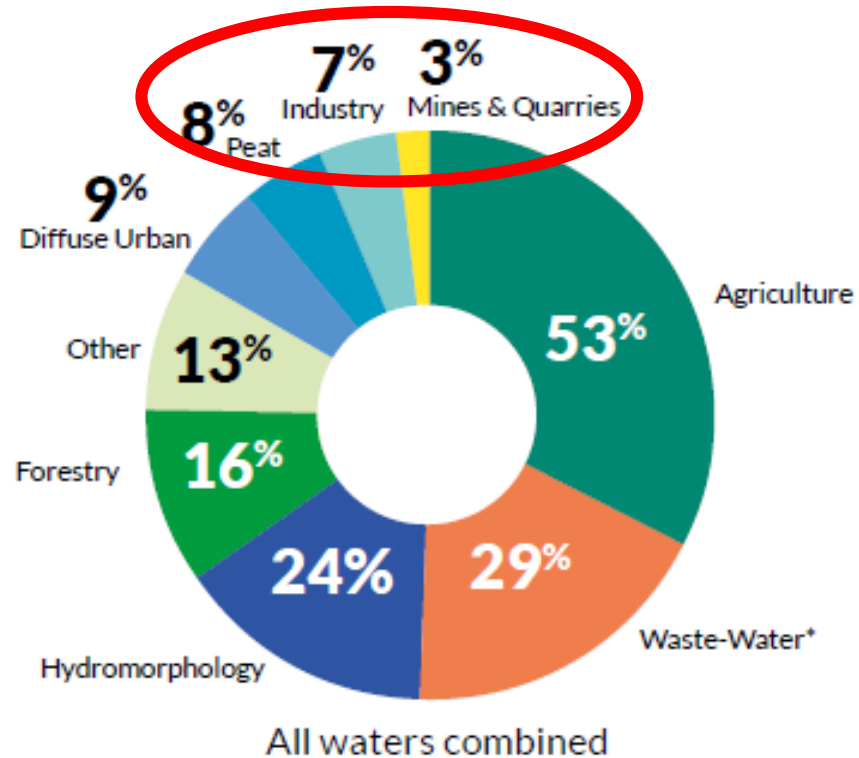


# EPA Licensed Industry & Waste Sites and WFD

21<sup>st</sup> June 2018

Mary Frances Rochford  
Senior Inspector  
Office of Environmental Enforcement  
Environmental Protection Agency

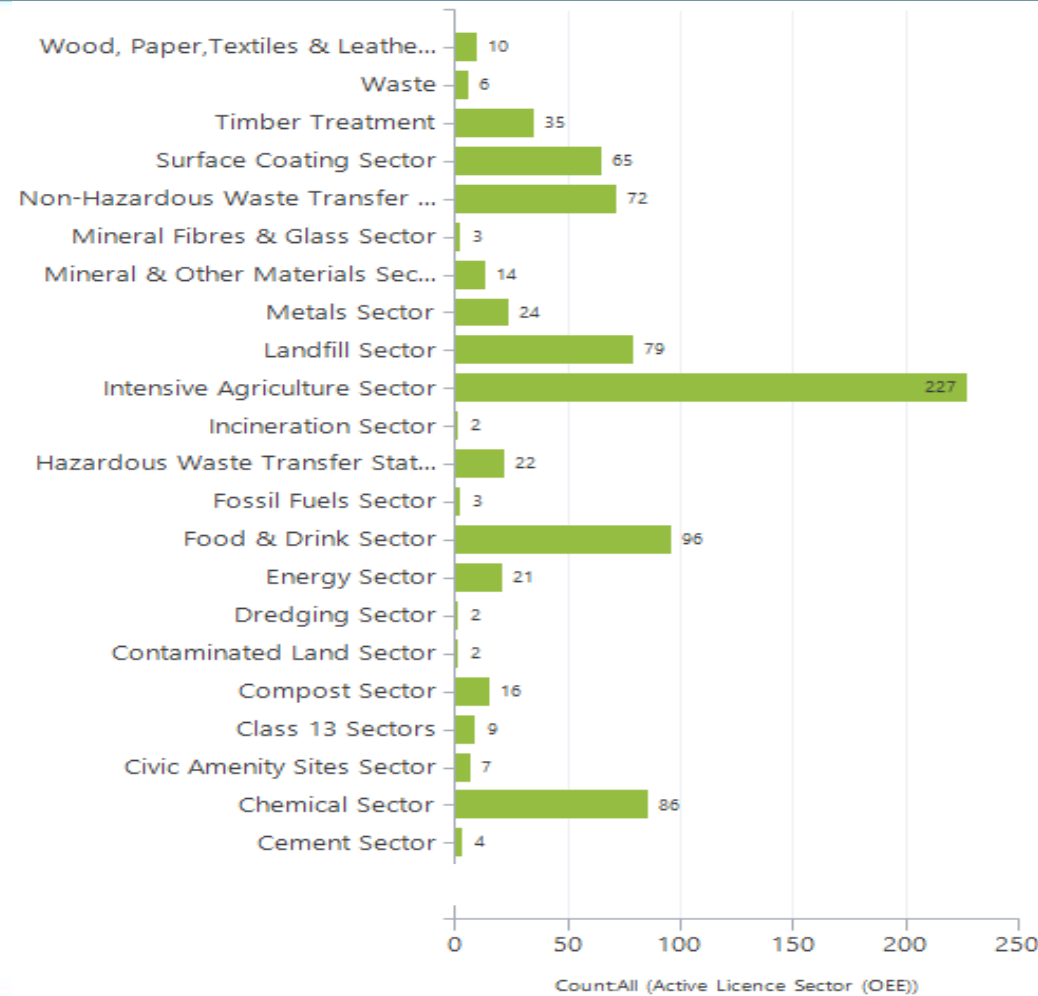
## Significant pressures on at risk water bodies



60 EPA licensed industrial and waste sites identified as significant pressures to one or more water bodies

- 30 as significant groundwater pressures
- 34 as significant surface water pressures
- 4 common to both groundwater and surface water

# Licence sectors

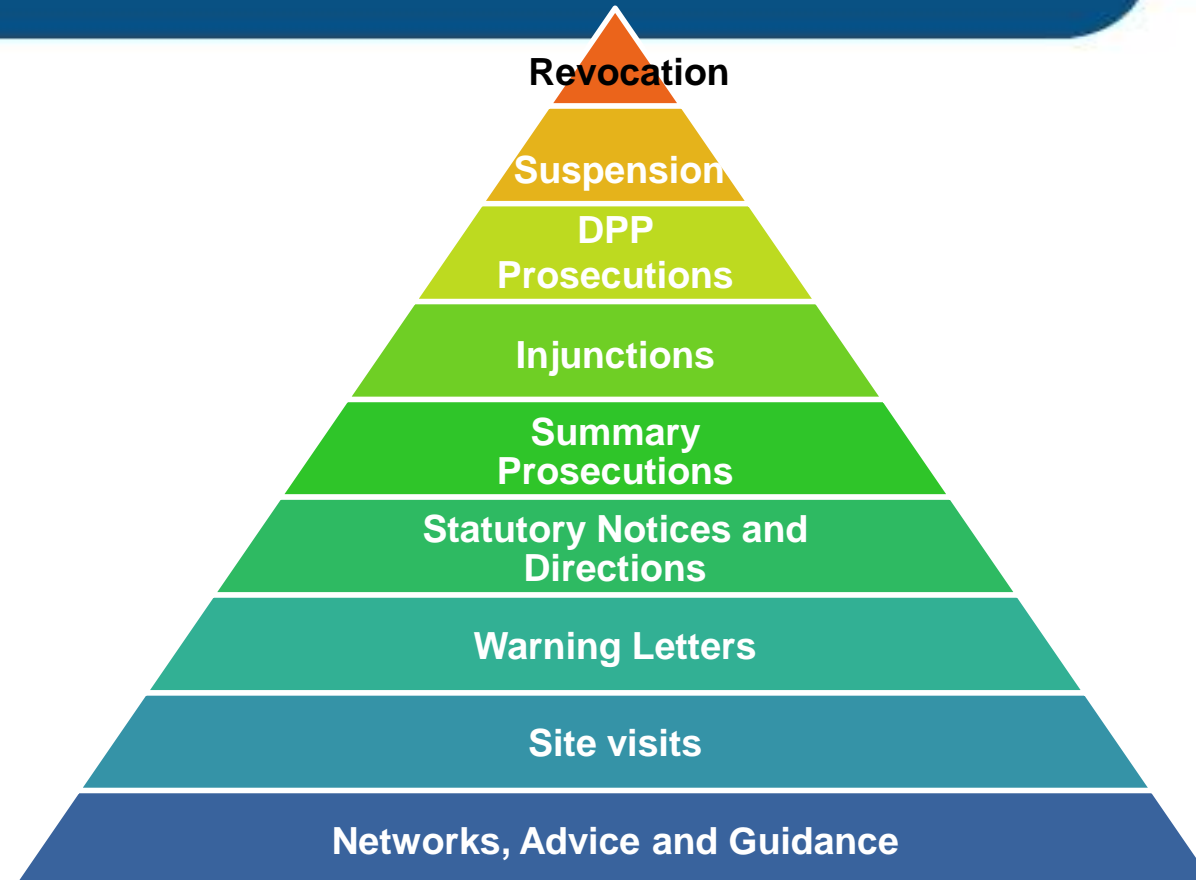


Approximately 800  
industrial, waste &  
intensive agriculture  
licences

## Licence conditions

- Physical infrastructure
- Management systems, procedures, staff training
- Accident and emergency prevention & preparedness
- Financial provision
- Limiting and preventing emissions to surface waters, groundwaters and the atmosphere
- Minimising and managing waste
- Monitoring and performance records & reporting
- Notifying the EPA about complaints, incidents or non-compliances

# Enforcement powers and tools



Adapted from "Responsive Regulation: Transcending the deregulation debate", Ayres and Braithwaite (1992).

## How we enforce

- Site inspections: 2017 planned (~350), reactive (~560)
- Monitoring: licensee and EPA (~500 water; ~100 air)
- Report assessment (~5500 returns)
- Complaints (~1000 per annum)
- Incidents (~1100 per annum; 97% minor)



- Compliance Investigations
  - Issue which needs to be addressed
  - Risk based: likelihood x severity
  - High, medium or low rating

## How we enforce

- Water quality accounted for 1% of all complaints in 2017
- 57% of all Compliance Investigations opened in 2017 for were for 'water related issues'
- 32% of EPA site visits undertaken in 2017 was for water/effluent monitoring

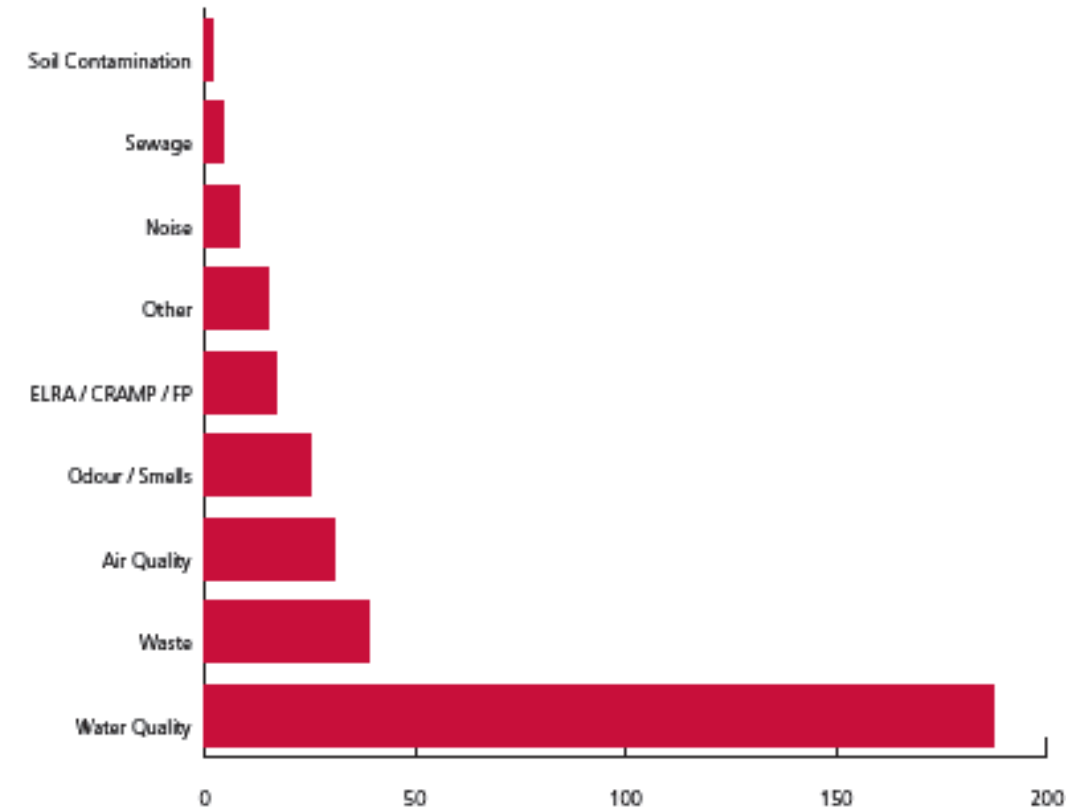
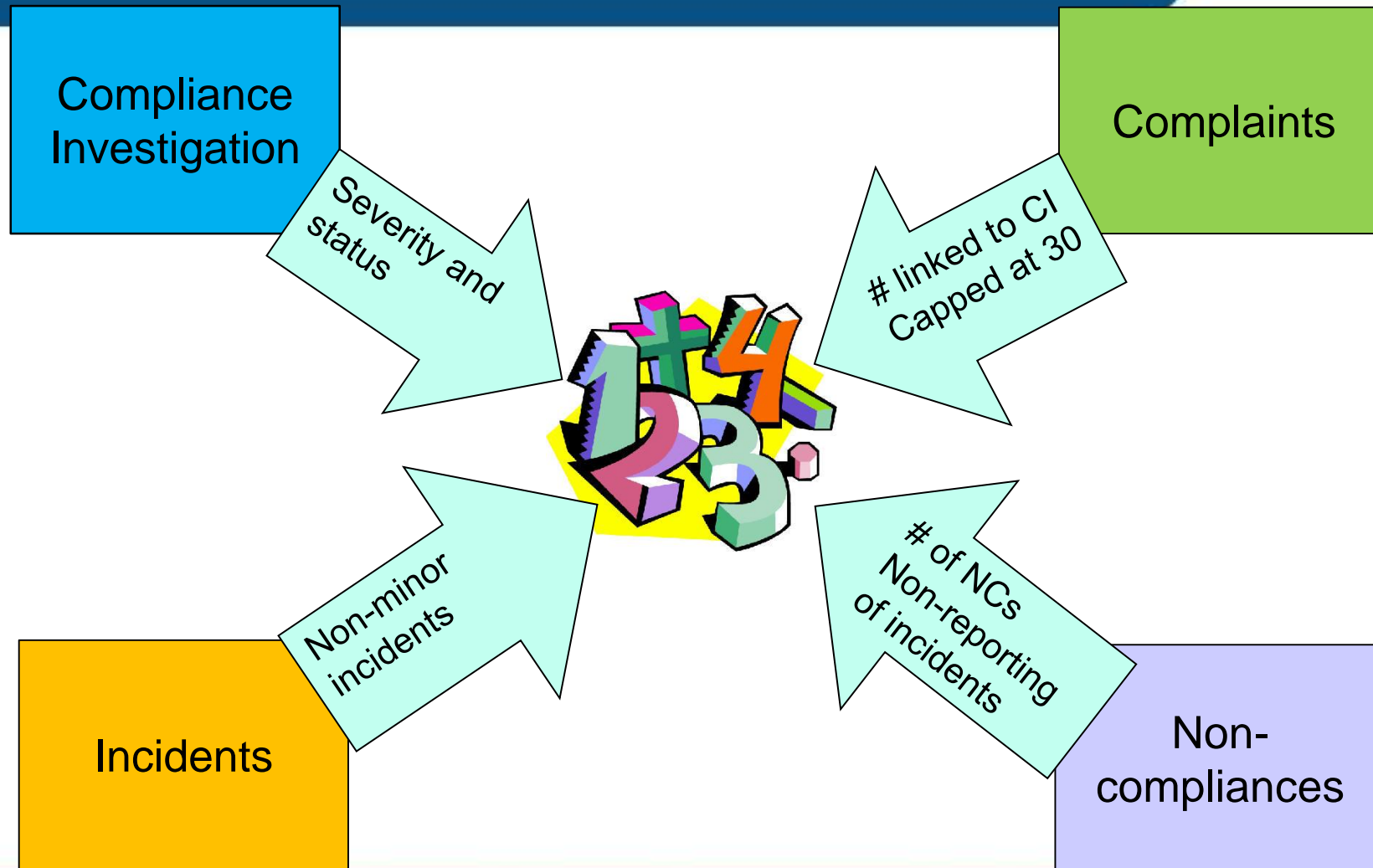


Figure 8 - Compliance Investigations open during 2017 by Issue

\*operational industry and waste sites

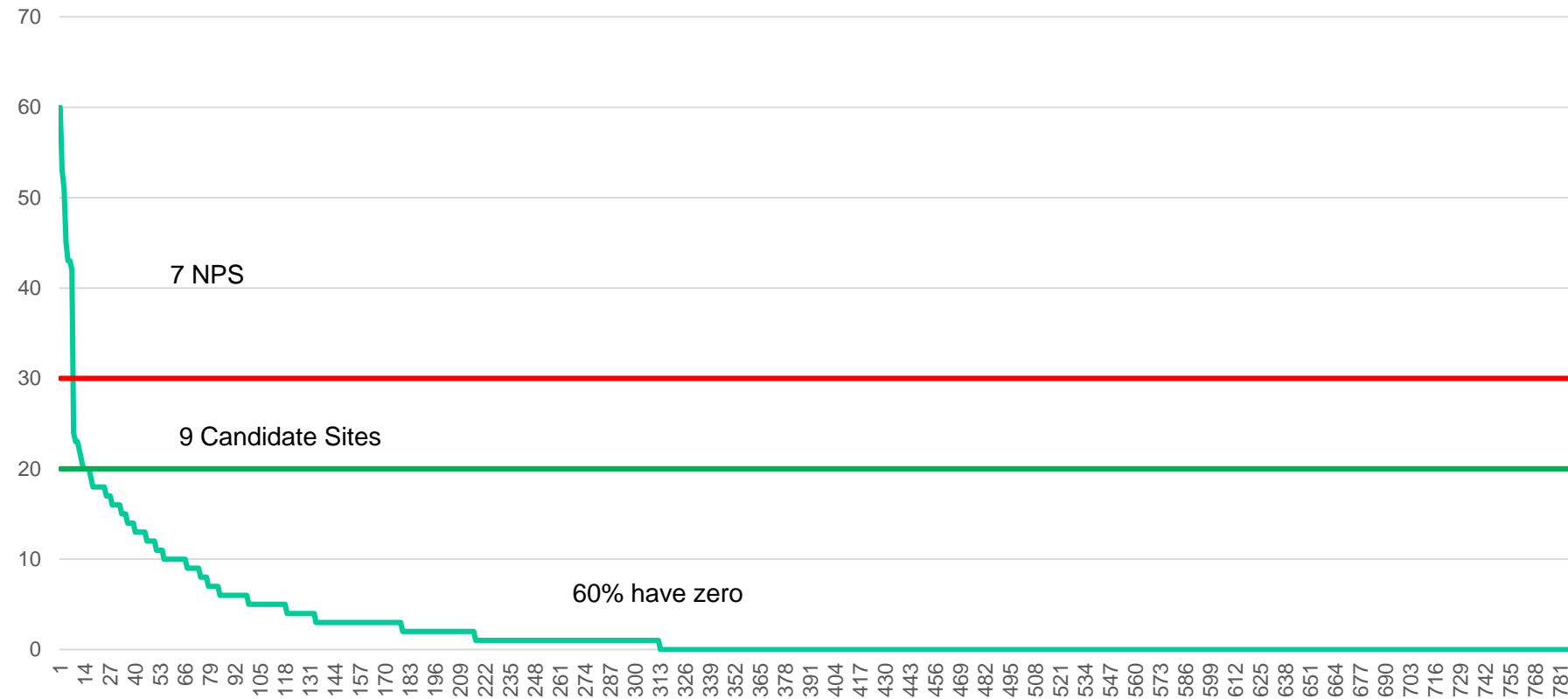
## National Priority Site List - scoring





# NPS Score distribution

NPS - End of March 2018



## The stats....

### Priority Sites Summary: April 2018 (October 2017-March 2018)



<1% of Industrial & Waste  
Sites



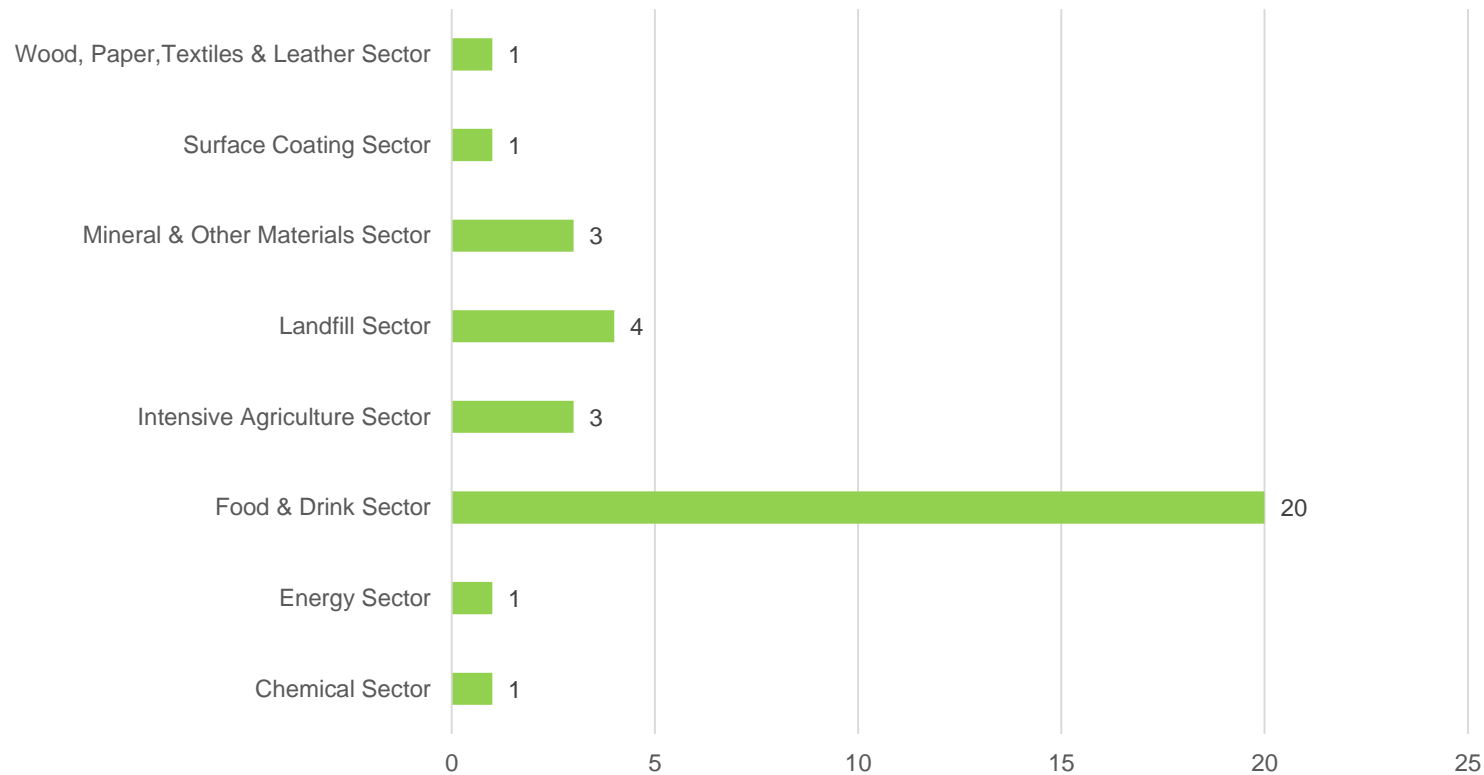
## The stats....

2017

- 20 sites were identified as National Priority Sites
  - All sites were prosecuted or face legal action
  - 9 sites from the food & drink sector
  - 4 sites from the waste sector
- 2 main issues
  - Risk to water quality
    - Poor site operational practices
    - Poor surface water management
    - Poor operation of wastewater treatment plants
    - Inadequate wastewater treatment infrastructure
  - Nuisance i.e. odour, noise and dust

## Significant pressures to one or more surface water bodies

Licence Sector (OEE)

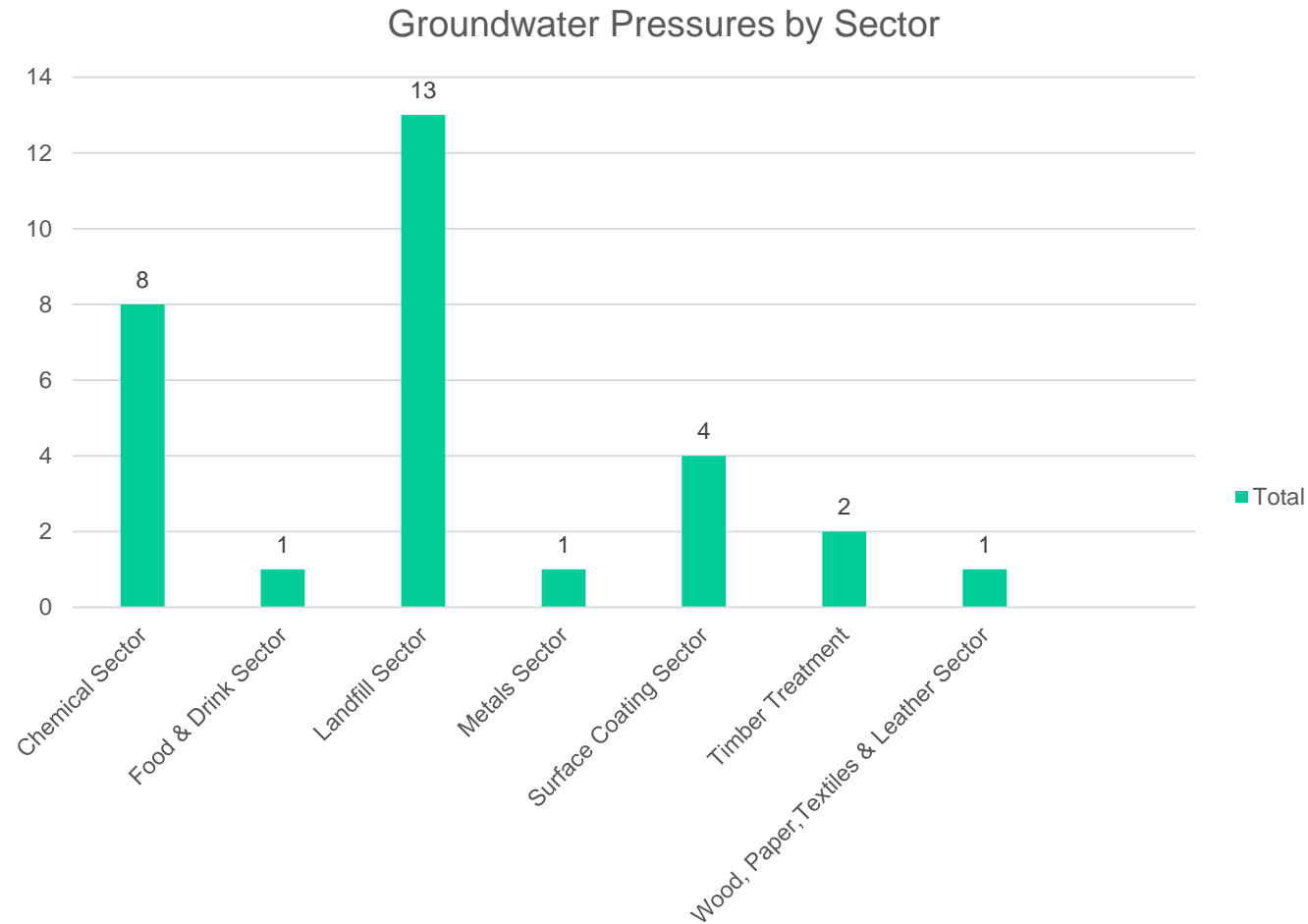


- 34 licensed sites impacting on 46 waterbodies
- 20 in areas for action

## Corrective Actions; in place or planned

- Improved operational practices and controls
- Relocation of discharge
- More stringent ELVs are in place by way of a licence review
- WWTP upgrades, including installation of calamity tanks
- Installation of swales and improved SW management practices
- Improved water management; meters
- Investigation
- Good status date...

# Significant pressures to groundwater bodies



30 licensed sites  
associated with  
groundwater bodies of  
poor status

## Why are these considered significant pressures?

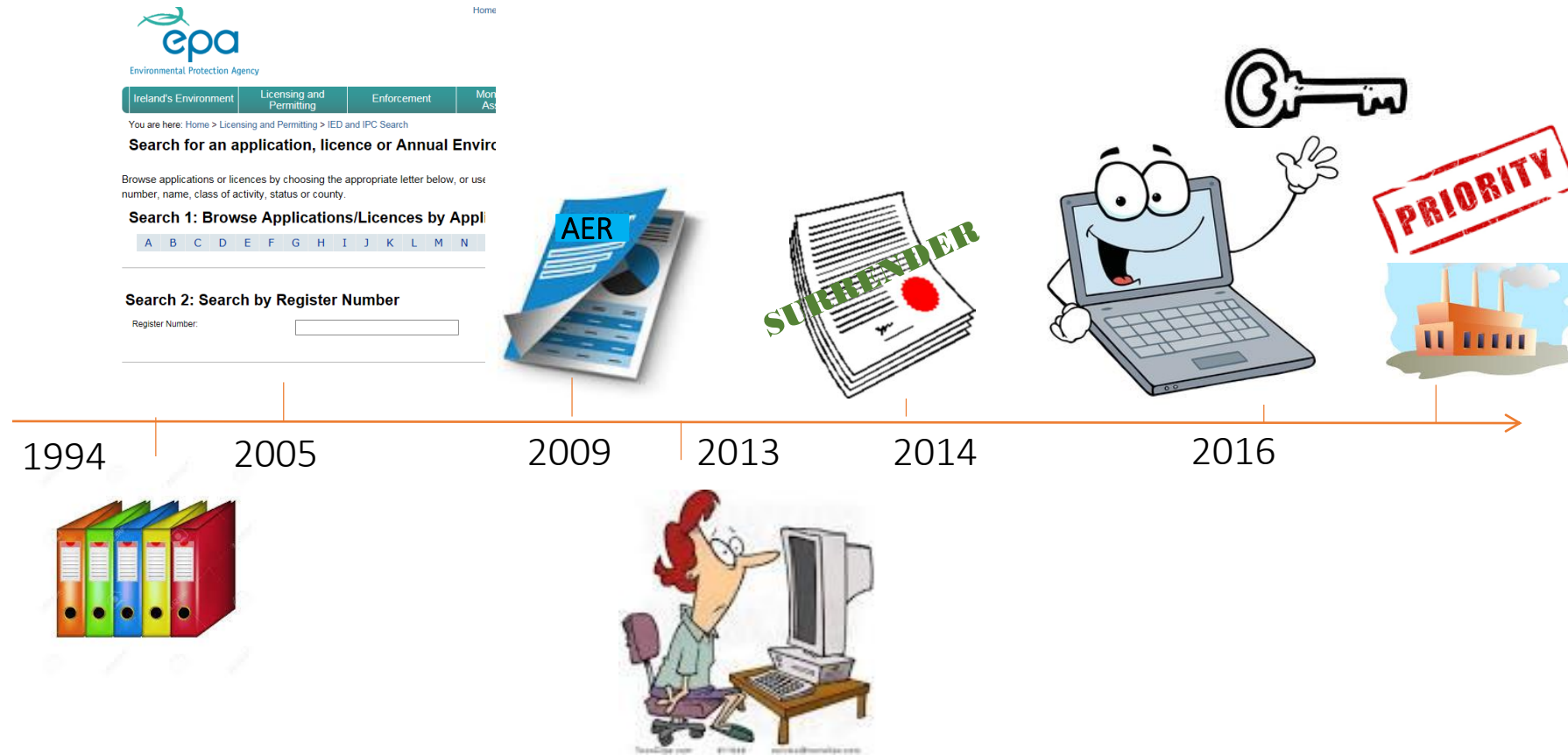
- Due to the presence of:
  - An off-site groundwater plume;
  - One or more individual bedrock well(s) with contaminant concentrations greater than 100 times a threshold value;
- Contaminants of concern include:
  - Dichloromethane (DCM)
  - Tetrahydrofuran (THF)
  - Tetrachloroethene (PCE)
  - Trichloroethylene (TCE)
  - Dichloroethylene (DCE)
  - Total petroleum hydrocarbons (TPH)
  - Benzene, Toluene, Ethylbenzene and Xylene (BTEX)
  - Methyl tert-butyl ether (MTBE)
  - Ammonia

## Corrective Actions; in place or planned

- Improved operational practices and controls
- Remediation underway, on-going monitoring and evaluation; removal of source and/or declining trends
- Monitoring and investigations underway/complete: develop appropriate remediation plan
- Good status date...



# Finding out about licensed sites...



**THANK YOU FOR LISTENING**