



# Interpreting Waste Related HAIL Activities

G3, G5 or even I?

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# Hazardous Activities and Industries List Guidance – Identifying HAIL Land

- Released by MfE in 2023
- Aim to improve consistency in characterisation and assessment of HAIL land
- HAIL activity profiles including:
  - Description, exclusions, activity and substance factors, mechanisms of contamination and contaminants of concern





# How it's intended to be used

- Not a tick box, should be used as a guide only
- Must still use best judgement for assessing risks to HH&E
- The contaminants of concern listed are not exhaustive nor prescriptive
- Should not supersede activity specific guidelines (e.g. timber treatment, landfill, gasworks etc)
- Guidance should not be considered a rule book. Every site should be evaluated on its own merits







## G3 – Landfill Sites

- Waste materials deposited in more than a thin layer, with a resultant change in land contour
- Excludes thin layers of solids or sludges where the generation of landfill gas is unlikely, farm offal pits, and cleanfills
- Key “contaminants” of concern can include:
  - Waste materials
  - Leachate
  - Landfill gases (methane and carbon dioxide)







## G5 – Waste Disposal to Land

- A thin layer of waste on or in the ground
- Includes land farming or bio-piling of contaminated soils, disposal of untreated municipal waste or hazardous wastewater
- Excludes accidental spills or leaks to ground, agricultural spreading of animal effluents (except in certain cases), domestic septic tanks, and municipal biosolids
- Key contaminants of concern are widespread, depending on type of waste deposited

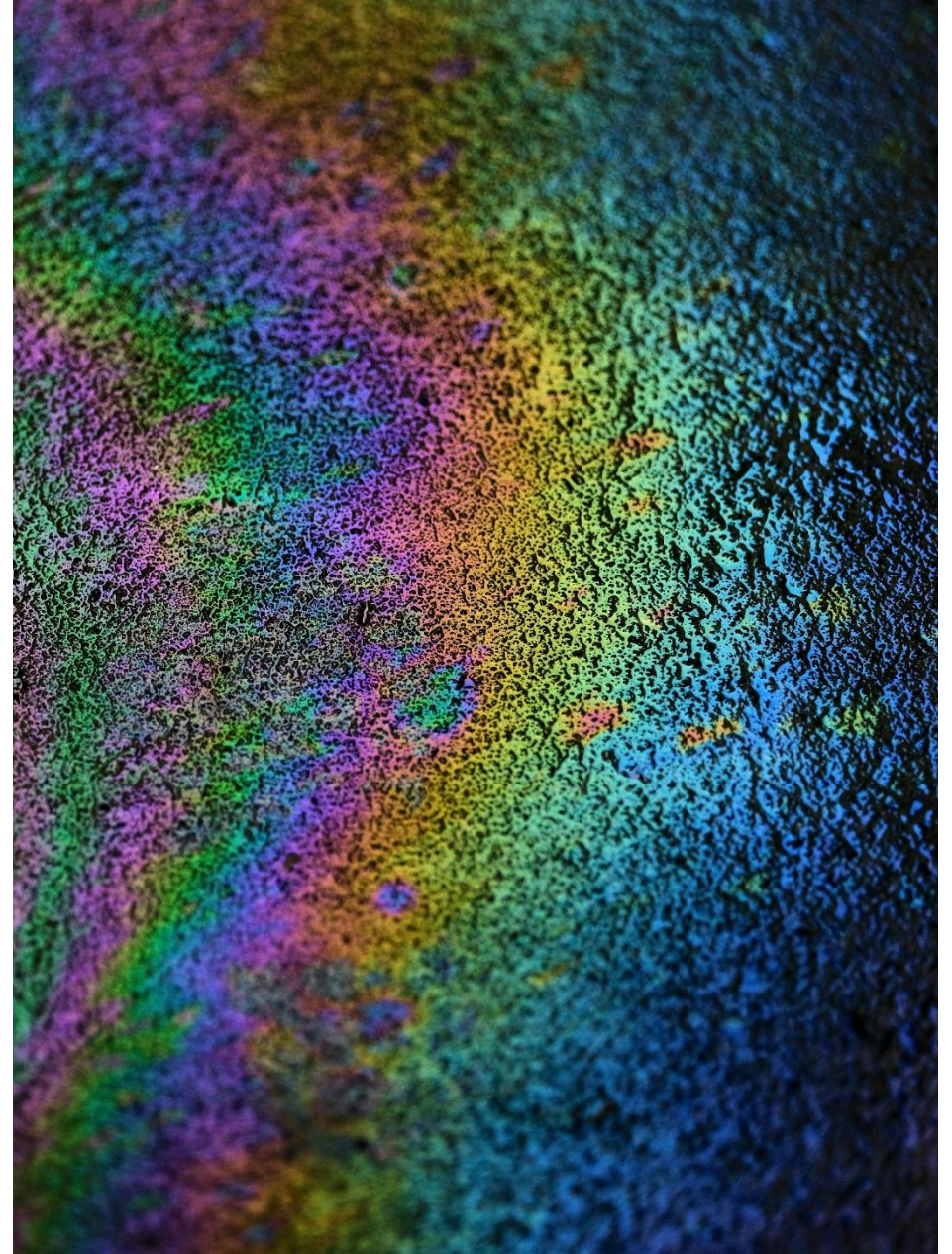






# I – Any Other Land

- Land that is “not a HAIL site”, but where the release of contamination could pose a risk to human health or the environment
- The release may be intentional or accidental, and can include:
  - Spills of hazardous substances or dangerous goods
  - Burn pads





# Implications of HAIL Guidance

- The specific HAIL activity has no implications under the NESCS
- Method (6)(2) allows use of Council information without needing an PSI
  - Consistency in HAIL identification is important
  - Not for the specific activity but for defining what is and isn't HAIL
- Significant differences in interpretation across the regions e.g. HAIL G5
- Legal implications

2011/361



**Resource Management (National Environmental  
Standard for Assessing and Managing Contaminants in  
Soil to Protect Human Health) Regulations 2011**

Jerry Mateparae, Governor-General



A black and white photograph of a field with tall grass and some debris, including a large metal wheel or barrel lying on its side.

# Case Studies





# Case Study Site A

- Waste includes: metal, glass, ACM, ceramics, concrete, timber, asphalt, rubber
- Located on the edge of a ridge – dumped over the side
- Approx. 35 m<sup>3</sup> and 0.4 m deep
- No LFG recorded
- ACM fragments
- Asbestos and lead above human health guidelines







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# Case Study – Which HAIL activity applies?

## ■ HAIL G3 – Landfill sites

- Small scale – 60% soil
- Minimal change to land profile
- HAIL guidance says “sites where a significant volume of fly-tipped waste has resulted in a change to the ground contour”



## ■ HAIL G5 – Waste disposal to land

- More related to land farming or wastewater disposal
- Requires no change to the land profile





# Case Study – Which HAIL activity applies?

- HAIL I – Any other land

- Only applies when there is no other activity
- Must pose a risk to human health or the environment



- HAIL E1 – Asbestos products

- Asbestos wasn't the only contaminant of concern, nor the primary constituent of the waste







# Case Study Site B – Gasworks waste land reclamation

- Residential properties on reclaimed land within a harbour
- Historic gasworks nearby
- Gasworks waste found to at least 2.5 m bgl
- Significant change to land profile (during reclamation)
- HAIL G5 excludes industries where it is common practice to dispose of large amounts of waste and states we should refer to the gasworks HAIL activity
  - HAIL G3 doesn't say this
- HAIL A7 (Gasworks) includes waste disposal as an activity factor



# Who cares?







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