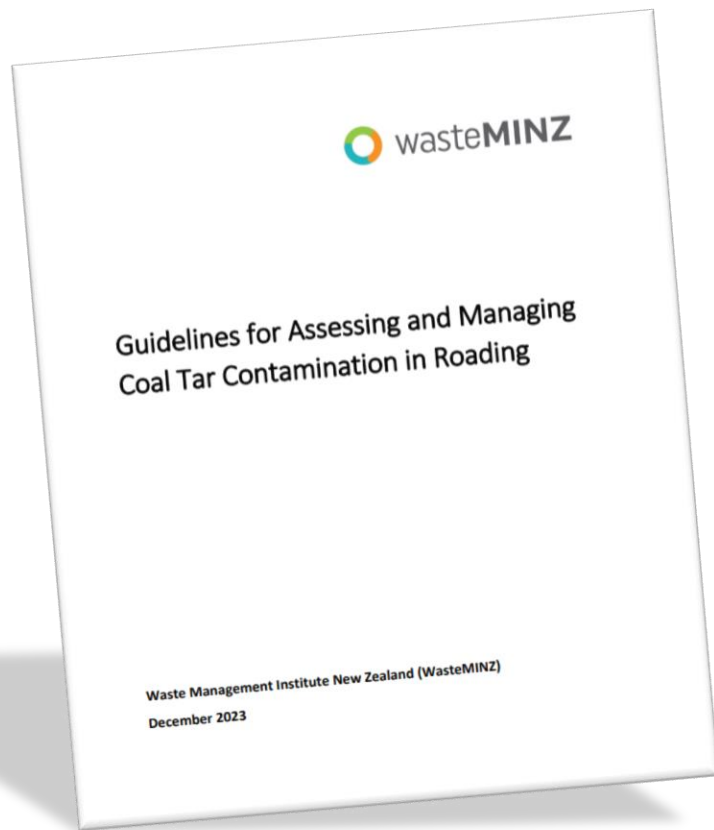


# Road testing the Coal Tar Guidelines

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Dr Genevieve Smith, Senior Environmental Consultant



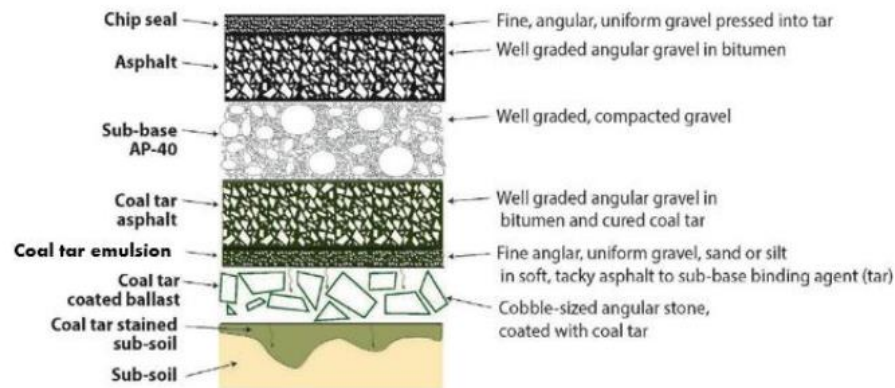


- Where coal tar is being encountered
- Field screening
- Varying awareness and management of coal tar
- Reflections

# What is it?

The textbook definition:

- Benzo(a)pyrene (BaP) toxic equivalency (TEQ)  $\geq 1$  mg/kg
- Total polycyclic aromatic hydrocarbons  $\geq 20$  mg/kg
- “weight of evidence” approach



(Image: Helen Hudson Mongillo, Sephira Environmental)

# Roads



Paremata



Paremata

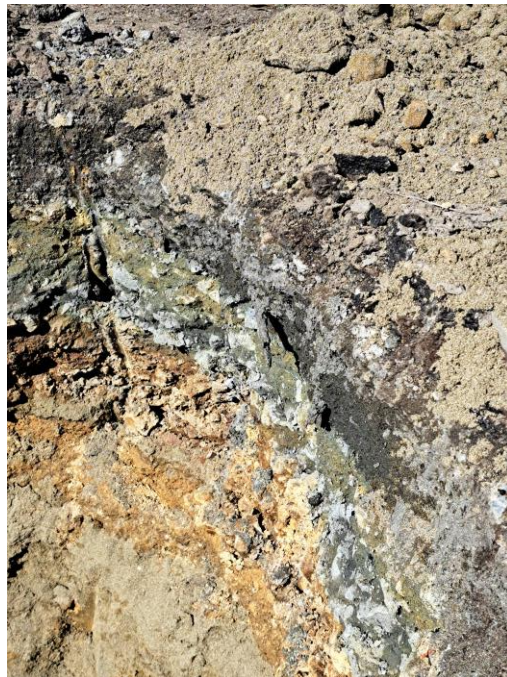


Nelson

# Industrial Sites



Lyall Bay, Wellington



Lower Hutt

# Airports



Wellington



Marlborough



# Uncontrolled Fill



South Coast, Wellington

# Field Screening

- White paint preferred over the coffee/tea test
- Correct paint is important
- Corroborate with laboratory analysis



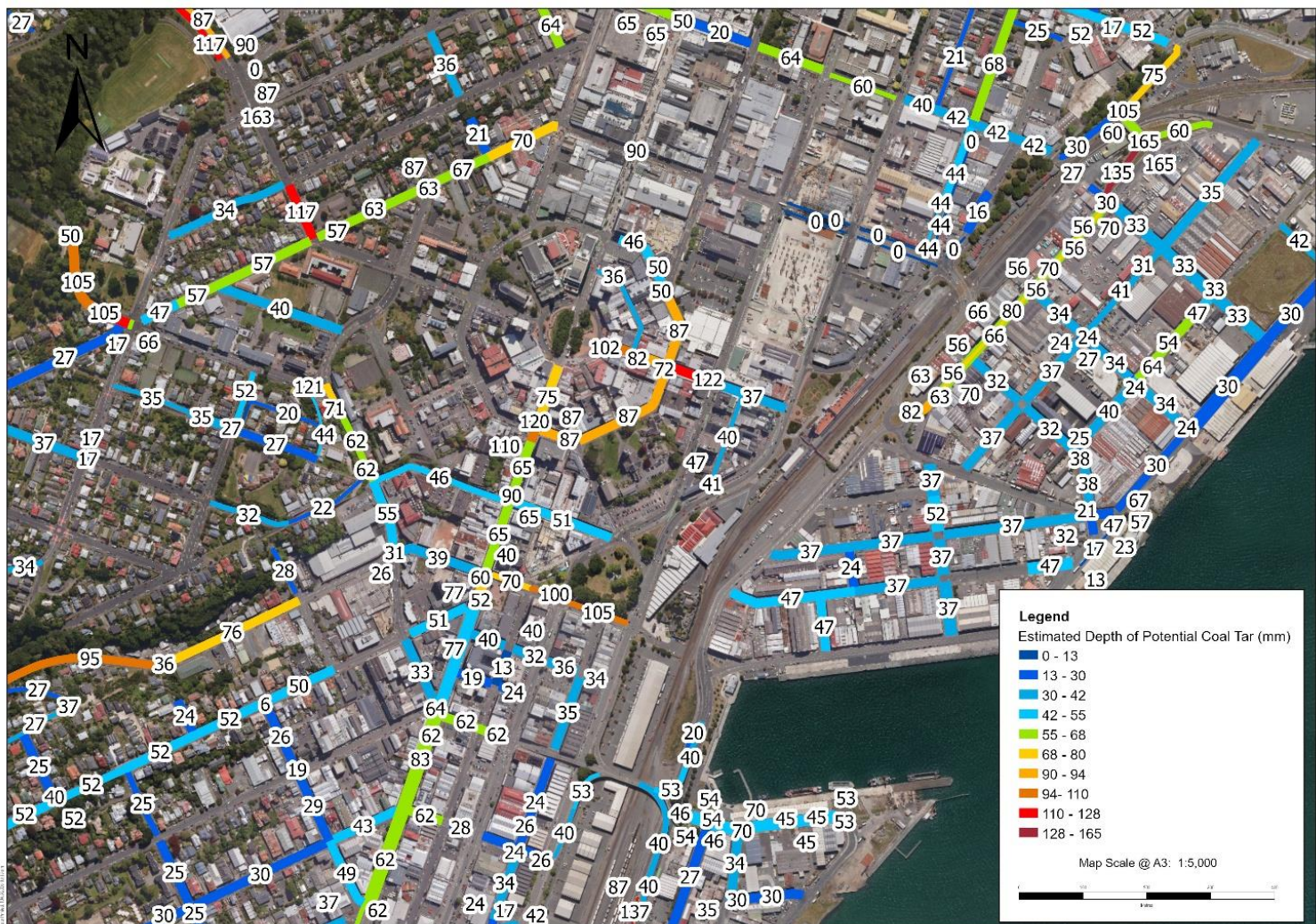
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# Reflections

- The Guidelines are a useful tool that have addressed a gap
- Unconvinced of the need to define “coal tar” based on PAH concentrations, when decisions are based on risk and waste acceptance criteria
- Incompatibly between the coal tar definition and clean fill / controlled fill waste acceptance criteria
- Appendix E Leachate Testing Methods - references to water quality guidelines could be improved

# Reflections

- The minimum sampling density of 1 per 50 m of road length
- Increased awareness needed in smaller areas
- Coal tar needs consideration during project design as disposal and unexpected discovery cause cost and delay
- Coal tar needs to be considered in unexpected discovery procedures

**make  
everyday  
better.**

**whakapai  
ake.**

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Acknowledgements:

Coal Tar in Roding Working Group  
Our many clients for allowing the use of their images, particularly Dunedin City Council for their GIS Pre 1980 Layer