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White Paper

Coal Tip Safety (Wales) White Paper

A new regulatory framework for disused coal tips in Wales

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Mae'r ddogfen hon ar gael yn Gymraeg hefyd /
This document is also available in Welsh

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Overview

This consultation sets out the proposals for a Coal Tip Safety (Wales) Bill. The proposals aim to introduce a consistent approach to the management, monitoring and oversight of disused coal tips. The proposals consist of measures, which are directly implemented through primary legislation and, at the same time, establish frameworks to design and implement secondary legislation.

How to respond

You can reply in any of the following ways:

Online

The consultation document can be accessed from the Welsh Government's website at: <https://gov.wales/white-paper-coal-tip-safety>

Write to us:

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Further information and related documents

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This document is also available in Welsh: <https://llyw.cymru/papur-gwyn-ar-diogelwch-tomenni-glo>

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Ministerial Foreword

Minister for Climate Change



Wales has a proud history of coal mining, which has helped to shape our society, culture and values, with the Welsh coal fields helping to drive the industrial revolution drive unprecedented economic growth and social change across Britain from the mid-18th Century to the early 1900s.

Perhaps the most significant and visible legacy of this industry is the large number of spoil heaps that pepper Wales' landscape and predominantly so in the South Wales Valleys. The coal fields and the nearly 2,500 tips left behind, represent an important cultural heritage of Wales.

However, in October 1966, tragedy struck when a massive coal spoil heap on the hillside above Aberfan became unstable and collapsed after prolonged and heavy rainfall. Tens of thousands of tonnes of debris swept down the hillside, engulfing Pantglas Junior School and killing 144 people in the village, 116 of whom were children. The disaster revealed the potential lethal risks posed by poorly monitored and managed coal tips, and the devastating consequences of the event still scar this former mining community. In February 2020, many communities experienced directly the damage and trauma that climate change can cause, with intense rainfall from Storms Ciara, Dennis and Jorge leading to substantial flooding across Wales. The heavy rainfall across South Wales also led to a major landslide of a disused coal tip in Tylorstown, which resulted in over 60,000 tonnes of debris falling into the Rhondda Fach River. Fortunately, there were no injuries nor major damage to property and infrastructure. The resulting silt deposits impacted on river habitats however and created a significant flood risk until repair work was completed. The Tylorstown landslide was a stark reminder of the potential risks for our communities, environment and infrastructure still posed by Wales' past mining industry.

In its most recent reports, the Met Office has published analysis demonstrating how our climate is continuing to warm, resulting in significant climate impacts now being felt across the UK. The latest independent Climate Change Risk Assessment for Wales (CCRA3) recognises the potential for climate impacts to increase the risk of future landslips, landslides and subsidence linked to historic mining activities also.

The safeguarding of our communities has always been and remains the Welsh Government's top priority. The Coal Tip Safety Task Force, established by the First Minister immediately after the Tylorstown landslide, has taken forward work including extensive data collection on tip locations. The work has enabled us to inspect more frequently the higher rated tips, as well as trial new technologies to monitor ground and water movement and establish a new grant scheme to provide financial support to local authorities so they can undertake essential maintenance works on tips.

Following an invitation from the Welsh Government, the Law Commission have reviewed the existing legislation relating to disused spoil tips (the Mines and Quarries (Tips) Act 1969). The Law Commission concluded in its report, '*Regulating Coal Tip Safety in Wales*' that the current

law is no longer effective. An effective management regime is required to help ensure the safety of tips and address the risks they pose to our communities and the environment. The proposals contained in this White Paper build on the Law Commission's findings and recommendations.

I am grateful for the support and advice from our Task Force partners – the Coal Authority, Natural Resources Wales, local authorities and the Welsh Local Government Association, in helping to progress the coal tip safety work programme. Whilst much has been achieved in the last two years, we still have much more to do and this White Paper is a significant step forward delivering on our Programme for Government commitment to introduce new primary legislation.

The social, economic and environmental costs of coal mining have not been recognised fully hitherto, including costs and risks with the associated mining waste. With 40% of Britain's coal tips located in Wales and many sites naturally prone to landslips, our communities are clearly affected disproportionately. Welsh communities should not bear the cost of reclaiming the UK coal industry's legacy. There is a clear case for the UK Government to support the reclamation of these wasted assets from the UK's industrial past. There are many economic, social and environmental opportunities that might be gained from investing in coal tips, many of which are located in some of the most deprived areas of the UK. To assist in addressing the climate and nature emergency some of our coal tips can be sites for tree planting, contributing to ecological networks and improving ecosystem resilience. Reclaiming and repurposing some coal tips could also provide opportunities to improve community amenities and create new jobs also.

The Welsh Government is determined to do everything in its power to avoid the type of tragedy that occurred at Aberfan 55 years ago. This is why we are bringing forward new legislation to put in place robust and enforceable mechanisms for the management of tips, tackle the impacts of climate change, develop and deploy new technology to support tip monitoring and implement a substantial programme for the long-term reclamation and repurposing of tips where this is needed.



Julie James MS

Executive Summary

Storms Ciara, Dennis and Jorge in February 2020 clearly illustrated the devastating impact flooding can have on our communities. The landslide of a disused coal tip in Tylorstown, during Storm Dennis, demonstrated further the potential impact climate change can have on Wales' industrial mining legacies.

The establishment of the First Minister's Coal Tip Safety Task Force, shortly after the Tylorstown landslide, was to deliver a programme of works including reviewing the safety of coal tips across Wales, inspections and maintenance of the higher rated tips. The Welsh Government also undertook a policy review of the existing arrangements for oversight of coal tip safety, including assessing the effectiveness of the current legislative framework.

This initial review led to the Welsh Ministers inviting the Law Commission to undertake an independent review of the law governing coal tips in Wales. The Law Commission were also asked to consider options for a modern legislative framework and to recommend a coherent, standardised and future-proofed system for identifying, recording, inspecting, and maintaining coal tips throughout their lifecycle, identifying an overarching set of duties and adopting a uniform approach to risk assessment. The Commission commenced its review in November 2020. On 24 March it published its report and recommendations.

The Law Commission report set out clearly the issues with the existing legislative framework as provided by the Mines & Quarries (Tips) Act 1969. In summary, the Law Commission found the current regime primarily relates to an active industry and is no longer appropriate for managing disused tips.

This White Paper draws on the recommendations of the Law Commission and the further analysis, which we have undertaken where this was appropriate. In a number of recommendations, which deal with technical matters, the Commission has left this to the Welsh Government to develop and we reflect our analysis and proposals in this paper. Some proposals outlined in this White Paper are new as they were either not or only partially captured in the Law Commission report.

Purpose of Bill

The purpose of a proposed Bill will be to introduce a consistent approach to the management, monitoring and oversight of disused coal tips. The aim is to protect communities, critical infrastructure and the environment by introducing appropriate management of tips, which will help reduce the likelihood of landslides. The objectives of the new regime are to provide:

- Clarity of roles and responsibilities;
- Consistency of approach for all disused coal tips and spoil tips;
- A proportionate response to disused tips as they are not homogenous; and
- Effective management of disused tips to reduce risks to communities and the environment.

The Bill will form part of a wider package of measures to deliver our objectives, the other mechanisms include: a) £44.4 million capital investment over the next three years to support local authorities carry out necessary identified maintenance works; b) addressing the skills gap to ensure sufficient capacity and capability to deliver the on-going inspections and maintenance programmes; c) trialling technology to support monitoring and inspection and d) long-term reclamation programme – to address long-term stability issues and to deliver potential opportunities, which could be derived from coal tips.

Proposals

The proposals contained in this White Paper for a new management regime include:

- Establishment of a new supervisory authority, a Welsh Government Sponsored Body, which will be subject to a general duty to perform its functions so as to ensure the safety of coal tips. This new body will be responsible for ensuring the consistent approach to be introduced in a Bill and compliance with the new duties set out in this White Paper.
- Development of a new ‘National Asset Register’ comprised of uniform, coherent, reliable and up to date data, which is critical for the introduction of a consistent, comprehensive and effective management regime for disused coal tips. The Welsh Ministers to prescribe the minimum content of the register in subordinate legislation. To ensure the asset register is up to date, there will be requirement on responsible parties to update the register with reports and progress on maintenance.
- Supervisory authority to oversee a register of professionals competent to undertake tip safety work – not limited to one profession but across a wider spectrum of skills and knowledge required for coal tip safety.
- A requirement for the supervisory authority to arrange a hazard assessment of all tips. A hazard assessment, which will feature each significant hazard identified at a site with the potential to cause injury or harm to property, infrastructure or the environment.
- A new consistent approach to categorisations based on the hazard assessment and impacts on receptors. The aim of the new categorisation is to ensure consistency, accuracy and transparency in the categorisation of all disused tips.
- Supervisory authority to map all interdependent and proximate clusters of tips for the purpose of determining whether a management plan should apply at a cluster level.
- Supervisory authority to arrange for the production of management plans for all disused coal tips. The management plan should be appropriate for the hazard level and categorisation of a tip, therefore higher status tips, we propose, will have a more in-depth plan. Depending on the specifics of the tip, this could include a statement of requirements on additional types of specialist inspections - ecological, drainage.
- In addition to an initial hazard assessment, we propose a two-tier approach to monitoring tips from inspections and appraisals – with the frequency and scale linked to the category of the tip. An inspection we propose, is a simplistic, standardised check on a tip, while an appraisal is a detailed, comprehensive technical appraisal, including site inspection. Provides a detailed catalogue of all features, their condition and general remarks on the

site. The frequency of inspections and appraisals to be determined by the categorisation. We propose the supervisory authority is responsible for all Category 1 tips (currently category D), local authorities for their own and privately owned Category 2 tips (currently category C), and owners for Category 4 and 5 tips (currently categories B and A).

- We propose the maintenance arrangements for tips are the same as the responsible parties for inspections and appraisals. However, maintenance agreements can be arranged by the supervisory authority with owners, particularly for category 4 and 5 tips. Non-compliance of a maintenance order can result in the issuing of a tip order and non-compliance of a tip order can result in a summary offence.
- As recommended in the Law Commission report we also propose rights of access for:
 - inspecting, carrying out tests or sampling upon a known or suspected coal tip;
 - performing, supervising or inspecting works of maintenance or remedial operations or installing and monitoring instrumentation upon a coal tip; and
 - gaining access to a coal tip for the above purposes.
- We also seek stakeholders' views on the role of civil sanctions and the type of activities for which these could be used.
- We also seek stakeholders' views on whether there are types of activities on tips, falling under three themes: a) Trespassing and vandalism; b) Actions with the potential to change the condition or performance of a tip (e.g. have a potentially de-stabilising action); and c) Land use changes which may require to be either banned or controlled through consents or permits.
- We also propose whether the supervisory authority may require to be a statutory consultee in development applications, where the development could change the categorisation of a tip from a lower status to a higher status tip.

Chapter 1: Introduction

- 1.1. This White Paper sets out our aims to address the gaps in the existing regime for disused coal tips, as provided in the Mines and Quarries (Tips) Act 1969 ('Tips Act'). The paper sets out our proposals for the introduction of a new statutory management framework to support coal tip safety and address the potential impacts from climate change.
- 1.2. We are seeking your views on the key elements of the new proposed statutory regime, which will be introduced in new primary legislation during this Senedd.
- 1.3. This White Paper follows on from the recent report¹ published by the Law Commission on 24 March. It draws on the recommendations presented by the Law Commission following its review and consultation paper '*Regulating for Coal Tip Safety in Wales*'².
- 1.4. The review commenced in November 2020, following an invite from the Welsh Ministers to the Law Commission to undertake an independent assessment of the relevant legislative framework for coal tip safety and provide recommendations for a future Bill.
- 1.5. The Law Commission consulted on its findings and proposals between June and September 2021. The review found the current legislation relating to coal tip safety, in particular the Tips Act 1969, does not provide for the effective management of disused coal tips.
- 1.6. In this paper, we draw upon the responses from the Commission's review and its recommendations and have undertaken further analysis where this was appropriate. In a number of recommendations, which deal with technical matters, the Commission has left this to the Welsh Government to develop and we reflect our analysis and proposals in this paper. Some proposals outlined in this White Paper are new as they were either not captured in the Law Commission report or only partially captured, for example the specific form of a new supervisory authority.
- 1.7. This document is supported by an Integrated Impact Assessment, which provides a summary of the impacts of the proposals, including the social, economic, and environmental effects. More detailed assessments are underway to inform the development of the proposals provided in this White Paper. We intend to introduce a Bill during this Senedd. The Law Commission issued a supporting Impact Assessment with its report, which outlines its economic analysis³.

Historical Background

- 1.8. Coal mining in Wales, dates to the Bronze Age, by the 15th century, mines existed across the country, mostly for use in small-scale industry. During the 16th and 17th centuries, an export industry developed, and production rose. However, from the mid-19th century, large scale mining increased due to the mechanisation of the industry. Pre-mechanisation, the volume of coal extracted from mines was on a small scale, but technological advances resulted in substantial increases in the volumes of extracted coal. By 1913, there was no

¹ Law Com 406, 24 March 2022, [Regulating-Coal-Tip-Safety-in-Wales-Report.pdf](#)

² [Law Commission Documents Template](#)

³ [Impact Assessment template](#)

less than 57 million tons of coal being produced from the Welsh coalfield from more than 600 mines⁴.

- 1.9. The increase in the Welsh mining industry gave rise to population growth in and around the coalfields and throughout the nineteenth century and early twentieth century, was key to the Industrial Revolution. However, it also resulted in the depositing of unsaleable material into tips. This action was a negative externality from the spill-over effects from the actions of coal mine owners.
- 1.10. Until the introduction of the Tips Act 1969, there were no laws and regulations governing mine and quarry tips and spoil tips. In Wales, particularly in the South Wales valleys, the scale of the increase in mining, resulted in tips being located higher up the steep valleys, on a landscape, which was and is prone to natural landslides and in proximity to the growing communities. Mining activities also reactivated some landslides⁵.
- 1.11. The Tips Act 1969 was introduced in response to the catastrophic collapse of an active coal tip at Aberfan in 1966, which claimed the lives of 144 people, of which 116 were children. The disaster revealed the devastating impact of a landslide from a coal tip.
- 1.12. The Tips Act 1969 introduced a management regime for all spoil tips (not solely coal tips) but as the Law Commission found in its review, the Act was focused on an active mining industry and active spoil tips. It does not provide an effective regime for disused tips, and the vast majority of tips in Wales are now classed as disused. The Tips Act 1969 no longer provides an adequate statutory regime for the modern day, where a mining industry is all but nearly gone.

Tylorstown landslide

- 1.13. On 16 February 2020, the impact of climate change saw increased winter storms with extreme rainfall in parts of South Wales. Storm Dennis, following storm Ciara, brought record rainfall and the most severe flooding in Rhondda Cynon Taf since the 1970s. As a result of the increased rainfall there were a number of minor landslides from disused coal tips but a landslide at a disused coal tip in Tylorstown, resulted in 60,000 tonnes of material falling into the Rhondda Fach River, damaging a foul sewer and burying a strategic water main under several metres of debris. Fortunately, there were no casualties. The cost of recovering the debris and remediating the tip is now estimated at approximately £20 million. To date three of the four phases of recovery and remediation of the landslide have been completed. Phase 4, however, will focus on the main remediation of the site.
- 1.14. The landslide raised concerns over the safety of Wales' disused coal tips and highlighted the continuing risks posed by Wales' industrial heritage.
- 1.15. In the immediate aftermath of the Tylorstown landslide and in recognition of the seriousness of the incident, the First Minister and Secretary of State for Wales jointly

⁴ BBC, August 2008

⁵ SP Bentley and HJ Siddle, "The evolution of landslide research in the South Wales Coalfield" (1990) 101 Proceedings of the Geologists' Association 47, <https://documents.site/the-evolution-of-landslide-research-in-the-south-wales-coalfield.html>

commissioned the Coal Authority to undertake immediate ground checks to better understand the status of these legacy assets from the mining industry.



Figure 1: Thousands of tonnes of coal tip waste on the hillside and in the river at Tylorstown following the landslide in February 2020

Jack Brown, RCT County Borough Council

- 1.16. Shortly after the landslide, the First Minister established the Coal Tip Safety Task Force, which is led by the Welsh Government, working together with the Coal Authority, Natural Resources Wales (NRW) and local authorities, including the Welsh Local Government Association (WLGA). The purpose of the Task Force is to work collaboratively to deliver a programme of works including reviewing the safety of coal tips across Wales; inspections and maintenance of the higher rated tips. The Welsh Government also began a policy review of the existing arrangements for oversight of coal tip safety, including assessing the effectiveness of the current legislative framework.
- 1.17. In December 2020, there was a further landslide at a tip in Wattstown. This landslide, while visible on the face of the tip, fortunately, did not result in any damage.

Coal Tip Safety Task Force

- 1.18. The Task Force has undertaken a wide programme of work⁶ from gaining a better understanding of the scale of the challenge, carrying out inspections and maintenance works on tips to introducing a number of technology trials to assess the role of technology in providing information on ground movement and water regimes.

⁶ [Coal tip safety | GOV.WALES](https://gov.wales/coal-tip-safety)

- 1.19. Since 2020, the Welsh Government has funded the Coal Authority to carry out inspections of all tips with an interim rating of category C or D and to collate data on the location, status and ownership of disused coal tips (see paragraphs 5.1 and 5.2 for an explanation of interim categorisations).
- 1.20. The Coal Authority, working with local authorities, has carried out three rounds of inspections, with the most recent completing in February 2022. A further round of inspections of D rated tips will be undertaken over summer 2022.

Maintenance Programme and Grant Scheme

- 1.21. Tip inspections help to identify maintenance and remedial works required on tips, including whether drainage systems are blocked or not functioning effectively. Since late 2020 a Welsh Government grant scheme has been in place to enable local authorities to undertake these works, including remedial works on tips, which have had slides, such as at Tylorstown and Wattstown (as illustrated in the photograph). The photograph illustrates matting placed onto a tip, which provides erosion protection to the failed bare slope section.



Figure 2 :Geomattng on Wattstown Standard coal tip in Rhondda Cynon Taf

- 1.22. To support the coal tip safety programme, the Welsh Government has committed £44.4 million over the next three years to support local authorities carry out maintenance and remediation works on coal tips.

Coal Tip Landscape

- 1.23. Since 2020, the Coal Authority, as commissioned by the Welsh Government, has worked with local authorities to gather information about the location, status and ownership of disused coal tips in Wales, utilising a variety of different sources from maps, historical

records, aerial photographs and LIDAR data, and in some cases confirming data through site visits.

- 1.24. To date, 2,456 disused coal tips have been identified with approximately 85% located in the South Wales valleys⁷. Table 1 provides a breakdown by local authority. While every effort has been made to identify all tips, the data remains subject to ongoing review and totals should not be considered definitive and will be subject to change.
- 1.25. The ownership landscape for disused coal tips is complex. Approximately 50% of disused coal tips have more than one owner, with some tips having multiple interests in the land, which can include a mix of private and public interests. A number of tips also sit across more than one local authority.
- 1.26. The Coal Authority has provided every tip an interim rating in order to determine, which tips need to be most closely monitored. Tips have been assigned an interim rating from A-D, where A is the lowest rated and D the highest.
- 1.27. A higher rating does not mean a tip poses an imminent risk. Due to their size, location or history, tips rated C or D are inspected more frequently to assess their condition and, where necessary, take remedial action.
- 1.28. As illustrated in Table 1, a total of 327⁸ disused coal tips have been given an interim C or D rating, of which 98% are located in the South Wales valleys. Due to on-going quality assurance of location data, the figures provided in the table may be subject to change. Ceredigion, Conwy, Denbighshire, Gwynedd, Newport and the Vale of Glamorgan have no recorded disused coal tips.

⁷ This figure was provided to the Welsh Government by the Coal Authority in August 2021, this is a live data set and subject to change.

⁸ This is as of 11 October 2021 [Written Statement: Update on Coal Tip Safety \(11 October 2021\) | GOV.WALES](#) and 26 October 2021 [New data shows true scale of coal tip challenge as First Minister makes fresh funding call | GOV.WALES](#). The data is live and after on-going quality assurance may alter.

Table 1: Disused coal tips in Wales by Local Authority

Local Authority						LA Total
	D	C	B	A	R*	
Neath Port Talbot	12	27	163	375	30	607
Rhondda Cynon Taf	23	52	95	89	44	303
Wrexham		3	21	107	85	216
Caerphilly	7	44	67	79	8	205
Swansea		5	36	120	42	203
Torfaen	3	32	81	49	10	175
Carmarthenshire			58	59	53	170
Blaenau Gwent	3	11	38	66	10	128
Merthyr Tydfil	14	45	30	30	1	120
Bridgend	5	26	27	56	4	118
Flintshire			19	40	6	65
Pembrokeshire		1	6	54		61
Powys	1		18	6	3	28
Monmouthshire	2	10	7	8		27
Cardiff	1		10	11		22
Isle of Anglesey			2	6		8
Overall Category Total	71	256	678	1155	296	2456

*R = Now removed or built over

Technology Trials

1.29. The Welsh Government is also funding a number of technology trials to identify potential suitable monitoring approaches for specific tips. The trials are testing the following:

- monitoring ground movement;
- tip performance with respect to both surface and groundwater; and
- suitability for providing advanced warning of changes in stability performance.



Figure 3: Tiltmeter sensor on a coal tip in the Rhondda Fach

- 1.30. The trials will also provide evidence on whether any technologies may be appropriate for inclusion in the new management regime by supporting the on-going monitoring of tips. Annex 3 provides an overview of the different technologies currently being trialled.

Law Commission Review

- 1.31. In October 2020, the Welsh Ministers, using powers under the Law Commission Act 1965⁹, invited the Law Commission to review the legislative framework relating to coal tip safety.
- 1.32. The Law Commission agreed to review the law governing coal tips in Wales and consider options for a modern legislative framework and to recommend a coherent, standardised and future-proofed system for identifying, recording, inspecting and maintaining coal tips throughout their lifecycle, identifying an overarching set of duties and adopting a uniform approach to risk assessment. The Commission commenced its review in November 2020.
- 1.33. The Law Commission consulted on its proposals from 9 June until 10 September 2021. Following the closure of the consultation document, the Law Commission analysed responses and issued its report to the Welsh Ministers on 24 March, when the Welsh Ministers laid the report in the Senedd.
- 1.34. The consultation¹⁰ document and report set out clearly the issues with the existing legislative framework as provided by the Tips Act 1969. In summary, the Law Commission found the current regime is outdated and reform is vital for protecting the public from any future landslides. The Law Commission clearly stated the legislation relates to a time when there was an active coal industry and does not provide an effective management framework for disused coal tips in the twenty-first century. One of the key issues is the Tips Act 1969 only provides a permissive regime, in particular powers may be used only where it appears to a local authority there may be danger to the public due to instability. This means a local authority cannot intervene at an earlier point on a proactive basis to prevent risk arising. Other key issues identified were:

⁹ As amended by the Wales Act 2014

¹⁰ [Law Commission Documents Template](#)

- There are no requirements in legislation to provide consistent categorisation, minimum levels of expertise or consistency in approach to inspections;
- The current regime is unnecessarily complex as powers granted to local authorities, in relation to tip owners, are subject to a confusing system of notices and counter notices;
- Local authorities have no power to oversee routine maintenance of tips and no powers to compel a tip owner to undertake even basic maintenance requirements to make a tip safe; and
- There is no oversight and monitoring of inspections and maintenance of disused coal tips.

1.35. All of the Law Commission’s recommendations are listed at Annex 2.

Programme for Government

1.36. The Welsh Government has committed in its Programme for Government to introduce legislation during the current Senedd term to deal with the legacy of centuries of mining and ensure coal tip safety. This White Paper provides the policy direction for this Bill.

Climate and Nature Emergency

1.37. The 2018 Intergovernmental Panel on Climate Change (IPPC) *Special Report on Global Warming of 1.5 C* refers to substantial evidence that global warming has already resulted in increases in the frequency, intensity and/or the amount of heavy precipitation in regions, which include northern Europe, and will lead to further such increases¹¹.

1.38. In April 2019, the Welsh Government was the first government to declare a climate emergency in response to the latest evidence from the IPCC¹².

1.39. In July 2021, the Met office reported an increasing pattern of wetter weather, more frequent storms and heavier rainfall. As a result of climate change, the amount of rain falling on the South Wales coalfields has increased by 13% since the 1960s, and has also shifted towards the winter months, meaning that rainfall is less spread out throughout the year. A number of coal tip landslides, such as the one at Tylorstown, are caused by increased rainfall impacting on the engineered drainage systems, some of which were not designed to cope with current and predicted levels of rainfall.

1.40. In 2021, the independent Climate Change Risk Assessment for Wales (CCRA3)¹³ recognised the potential for climate impacts to increase the risk of future landslides and subsidence linked to historic mining activities.

1.41. In addition to the potential impacts of climate change on disused tips, many of the 2,456 coal tips in Wales provide thriving ecosystems as well as supporting habitats and wildlife of considerable local, regional and national importance. A tip slide would have a negative impact on Wales’ biodiversity. Improved management of tips can help reduce the

¹¹ IPCC, Special Report, Global Warning of 1.5°, Chapter 3

¹² [Welsh Government makes climate emergency declaration | GOV.WALES](#)

¹³ Third UK Climate Change Risk Assessment Technical Report: Summary for Wales, p26

likelihood of slides and as such reduce the risk of impact on existing ecosystems, habitats and wildlife.

Scope of Bill

- 1.42. The Law Commission consultation '*Regulation Coal Tip Safety in Wales*' focused on proposals for a new management regime for disused coal tips. The consultation paper, however, did seek views on whether the regulatory framework which is adopted for coal tips should be capable of expansion to cover spoil from other types of mine found in Wales. While not a formal consultation question, the Commission reported a number of respondents who commented on the issue were in favour of extending the framework to include non-coal tips.¹⁴ One reason cited was the potential practical issues of two distinct regimes for disused spoil tips operating in Wales, one for coal tips under new legislation and the Tips Act 1969 for all non-coal tips¹⁵.
- 1.43. Extensive work has been undertaken to map the location of the 2,456 disused coal tips across Wales. Due to the lack of any centralised asset register, a consistent approach to categorising risks associated to a tip, as well as the complex ownership matrix of tips, this has been a lengthy process. There are substantially greater numbers of non-coal tips in Wales and the time required to map these tips could be a number of years.
- 1.44. We consider any delay to the introduction of a new management regime until evidence on numbers on non-coals is acquired would not be appropriate. However, we acknowledge stakeholders' views on any regime applying to all disused spoil tips. While the proposals in this consultation document focus on disused coal tips, we will undertake an analysis of the extent of non-coal tips and look to develop a framework, which can apply equally to both coal and non-coal tips, enabling the phasing in of other spoil tips into the new regime over time— this is presented further at Chapter 2.
- 1.45. While the 'Tips Act 1969' was introduced for active, closed and disused tips, active and closed tips, which are tips associated with an active mine, are now regulated by the Mines Regulation 2014 and the Quarries Regulations 1999. In Wales the number of active coal tips will be substantially lower than all active mining operations. Due to the low number of these tips, their expected duration and the existing legislative framework, we propose the new statutory framework focuses only on disused tips.

Acknowledgements

- 1.46. Our thanks go to our partners in the Coal Tip Safety Task Force for their support and contributions to the delivery of the coal tip safety programme. We are grateful to the contribution of the Coal Authority in helping to test our ideas for the new regulatory frameworks and in their advice and technical expertise.

¹⁴ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, para 12.38

¹⁵ *Ibid* para 12.39

Chapter 2: Scope and Supervisory Authority

We propose:

- The new regulatory framework to apply to all disused coal tips but with the potential to incorporate non-coal tips through gradual phasing in as evidence of numbers, locations and ownership is obtained;
- New regulatory framework will apply only to disused tips and not to active tips, which will remain regulated by the Quarries Regulations and Mines Regulations;
- Establishing a new supervisory authority;
- Supervisory authority to be an Executive Welsh Government Sponsored Body; and
- Supervisory authority to be a public body under the Well-being of Future Generations Act 2015.

Scope

- 2.1. We outlined at paragraph 1.42, we propose the scope of the Bill will apply to disused tips and will not extend to active or closed tips as defined in the Tips Act 1969. This is in line with the Law Commission's **recommendation 2** – '*We recommend that any new legislation should not apply to a tip to which the Quarries Regulations 1999 or the Mines Regulations 2014 apply*'¹⁶.
- 2.2. Part II of the Tips Act 1969 applies to all disused spoil tips and we also outlined at paragraph 1.44, our intention for the focus of the Bill to apply to disused coal tips but for the new regime framework to be able to extend to all spoil tips where this is appropriate.
- 2.3. Since the Tylorstown landslide, our partners the Coal Authority and local authorities have been working to identify disused coal tips across Wales. Due to the lack of an existing central database this has been a lengthy exercise, requiring careful assessment of boundaries, ownership and status.
- 2.4. There are nearly 2,500 disused coal tips but our initial estimate is that there are substantially more non-coal tips. We will be looking at appropriate means of collating information on non-coal tips, which could take a number of years. This will provide more detailed information on non-coal tips to enable a full assessment of the specific needs of non-coal tips before this information can be added to the proposed national register (see Chapter 3) in the future.
- 2.5. The Law Commission proposes the new regime applies to tips on the new asset register, requiring the supervisory body to undertake an initial inspection and risk assessment of tips on the register and provide for the preparation of a management plan¹⁷. Currently, the level of information required to add a tip to a register is not available for non-coal tips and due to the extensive number will require a significant piece of work to collate and quality assure the relevant data.

¹⁶ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, para 1.70

¹⁷ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, recommendation 17, para 4.63

2.6. We acknowledge comments from respondents to the Law Commission consultation on extending the regime to non-coal tips and will consider these views when a dataset of non-coal tips has been collated. This assessment will also include considering the specific hazards presented by non-coal tips and whether all of the components of the proposed regime in this White Paper are appropriate.

2.7. To prevent delay in introducing a new regime we propose the following:

- The proposals outlined in this White Paper will provide an overarching framework, which can be suitable for both disused coal and non-coal tips;
- Collate and quality assure data on location and ownership and gradually add specific types of non-coal tips to the proposed ‘National Asset Register’ (see Chapter 3);
- Assess the different hazards and requirements of non-coal tips;
- Within new primary legislation provide enabling powers to amend technical provisions provided in subordinate legislation, where evidence on non-coal tips indicates a specific requirement is needed for a particular type of non-coal tip. For example, if the proposed categorisations (see Chapter 5) require different hazard assessment for quarry or metal mine tips.

2.8. This approach enables non-coal tips to be phased into the regime, where this is appropriate over time, as and when the relevant information on location and ownership becomes available.

Consultation Question:

1. Do you agree with the proposed approach to phase in non-coal tips over time, where this is appropriate?

Supervisory Authority

2.9. The Law Commission recommends the introduction of a new supervisory authority responsible for managing coal tip safety in Wales¹⁸.

2.10. To ensure the consistent approach to be introduced by the new regime (as presented in this paper) and compliance with these new functions, oversight is required. In addition, there is also a need to ensure there is relevant expertise available to provide the necessary technical input into delivering many of the functions outlined in chapters 3 to 8.

2.11. The Welsh Government has considered the rationale behind the Law Commission’s recommendations and agrees a supervisory authority is required for Wales. To not do so would mean significant risk of the issues and inconsistencies identified in the current regime continuing. This would mean limited mitigation against the risk of landslides, which not only pose a risk to life but also places significant financial burdens on communities, local and central government. In this chapter, we outline our reasons for the need for a new body and set out our proposals for the establishment of this body.

¹⁸ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, paras 2.26, 2.65, Recommendations 3 and 4

Assessment

- 2.12. A small majority of respondents to the Law Commission consultation supported the creation of a new supervisory authority, with a number of respondents supporting the role be carried out by an existing body.
- 2.13. We recognise there are existing bodies, which may be considered appropriate to take on the role of a supervisory authority. In addition, to considering the rationale for the Law Commission's recommendation for a new body, we also undertook an analysis to determine whether the body should be an existing organisation or a newly created Welsh entity. If the latter, what should be the form of this body.
- 2.14. Under current legislation, there is no public body directly responsible for coal tip safety (local authorities with only permissive powers under the Tips Act 1969¹⁹) and no public body has any specific duties in relation to disused coal tips²⁰. Under the Quarries Regulations 1999 and the Mines Regulations 2014, the Health and Safety Executive (HSE) has responsibilities for active spoil tips. Our own assessment of capacity within bodies, which do carry out activities on disused coal tips has found that in general these are small teams.
- 2.15. In assessing the most appropriate mechanism for overseeing the new proposed management regime, the following factors were taken into account:
- Accountability – within the Welsh governance framework, reporting to Welsh Ministers and/or the Senedd, being subject to audits by the Welsh Audit Office and review by the Public Services Ombudsman for Wales in response to any administrative complaints;
 - Independence – having independent structures, being accountable within the Welsh governance framework, independently audited by a body such as the Auditor General for Wales;
 - Expertise – should provide expertise across multiple areas to deliver its functions, including regulatory knowledge;
 - Remit - no conflicts of interests in delivering its functions;
 - Value for Money - efficient and effective use of all available resources;
 - Confidence – from public to owners in its ability to deliver.
- 2.16. While there are existing bodies who could provide some of the functions outlined in this White Paper and the Law Commission's report, from our analysis no single existing body matched against the six criteria listed at paragraph 2.15. While some do have experience against some criteria, none met against all of the criteria.
- 2.17. As provided in the Law Commission report, as a reserved body, the Coal Authority does not sit within the Welsh governance framework and is not accountable to the Welsh Ministers or to the Senedd and would not be subject to review by the Wales Audit Office or the Welsh Public Services Ombudsman. This also applies to the Health and Safety Executive, who oversee active tips under the Quarries Regulations and Mines Regulations.

¹⁹ Law Commission Consultation Paper – *Regulating Coal Tip Safety in Wales*, 2021, para 4.60

²⁰ An example is provided in the Law Commission Report 2022 at para 2.58.

2.18. We considered the Law Commission's assessment:

*"We cannot see the benefit of seeking such an arrangement over the establishment of a self-standing authority in Wales, save in accessing specialist skills and, possibly, saving costs. If access to skills were required, a simpler approach would be for the new authority to contract with the Coal Authority to provide services to it. We are also doubtful as to the likelihood of cost savings, as the Coal Authority would need to form a separate division to undertake the work."*²¹

2.19. While NRW does sit within this governance framework, the focus for the body should be its role as the environmental protector and meeting its general duty of sustainable management of natural resources²². There could also be perceived or potential conflicts as it manages the largest coal tip estate on behalf of the Welsh Ministers. We acknowledge there are other policy areas where these types of conflicts may exist but believe, in light of the potential to extend to non-coal tips, it would be more appropriate not to create a new regime with potential in-built conflicts.

2.20. As recommended by the Law Commission, to provide the necessary independence, accountability, expertise, remit, and confidence we agree a supervisory authority for Wales is required. The main benefits for establishing a single supervisory body are as follows:

- Specialised technical skills, which can offer added benefit to local authorities in the management of disused coal tips;
- Dedicated remit to ensure the safety of disused tip;
- Providing independent oversight of the regime to ensure consistency in approach;
- Provides independent oversight and monitoring to compliance with the new regime;
- Economies of scale in procurement of services, gathering research and evidence and developing and sharing best practice and guidance.

2.21. To effectively deliver the new management regime, particularly with the current deficiencies in expertise, it will be important for the new body to establish close working relationships with other bodies, which have experience of inspecting and maintaining disused coal tips, including entering into service contracts. This will help to build cross-disciplinary relationships and share best practice and guidance.

Form of the new body

2.22. The Law Commission has recommended the creation of a new central public body²³, particularly as a central body can provide streamlined processes and consistency.

2.23. We acknowledge responses from respondents to the Law Commission consultation about the different forms a new supervisory authority could take and have considered in our analysis²⁴. We considered various types of public body from an executive agency, a non-ministerial department to a Welsh Government sponsored body either advisory or executive. We determined an internal department within the Welsh Government would not

²¹ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, para 2.60

²² Art 4, Natural Resources Body for Wales (Establishment) Order 2012 as amended by s5 Environment (Wales) Act 2016

²³ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, para 2.74, Recommendation 5

²⁴ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, Chapter 2

provide the necessary independence required, as the largest coal tip estate, is managed by NRW on behalf of the Welsh Government woodland estate.

- 2.24. In considering what form of public body would be more appropriate, we considered the following:
- 1) Does the service or function need to be delivered by government?
 - 2) Level of expertise required; and
 - 3) Level of independence.
- 2.25. In response to the first of these factors, the answer was yes against all the types of public body provided in paragraph 2.23. The recommendations presented by the Law Commission and the proposals contained in this White Paper set out a wide range of functions for the proposed new body from regulatory, operational, administrative and technical.
- 2.26. In response to factor 2, the body will require substantial expertise across a number of different technical areas, including ground engineering, geo-engineering, civil engineering, soil mechanics, hydrology, hydrogeology, ecology and regulatory.
- 2.27. In response to factor 3, as the Welsh Government owns the largest coal tip estate on the Welsh Government wood land, as managed by NRW estate, there could be a perception of a lack of independence if the body was not arms-length. In addition, an executive agency generally has to be financially viable and as such we did not consider this to be a viable option as it could create actual or perceived conflict for a new body, which sole focus should be on ensuring tips are safe.
- 2.28. To ensure the appropriate independence and focus on securing the safety of tips, we propose the body should be arms-length from government and established as an Executive Welsh Government sponsored body.

Consultation Question:

2. Do you agree the new supervisory body should be a new Executive Welsh Government Sponsored Body?

General purpose/duty of the body

- 2.29. The Law Commission recommends “*that the supervisory authority should be subject to a general duty to perform its functions so as to ensure the safety of coal tips, without limitation to specified risks*”²⁵.
- 2.30. We have considered the rationale behind the recommendation and find value in the proposal that this should not be a direct duty on the supervisory authority but that the duty can incentivise and inform the performance of its functions. In particular the statement “A

²⁵ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, para 2.98, Recommendation 6

public responsibility for ensuring safety provides the authority with a clear rationale for intervention, which can be backed up with a framework for its enforcement²⁶".

General Oversight

2.31. It shall be the responsibility of the supervisory authority to ensure consistency of approach in relation to inspections, appraisals, categorisation and development of management plans.

Well-Being of Future Generations

2.32. As a new Welsh public body, we propose the new supervisory authority should be added to the definition of 'public body' under section 6 of the Well-being of Future Generations Act 2015 ('2015 Act'). This would require the body to:

- Comply with the sustainable development duty at section 3 of the 2015 Act;
- Act in accordance with the sustainable development principle, including applying the five-ways of working (section 5 of the 2015 Act);
- Publish well-being objectives (section 7 of the 2015 Act);
- Publish an annual report on its progress of meeting its well-being objectives (section 13 of the 2015 Act).

Reporting Requirements

2.33. To ensure transparency and accountability of the new body to the Welsh Ministers, the new body should produce an annual report on its activities for consideration by the Welsh Ministers and laid before the Senedd. We propose the report should include information on:

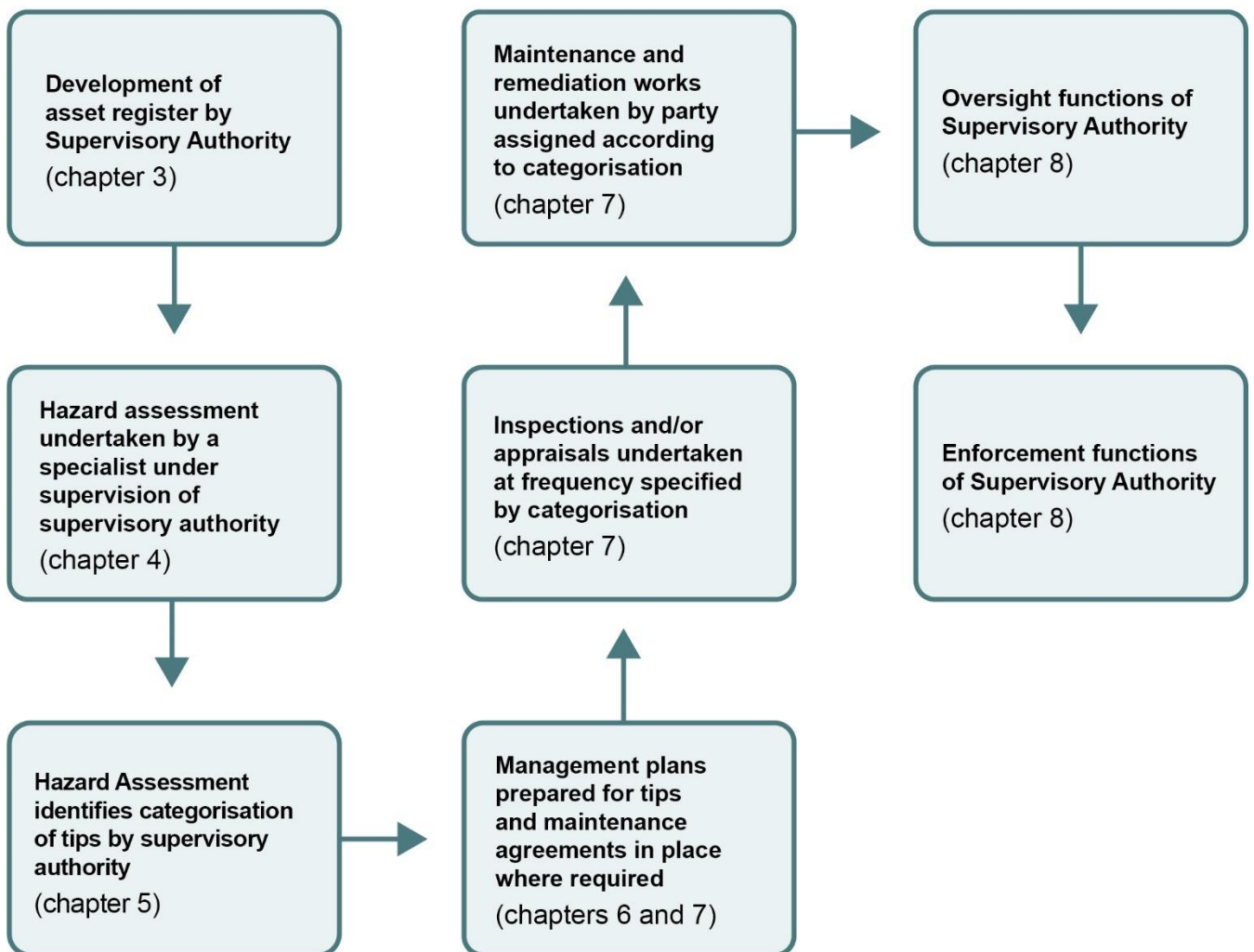
- status of disused tips and highlighting any key areas of concern;
- any compliance issues;
- progress on maintenance works;
- where it considers the minimum content of any document provided for in this White Paper may require to be amended; and
- tips where the supervisory authority considers there are potential reclamation opportunities.

²⁶ Ibid, para 2.92

Overarching Structure

2.34. The proposed regime for coal tip safety is set out in chapters 3 to 8 of this White Paper. We set out below diagram 1, which illustrates the key proposed components and the relevant chapter in which the details are presented.

Overarching structure of proposed coal tip safety regime



Chapter 3: Asset Register and Register of Professionals

We propose the development of a national asset register of all disused coal tips for which the Welsh Ministers will establish minimum content in subordinate legislation.

National Asset Register

- 3.1. The Law Commission has recommended ‘...*that a central tip register should be compiled and maintained by the supervisory authority*’²⁷.
- 3.2. The Welsh Government agrees that a central register is required. We believe a centralised national asset register comprised of uniform, coherent and reliable and up to date data is critical for the introduction of a consistent, comprehensive, and effective management regime for disused coal tips.
- 3.3. There are a number of benefits to be obtained from a centralised register including:
- Improving risk-management through the collation of consistent information on any risks/hazards associated with a tip and the management requirements for each tip;
 - Improved decision-making with information on coal tip locations, status, and proximity to critical infrastructure and/or the environment such as designated sites; and
 - Improving oversight to ensure consistent approach is applied and inspections and maintenance works are being undertaken; and
 - Providing transparency.
- 3.4. The asset register will be a key component of the new management regime for coal tip safety, providing up to date information on disused tips including inspections and maintenance and a tool to enable the new supervisory authority to monitor and oversee compliance with the regime.
- 3.5. In this Chapter, we set out our further proposals for an asset register, particularly in relation to its development and operation. As the Law Commission has consulted on the need for a centralised asset register with 93% of respondents agreeing for the need²⁸, our focus in this chapter is, therefore, on the content of the register, reviewing and updating the register, access, and rights of appeal. The new asset register, we propose should build upon the work already undertaken by the Coal Tip Safety Task Force on collating and quality assuring coal tip data.

²⁷ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, para 3.23, Recommendation 7

²⁸ Ibid, para 3.10

Background - Data Collection Since 2020

- 3.6. Since 2020, the Coal Authority with support from local authorities have utilised various sources to collect information on the location of disused coal tips, these sources include: reviewing ordnance survey maps, historical records, aerial photographs and LIDAR²⁹ data.
- 3.7. When the project began it was believed there were approximately 1,200 disused coal tips in Wales. The work undertaken by the Coal Authority and local authorities has now identified 2,456³⁰.
- 3.8. The Coal Authority applied its interim categorisation (see paragraph 5.2) to each of the 2,456 tips to determine those, which would require the more frequent inspections. Since 2020, the Welsh Government has commissioned the Coal Authority to undertake three rounds of inspections of higher rated tips. A number of local authorities have also supported these inspection rounds. The latest round of inspections was completed in February 2022 and until a new statutory regime is in place, the Welsh Government will continue to support the inspection of the higher rated tips.
- 3.9. Ownership information was acquired from Her Majesty's Land Registry, which revealed the extent of the complexity of the ownership landscape. While the majority of tips fall into private ownership (circa 55% of tip area in freehold ownership)³¹, many tips have multiple owners including both private and public organisations, there are also different types of interest in the land, including freehold, leasehold, possessory and profit a prendre³². Some tips have fragmented ownership, with sometimes less than 1% owned by a number of single parties.
- 3.10. In developing our proposals provided in this White Paper, we have considered the implications of the ownership landscape of a tip and developed our proposals in a way, which does not place onerous duties on a party with a negligible interest in a tip.

Other Spoil Tips

- 3.11. As outlined in paragraph 2.6 we intend in the future to look to extending the scope of the proposed new regime to all disused spoil tips, where it is appropriate. To assist in delivering this aim, we will seek to obtain a baseline of the extent of non-coal tips across Wales and will work with partners to develop an approach, which can collate the relevant information (ownership, status) on these tips in a timely manner.
- 3.12. Once this data has been collated and quality assured, non-coal tips can gradually be added to the asset register, where appropriate, thereby ensuring consistency with the format and operation of the register.

²⁹ [Light Detection and Ranging](#) (LiDAR) is an airborne mapping technique, which uses a laser to measure the distance between the aircraft and the ground. Up to 100,000 measurements per second are made of the ground, allowing highly detailed surface and terrain models to be generated at different spatial resolutions.'

³⁰ The figures are live and subject to amendment as the quality assurance process continues.

³¹ This has been updated since previous estimates of 70% as a result of the quality assurance process. 40% of tip area in public ownership and 5% is unregistered land.

³² A profit a prendre in gross is a right not attached to the ownership of any particular piece of land. The owner of the profit may not own any land at all and may dispose of the profit independently from any land they do own.

Definition of Coal Tip

- 3.13. The Law Commission consulted on whether the definition of a disused coal tip should refer to waste from coal mining and whether it should include express reference to overburden dumps, backfill, spoil heaps, stockpiles and lagoons. No recommendation for a definition was presented in the Commission's report.
- 3.14. We find helpful the Law Commission's suggestion for the definition of a disused coal tip to include elements such as '*...prospecting, extraction, treatment and storage of coal and associated minerals and as including, but not limited to, overburden dumps, backfill, spoil heaps, stock piles and lagoons*'.³³
- 3.15. We consider it important to have a clear definition to provide clarity for the regime. However, as the proposal is to gradually extend the regime to other spoil tips, we also need to determine whether it is necessary to have a definition of a disused spoil tip as well.
- 3.16. In the Law Commission report, we find value in the suggestion of continuity between the definition of a tip in the new Welsh legislation for disused tips and the expanded definition in the Mines Regulations 2014 for active tips.
- 3.17. The definition in the 2014 Regulations being:

"tip means an accumulation or deposit of any refuse from a mine (whether in a solid or liquid state or in solution or suspension) other than an accumulation or deposit situated underground, and includes, but is not limited to—

- (a) overburden dumps, backfill, spoil heaps, stock piles and lagoons, and*
- (b) any wall or other structure that retains or confines a tip*³⁴

- 3.18. We will consider the Law Commission's report and responses from stakeholders before making any final determinations on whether separate definitions will be required for a disused coal tip and disused spoil tip or whether one definition is required such as a disused spoil tip and the regime applies only when a tip is added to the asset register, in the beginning this will apply solely to disused coal tips.

'De Minimis' Tip definition

- 3.19. In collecting data on coal tips, we have also identified a number of tips, which are very small and we welcome stakeholder views on whether there is a value in defining a '**de minimis**' tip.
- 3.20. A de minimis tip definition could identify tip features, which pose a suitably low or insignificant risk from multi-hazards as outlined in Chapter 4 and key elements of the regime could be applied proportionately or exempted in relation to these small tips, depending on whether they posed no risk to communities, critical infrastructure or the environment (see paragraph 3.24).

³³ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, para 7.37

³⁴ Regulation 2(1), Mines Regulations 2014 SI 2014/3248

3.21. The Mines and Quarries (Tips) Regulations 1971 (which are no longer in force) applied an approach, which defined ‘classified tips’ as:

“the tip consists of refuse accumulated or deposited wholly or mainly in a solid state and not in solution or suspension and—

- (i) the superficial area of the land covered by the refuse exceeds 10,000 square metres; or*
- (ii) the height of the tip exceeds 15 metres; or*
- (iii) the average gradient of the land covered by the refuse exceeds 1 in 12;”³⁵*

3.22. We believe in addition to the three attributes as provided in the 1971 Regulations – a) surface area; b) height; c) tip gradients – a fourth attribute of gradient of natural strata (basal plane) may be beneficial to include.

3.23. We will be commissioning research on this area but welcome stakeholders’ views on these attributes.

3.24. The effect of a ‘de minimis’ categorisation would be for owners of these tips to be excluded from the following proposed duties as set out in this White Paper:

- Inspections;
- Maintenance; and
- Preparation of a management plan.

Consultation Question:

3. Do you agree a ‘de minimis’ tip definition should be included in the Bill? If you agree – what attributes should be included?

4. Do you agree an owner of a ‘de minimis tip’ should be excluded from the duties outlined? If not please state your reasons.

Minimum content of the register

3.25. We have considered the views of stakeholders reflected in the Law Commission report and agree a need for consistent and coherent data is required to ensure the regime does not become fragmented³⁶. We consider this can be accomplished by the Welsh Ministers setting down in subordinate legislation the minimum content of the asset register.

3.26. While views were present in the report on some potential minimum content, for the purposes of being able to provide an enabling power in the proposed Bill, we welcome consultation with stakeholders on the setting of the initial minimum content. To aid this endeavour, we propose the following as the minimum content of the asset register:

³⁵ The Mines and Quarries (Tips) Regulations 1971, reg 2

³⁶ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, para 3.19

- Unique reference number;
- Name of tip;
- Location – (include details required);
- Categorisation (see Chapter 3);
- Dates of inspections/appraisals;
- Assessment report;
- Inspection/Appraisal reports (see Chapter 7);
- Management plan (see Chapter 7); and
- Maintenance agreements (see Chapter 7).

3.27. The Law Commission has held that it is not necessary to hold the particulars of owners on the register³⁷ on the basis this would duplicate information held by Her Majesty's Land Registry. We will consider this rationale in light of our view the supervisory authority will need to utilise the register as an effective administrative tool to monitor the regime. We do not see there would be any contradiction with the register acting as both a public facing portal (through provision of a map) and an administrative tool for the supervisory authority. This would be obtained through key delineation of what data was publicly available and what was restricted.

3.28. To enable flexibility into the regime and the ability to respond to any changing circumstances, including amending in response to further requirements for non-coal tips, we propose the power to set minimum content is also a power to review and amend the contents of the register.

3.29. In line with Welsh Government policy, the development of the statutory legislation will be subject to public consultation, but we also propose the Welsh Ministers consult with the new supervisory authority in any future amendments to the minimum content, but the supervisory authority can also advise the Welsh Ministers, if in its view the minimum content needs to be revised.

Consultation Question:

5. Do you agree with the minimum content set out in this chapter? If not, please state what you consider would be appropriate minimum content?

Tip Names

3.30. A number of disused coal tips have multiple names in both English and Welsh and sometimes the Welsh name is not a translation of an English equivalent. For example, 'Tylorstown' is also referred to as 'Llanwonno'. Multiple names for a single tip, for example 'Tylorstown Eastern' tip is commonly known as 'Old Smokey', and this can create confusion and a lack of clarity within a proposed regime and could cause delays in response time until the correct tip is identified. In addition, some tips have the same name but are delineated by reference to Tip A or Tip B. Reference to 'A' and 'B' tip could be confused with an interim categorisation rather than an identifier.

³⁷ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, para 3.36

- 3.31. To remove any uncertainty about the specific tip in question, we propose the use of a unique reference number to distinguish each tip. However, the use of a unique reference number will not address any potential identification issues where a member of the public wishes to report an incident on a tip and uses a commonly used name, which is one of multiple names.
- 3.32. Tip names may have an important cultural value and significance for communities, and we do not propose amending the names at this point in time, but we will engage with communities to consider an appropriate approach to ensuring there is consistency in tip names, which respects their cultural and social significance.

Historical Reports

- 3.33. Respondents to the Law Commission consultation as provided in the Commission's report made reference to numerous historical records³⁸, which may provide valuable information on the unique characteristics of a tip, providing information on drainage and the design standards, if any, adopted in their construction. We have discussed with our partners, the availability of historical reports within their organisations and will be working with partners on the best approach to collect and collate this information.
- 3.34. We believe a centralised repository for historic and archive data on disused coal tips would be invaluable to the new management regime, access to this data can provide details on:
- formation and construction;
 - drainage infrastructure;
 - design and construction;
 - maintenance history and condition;
 - history of stability or features & conditions associated with significant hazards (e.g., combustion); and
 - any historic remedial or capital works.
- 3.35. The collation of this information will be a substantial task and at present, we cannot estimate the volume of information available, or what within the information will be of specific value. The type of information available may vary between coal tips and other spoil tips. This will require time to collate and assess, as we outlined at paragraph 3.33 we intend to work with partner organisations to scope out this task.
- 3.36. It will also be important to quality assure the data as due to the passage of time, some of the information may no longer be accurate or valid as it has been superseded by other events or activities – for example more recent maintenance or remediation works.
- 3.37. In light of this, we propose historical records, where available, up to date and relevant, would be valuable to include in the asset register but do not propose including this within the mandatory minimum content but as additional information, which can be stored on the asset register where available and is pragmatic and proportionate to include.

³⁸ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, Chapter 3

Entry onto the Register

- 3.38. The initial register will draw upon the data collation undertaken by the Coal Authority, working on behalf of the Welsh Government. The sources used by the Coal Authority are outlined at paragraph 1.23. This list of disused coal tips will be housed on DataMapWales, when quality assurance has been completed³⁹.
- 3.39. We propose the initial register will include:
- All known disused coal tips at the time of the latest update to DataMapWales; and
 - Minimum content as prescribed by the Welsh Ministers in subordinate legislation – drawing on the most recent inspections and inspection reports available prior to the Bill coming into force and maintenance works which have either commenced or concluded from 2020.
- 3.40. The Law Commission recommends that the ‘...*supervisory authority should be under a duty to include on the register any tip of which it is aware*⁴⁰. We agree the body should be required to update the register to ensure it is comprehensive and up to date.
- 3.41. However, we have identified three scenarios where additional tips may be required to be added to the register:
1. Closure of an active mine resulting in active/closed tip being re-classified as a disused tip;
 2. Existing disused tips not included in the initial data set of disused coal tips but subsequently identified; and
 3. Disused non-coal spoil tips, which may require to be added to the register.
- 3.42. We, therefore, believe the Law Commission’s recommendation applies only to Scenarios 1 and 2. In relation to Scenario 1, while there are low numbers of active coal tips in Wales, further work is required to determine the number of active aggregate tips. While it was proposed by a respondent to the Law Commission consultation, that active tips could be included in the initial register marked as active tips and excluded from the regime until they are re-classified as disused tips. We do not propose this at this time until we have further clarification on the potential number of active aggregate tips and consider the potential implications of active tips being captured in a disused tip register.
- 3.43. To assist the supervisory authority in its duty to ensure the register is up to date, we propose the supervisory authority has a power to utilise remote sensing technology, for example drones, to monitor whether there are any unregistered tips on land. We propose a power of access to land to determine whether any identified unregistered sites are a disused tip. In this scenario, the supervisory authority will require to provide due notice to the person with an interest in the land.
- 3.44. In relation to Scenario 3, as we outlined at paragraphs 3.11-12, this will require a dedicated work programme to collate and analyse all data on non-coal tips. We propose

³⁹ The Welsh Government has committed to publish this information within the first half of 2022

⁴⁰ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, para 3.49, Recommendation 9

the supervisory authority will be under a duty to collate this information and add to the register as and when the data is available.

Consultation Question:

6. Do you agree with the approach to adding new tips to the register?

Updating the Register

- 3.45. It is vital the register is kept up to date. This will assist in ensuring the data on the register is current, particularly in relation to the status of the tip, which will be provided through inspections/appraisals and any works (maintenance or remediation) undertaken on the tips. This is also important to support the compliance obligations of the new supervisory authority.
- 3.46. We set out below where we consider there need to be a requirement to update the register:
- **Inspection Reports** - the party responsible for undertaking an inspection (see Chapter 7) should be under a duty to upload the most recent report to the register within 10 working days of the inspection
 - **Appraisal Reports** – the party responsible for undertaking an appraisal (see Chapter 7) should be under a duty to upload the most recent report to the register within working 20 days of the appraisal;
 - **Maintenance/remediation Works** – the party responsible for ensuring works are undertaken on a tip should be under a duty to update the register on the progress status of the works;
 - **Maintenance Agreements** – where a maintenance agreement is in place, any amendments to the agreement between the parties should be updated within a period of 30 working days;
 - **Management Plan** – where any amendments are made to a management plan, the new plan should be updated onto the register within a period of 30 working days.
- 3.47. To ensure compliance with these duties, the supervisory authority should be under a duty to monitor the asset register and follow up with parties where there has been any breach of any obligation to provide the latest information onto the register.
- 3.48. Where the duty to update falls onto the supervisory authority, for example where it has led on changes to a management plan or maintenance agreement, it will be required to provide details of its compliance in its annual report.

Consultation Question:

7. Do you agree with the proposed approach to update the asset register? If not, please provide details on how you consider the asset register should be updated and by whom.

Access to Asset Register

- 3.49. It has always been the intention to make information on tip location available publicly. Once the data has been quality assured, we will look to make the location of disused coal tips available.
- 3.50. At time of publication, both local authorities and local resilience forums⁴¹ have access to tip locations and their interim categorisation on DataMapWales to enable the preparation of any emergency plans where appropriate. DataMapWales serves as a source for public sector data in Wales, providing a shared data platform to members of the public and public authorities.
- 3.51. Access to the asset register would enable the regime to be transparent and enable accountability. However, there will also be data captured on the register which will be sensitive, for example enforcement orders and potentially some commercially sensitive information (such as leases) and also information on private citizens. The latter is particularly sensitive where there are multiple private citizens with less than 1% ownership of a tip.
- 3.52. The development of the asset register must be in compliance with Data Protection Act 2018 and the UK General Data Protection Regulations⁴². The proposal will be to provide the supervisory authority with a power to develop the asset register and lawful authority to collect, where relevant, associated personal data where it relates to a private citizen as whole or part owner of a tip.
- 3.53. To respect both the need for public access and securing sensitive information, we propose layered access to the register, which includes both publicly accessible data and excluded data. The general public will have access to the publicly accessible layer, the supervisory authority access to all layers, local authorities to tip information within their administration and private owners to their own tip information.
- 3.54. We propose the following is publicly available:
- Tip Name/identifier;
 - Location;
 - Categorisation;
 - Ownership status (public or private); and
 - Inspection timeline.
- 3.55. We propose the Welsh Ministers may be subordinate legislation prescribe that certain data is excluded data, where it is not in the public interest for particular information concerning coal tips to be publicly available.
- 3.56. We propose the following is classed as excluded data and not publicly available:

⁴¹ The data is available to Category 1 and Category 2 Responders as defined under the Civil Contingencies Act

⁴² As retained in UK law from the EU General Data Protection Regulation

- Live enforcement actions;
- Information where its inclusion would be contrary to the interests of national security; and
- Contractual information.

3.57. The Law Commission consultation included responses from some stakeholders on the potential impact of publishing the data on house prices and insurance liabilities⁴³. We have undertaken an assessment of these impacts, which will contribute to the Regulatory Impact Assessment for the Bill. A summary of the assessment is provided at Annex 4. This assessment has included discussions with the Association of British Insurers and our partners in the Coal Authority and local authorities.

Consultation Question

8. Do you agree with the proposal for the type of information to be made publicly available and which will be classed as excluded?

Right of Appeal

3.58. The Law Commission has recommended a right of appeal in the limited circumstance for an owner/occupier, on the ground that there is no tip situated on the land⁴⁴. This is further qualified the exercise of the right of appeal should not be permitted to delay urgent work.

3.59. We see merit in the Law Commission’s rationale:
“Any wider right of appeal against the contents of the register could engender disputes over technical detail. We agree that appeal rights should be time limited and should not be permitted to delay urgent work.”⁴⁵

3.60. As such we do not propose to offer any further proposals on this right of appeal in this White Paper.

Register of Professionals

3.61. Discussions with our partners have highlighted the lack of specialist coal tip safety skills, with many experienced inspectors having now retired. The shortage of experienced professionals may worsen. We have taken this into consideration when developing our proposals. For the proposed new regime to be effective, relevant skills will be required to ensure the proposals set out in this White Paper can be delivered.

3.62. The Law Commission’s report considers the role of a register of professions, which we consider to be a valuable proposal⁴⁶, to provide:

⁴³ Law Commission Consultation, *Regulating Coal Tip Safety in Wales*, 2021, para 7.41

⁴⁴ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, para 3.65, Recommendation 10

⁴⁵ Ibid, para 3.63

⁴⁶ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, para 10.37, Recommendation 34

- A source of professions competent to undertake tip safety work – not limited to one profession but across a wider spectrum of skills and knowledge required for example – ground engineers, geo-engineers, civil engineers, soil mechanics, hydrologists, hydrogeologists, ecologists;
- a valuable opportunity to provide training and development and up-skilling;
- an avenue for graduates into tip safety opportunities

3.63. We do not propose consulting on this matter in this White Paper as it has been covered in the Law Commission consultation and report. The supervisory authority would be responsible for overseeing the Register of Professionals.

3.64. At present, we are in discussions with Environment Platform Wales⁴⁷ on the development of an Expert Panel to reflect a broad spectrum of specialist skills from academia and industry. However, to ensure the widest spectrum of skills and resources, we will follow up on the Law Commission's recommendation about the establishment of a register.

⁴⁷ A collaboration of universities and researchers across Wales aims to increase the quality and relevance of evidence available for environmental management and policy making in Wales

Chapter 4: Hazard Assessment

We propose the introduction of a hazard assessment, which will capture and register all significant hazards identified at a site. They will:

- Be undertaken on all disused coal tips;
- Arranged by the supervisory authority and undertaken by an appropriately competent person;
- Assist in the categorisation of disused coal tips; and
- Assist in the development of management plans.

4.1. In this chapter, we set out our proposals for a hazard assessment of tips. This assessment (is similar to that referred to in the Law Commission report as a ‘risk assessment’⁴⁸) will be the foundation of the tip categorisation process. The assessment will capture and register all significant hazards identified at a site.

4.2. The assessment will provide the key information for the development of a management plan for a tip.

4.3. We consider an accurate assessment of hazard potential should be the foundation of the proposed regime and will be a critical factor in its successful delivery. In developing the proposals, we have given consideration to:

- The need for the approach to be adaptable and acknowledge the diversity across the tips estate - tips are varied by nature, whether by material composition, depositional history or legacy engineering intervention and controls;
- Existing weaknesses in record keeping for tip locations – the disused coal tips estate alone comprises nearly 2,500 locations. Each location has a varied, and often complex, site history from inception, through operation to closure and as a disused tip. There is insufficient consistency or accuracy in the level of information available across the estate to reliably undertake quantitative, or any robust analytical analysis at each site;
- Proportionality of the regime to address the large quantity of sites across Wales, all requiring assessment. The proposed regime needs to be able to be sufficiently proportionate to be effectively delivered; and
- Complexity of the approach – the proposed approach should not be overly complex, which results in reduced deliverability.

4.4. The Law Commission report recommends “...*the supervisory authority should be under a duty to arrange for the compilation of a risk assessment and management plan for any tip included on the register*”⁴⁹. Our proposal of a hazard assessment draws on the Law Commission analysis of consultation responses and its recommendation. While such an assessment is vital we have considered the potential timescale required for a hazard assessment of the nearly 2,500 disused coal tips, which could take a substantial time to complete, and particularly so if the regime is extended to non-coal tips.

⁴⁸ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, Chapter 4

⁴⁹ Ibid, para 4.63, Recommendation 17

- 4.5. We, therefore, believe the delivery of the duty needs to be prioritised with the initial focus being on higher rated tips as provided by the existing interim categories (see paragraph 5.2).
- 4.6. We propose, an assessment for the higher rated coal tips (those currently categorised as C and D) should be undertaken within 12 months of the tip being added onto the asset register. Lower rated tips (those currently categorised as B and A) should be assessed within 36 months of the tip being added to the asset register.

Minimum content of a hazard assessment

- 4.7. There needs to be consistency in the approach to undertaking a hazard assessment, ensuring tips are given the appropriate level of assessment. This is important to ensure fairness within the regime for all owners of disused tips.
- 4.8. To provide consistency, we welcome the Law Commission's recommendation for the Welsh Ministers to prescribe minimum content of assessment/s in subordinate legislation⁵⁰. This would enable additional matters to be considered where relevant as required by the specific characteristics of a tip. For the purposes of developing an enabling power in the Bill for the Welsh Ministers to issue subordinate legislation, we set out our proposals for the minimum content for stakeholders' views at paragraph 4.13.
- 4.9. The statutory minimum content should be supported by guidance developed by the supervisory authority.
- 4.10. We propose a hazard assessment should be undertaken by a specialist, someone who would be categorised as a lead technical professional meeting defined minimum competency levels, which will be set out by the Welsh Ministers in subordinate legislation after consultation with industry experts. We propose the minimum competency of a specialist should be ten years of relevant experience, or seven years of relevant experience as well as Chartered Membership with a relevant institution. In light of the number of disused coal tips and the potential to extend to non-coal tips and therefore increased numbers, we believe the supervisory authority should have a duty to arrange hazard assessments, thereby enabling it to delegate to another party or agree with an owner (e.g. a local authority) with the relevant experience to undertake the assessment.
- 4.11. In relation to the hazard assessment report, we propose this document is only reviewed where significant changes/actions are recorded in an appraisal (see chapter 7).

Hazard Assessment Form

- 4.12. We propose the development of a 'Hazard Assessment Form', which will feature each significant hazard identified at a site with the potential to cause injury or harm to property, infrastructure or the environment, as detailed by the 'Receptor Level' (see paragraph 4.20).

⁵⁰ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, para 4.64, Recommendation 18

4.13. To provide consistency of approach, we propose the assessment form includes the following minimum content of information for each hazard captured:

- Hazard Potential – descriptor;
- Receptor Level;
- Likelihood;
- Consequences – descriptor for primary, secondary and tertiary;
- Hazard Level – Calculated by multiplying Receptor Level by Likelihood;
- Management Recommendations;
- Date Logged; and
- Date Reviewed.

4.14. It is proposed that the hazard level will be based on a scenario driven qualitative analysis following a standard matrices approach. This approach will be applied to each significant hazard identified at a tip to assess potential and will not be limited to ground movement.

4.15. It is recognised that at a smaller number of sites, where information is available and where the requirement is justified by the risk potential, more detailed analytical techniques can be used to further support this approach.

4.16. In order to ensure consistency, accuracy, transparency and repeatability, it is proposed that the regime will include further measures to ensure quality and control (e.g. professional competency requirements).

4.17. Below we outline the four hazard types and five key receptor groups. The **four hazard types**, which reflect the Law Commission’s recommendations 19 and 20⁵¹ are:

- Ground Movement / Instability
- Flooding
- Pollution
- Combustion

4.18. It is proposed that **receptors** are classified under 5 key groups (1. people/communities, 2. property, 3. infrastructure, 4, ecosystems/environment, and 5. culturally sensitive/significant sites) with 4 Receptor Levels (1. low. 2. medium-low, 3. medium-high, 4. high), as detailed below and in Table 4. We propose risk to life is always scored as a ‘4’ – high priority, irrespective of receptor group. Tiers 1 to 3 are to be considered where the consequence has the potential to cause injury or impact condition, safe operational performance or serviceability.

⁵¹ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, paragraphs 4.77 and 4.98

Receptor Groups

1. People/Communities
2. Property
3. Infrastructure
4. Ecosystems/Environment
5. Culturally Sensitive/Significant Sites

Receptor Levels

1. Low Priority
2. Medium-Low Priority
3. Medium-High Priority
4. High Priority

4.19. Table 4 outlines receptor groups and the factors for consideration in determining the appropriate Receptor Level. This approach helps to provide an individual approach to the hazard level for each tip, enabling more targeted management of the site and potentially support for the development of any ‘emergency plan’ where this may be required.

4.20. The hazard level is obtained by multiplying the likelihood of the hazard against the receptor level as outlined in Table 2. Table 3 provides a proposed hazard level key.

Table 2: Hazard Level Matrices

		Likelihood				
		Highly Probable	Probable	Possible	Unlikely	Rare
		5	4	3	2	1
Receptor Level	4	20	16	12	8	4
	3	15	12	9	6	3
	2	10	8	6	4	2
	1	5	4	3	2	1

Table 3: Hazard Level Key

Hazard Level	
Severe	15–20
Major	7–14
Moderate	4–6
Minor	1–3

Consultation Question

9. Do you agree with the proposed approach to measure hazard level? If not please specify your reasons.

Table 4: Receptor Group and Receptor Levels

Receptor Level	4: High RISK TO LIFE	3: Medium–High	2: Medium–Low	1: Low
People/Communities	Multiple fatalities, fatality Impacts delivery of primary, safety critical services.	Life changing injury. Impacts delivery of non-life dependent community services	Non-life changing injury.	N/A.
Property		Buildings with high occupancy rates: Dwellings, schools, hospitals, community buildings, places of work.	Buildings with medium occupancy rates: Distribution centres, garden centres, workshops, leisure centres. Play and recreational fields. Allotments. High value agricultural land.	Buildings with low occupancy rates: Uninhabited buildings (e.g. barns, stables, storage facilities). Forest, farmland, derelict property. Low value agricultural land.
Infrastructure		Critical Infrastructure: Trunk Roads, A-roads, Passenger Rail, Trunk Potable Water, Power Utilities, Registered Dams & Reservoirs.	All other highway authority routes, including cycle ways and footpaths, and essential private highway assets (e.g. sole access to rural property). Minor water utilities and telecommunications. Rail non-passenger.	Private minor infrastructure (e.g. forestry access and farm tracks).
Ecosystems/ Environment		Designated main river systems and waterbodies. Source Protection Zones and catchment impact. SAC, SSSI, SPA, Ramsar & NNR.	Ordinary watercourse. Minor waterbodies. Locally Protected Sites (Nature Reserves, Wildlife Sites, RIGS).	Minor drains, ditches, culverts that are not associated with tip safety critical infrastructure.
Culturally Sensitive/ Significant Sites		World Heritage Sites, Listed Buildings, Scheduled monuments.	Registered Parks and Gardens, Conservation areas.	Undesignated archaeological monuments.

Chapter 5: Categorisations

We propose the introduction of a new set of categorises for disused tips, which are based on a hazard assessment and potential impact on receptors.

5.1. In 2020, as part of the collation of coal tips data, an interim categorisation approach was developed by the Coal Authority, on behalf of the Task Force, to ensure a common assessment scenario was used in the identification of disused tips. The criteria informing categorisation was adopted in part from existing practices with local authority partners. Box 1 provides an overview of these interim categories. The definitions are slightly different to those previously included in the Law Commission consultation, which is due to feedback from the categorisation process, which was progressing post the publication of the consultation paper.

5.2. These categories have been used to enable inspections of the higher rated tips (C & D) by the Coal Authority, as commissioned by the Welsh Government, with support from a number of local authorities.

Box 1: Coal Authority Interim Categories

Category	Criteria
D	Potential to cause risk to life or property known history of movement/signs of instability
C	Potential to cause risk to life or property no known history of movement/instability signs
B	Unlikely to cause risk to life / property
A	Minor tip or tip has been reclaimed / restored
R	Historic tip location – now removed or levelled and often built over

5.3. The interim categorisation approach provided the necessary consistency in the preliminary phases of the tips data capture process. It is, however, recognised that this approach is not suitable for a robust, future-proof categorisation systems that is to align with the policy ambitions of Welsh Government and meets the requirements identified by stakeholders.

5.4. Throughout the process of quality assurance of the data, a number of issues have been identified in the interim categorisation approach including:

- Scope – the approach needs to be suitable for all hazards associated with tips, not solely those related to slope stability and ground movement;

- The categorisations applied do not clearly relate to specific features or conditions and any associated hazards or risks;
- Clarity in definitions – a category needs a clear definition and remove any possible confusions and/or loopholes. Challenges have been acknowledged in their application given the potential for open interpretation; and
- As currently applied, there is insufficient detail on the impact on receptors and different receptor, which in consultation with stakeholders to the Law Commission consultation have identified as important.

5.5. The Law Commission report does not address the role of categorisations specifically but considers a role for designating⁵² tips as either of higher or lower risk. The Law Commission stated that the technical aspects were outside the remit of their⁵³ review and the technical development should be left to the Welsh Government. Both Chapters 4 and 5 reflect the technical aspects of developing a categorisation system, which enables specific and prioritised requirements on the different categories of tips.

5.6. We found value in the Commission’s recommendations (19 & 20), which stated for the risk classification of tips to have regard for hazards relating to instability, pollution, combustion or flooding.

5.7. We have considered the recommendations and believe our proposals reflect the Law Commissions intent. Whilst not based on the designation of tips into higher and lower rated tips, we believe our approach set out in this Chapter and Chapter 4 reflects a number of the consideration presented by the Law Commission and respondents to its consultation in particular to the interconnection between a risk assessment, a risk categorisation⁵⁴ and designations. In this Chapter we outline our proposed approach.

Proposed Categorisation System

5.8. We propose that the supervisory authority will be required to provide each tip with a new tip categorisation unless it considers an existing category to be appropriate. The categorisation will be made following evaluation of the ‘**Hazard Assessment Form**’, set out in Chapter 4, and review of other relevant site-specific factors. This will result in the transition from the current interim to the new statutory categorisations

5.9. Site specific factors, for example may include the potential burden of liability associated with the safe, effective maintenance and management of a tip site (e.g. major safety critical infrastructure), whereby it is not practicably possible, nor reasonable, for this to be burdened by a would-be responsible party. In this instance, where the tip is not a category 1 tip, the supervisory authority should be empowered to designate the tip as one of ‘significance’ and managed by it in

⁵² Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, Chapter 6

⁵³ Ibid, para 6.9

⁵⁴ Ibid, Recommendation 17, para 4.63.

agreement with the landowner and its management arranged through a maintenance agreement (see Chapter 7).

5.10. The aim and objectives of a new categorisation system are to:

- ensure consistency, accuracy and transparency in the categorisation of all disused tips;
- enable application for all significant hazard types associated with tip assets;
- provide a clear demonstrable process founded on a strong evidence base;
- ensure receptor levels will be classified appropriately for the hazards and potential risks applicable under the regime;
- for categorisations to be informed by detailed assessment of all significant hazards at any one site; and
- providing an adaptive management approach for categorisation, ensuring its open for review.

Proposed Categories

5.11. A total of five categories are proposed for introduction under the new regime. These are set out in Table 5.

Table 5: Tip Categories

Categorisation	Status	
1	High	Active Regime
2	Medium	
3	Low	
4	Very Low	
5	Exempt*	Inactive

*Would include the proposed 'de minimis' tips

5.12. We propose moving away from the A to D approach, whilst currently utilised through interim categorisations, it is likely using the hazard assessment approach will alter the breakdown across categories in the new regime.

5.13. To meet Welsh language requirements, the categories will be published in both English and Welsh, we therefore, propose to move away from the A to D approach and utilise numbers instead.

5.14. The Law Commission did not recommend a right of appeal to a designation of a tip for the same reason as no right of appeal for a risk categorisation:

“...risk classification is a technical decision drawn from detailed consideration of the attributes of a tip and its location, and serving as a signal to the public of the broad category of approach to be taken to its management.”⁵⁵

5.15. However, they did invite us to consider whether there is value in a system of provisional designation followed by period for representations. This is similar to the staged approach provided for in the Reservoirs Act 1975, which provides for a provisional designation based on information initially held by the regulator, a period for representations so that the owner can correct errors or provide further evidence, and a final designation based on all evidence gathered.

5.16. We welcome stakeholders’ views on whether a staged approach would be valuable, in particular for the higher rated categories, enabling owners to provide representations to the supervisory authority on the provisional categorisation.

Consultation Question

10. Do you agree with the approach to developing categorisations? If not please specify your reasons.

Changing Categorisations

5.17. We propose the supervisory authority should have a power to amend the category of a tip either up or down, where changes or actions have been recorded with the potential to alter the hazard performance and receptor level and, subsequently, the risk potential at a site

Prescribed Categorisations

5.18. In line with the Law Commission recommendation 25⁵⁶ for the criteria to be prescribed by the Welsh Ministers by statutory instrument, we also agree this approach should be applied and this should be developed in consultation with experts⁵⁷. We also believe, on review and recommendation by the supervisory authority, the criteria can be amended by the Welsh Ministers by statutory instrument

⁵⁵ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, para 6.86.

⁵⁶ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, paras 6.70

⁵⁷ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, Recommendation 26, para 6.71

Chapter 6: Tip Clusters and Management Plans

We propose the supervisory authority should:

- identify all interdependent and proximate clusters of tips;
- produce a management plan for interdependent tip clusters
- should produce a management plan for category 1 tips;

Supervisory Authority has the power to arrange for the development of management plans.

We propose a two-scale approach to management plans:

- a) higher status tips (1 and 2) require a full-scale management plan within 18 months of tip being added to register;
- b) lower status tips (3-5) require a lower scale plan within 36 months of tip being added to register

The minimum content of management plans to be prescribed by Welsh Ministers in statutory legislation.

6.1. In Chapter 4, we set out our approach to carrying out a hazard assessment, which will assist in the categorisation of a tip (Chapter 5), these two factors help to identify what is required for the management a tip. In this chapter we consider the role of the management plan and its development.

Tip Clusters

6.2. However, we believe there is merit in considering a collective management of clusters or groups of tips, as tips are often not located in isolation but within close proximity to one another. We have identified two types of tip clusters:

- **Interdependent:** Where the engineering or environmental performance of a tip(s) is shared with, or reliant upon, the performance of adjacent tip sites, thus resulting in interdependencies. To ensure safe, effective management, the tips should be managed as one.
- **Proximate:** Where tips can be clustered (proximity, site history, access etc.) to take advantage of potential operational efficiencies in the management of tips in this grouping.

6.3. We believe there are a number of benefits from applying this approach including:

- Considering potential impacts from nearby tips if they slipped;
- Lower-level tips are managed within a group of tips; and
- Economies of scale for management efficiencies.

- 6.4. We propose the supervisory authority should have a duty to identify all clusters of tips to enable a distinction between interdependent and proximate clusters.
- 6.5. The supervisory authority should be responsible for developing a management plan, which covers all tips within an interdependent cluster, but it has the discretion to determine in relation to proximate clusters, whether it is beneficial for it to lead on the development of a management plan where the proximate cluster includes a category 1 tip.

Consultation Question:

11. Do you agree with the approach for interdependent and proximate clusters of tips?

Management Plans

- 6.6. The Law Commission report includes a recommendation⁵⁸ for the supervisory authority to arrange for the compilation of a management plan for every tip in the register. The Welsh Government has considered this in light of the proposed extension of the regime to other spoil tips. Due to the potential scale of such a duty, we agree no single body should be responsible for producing all management plans, but owners should also be required to participate in this exercise.
- 6.7. As outlined in paragraph 6.2 on tip clusters, we believe the supervisory authority should be under a duty to produce management plans for interdependent clusters, particularly those which include higher status tips⁵⁹. We believe the supervisory authority should lead on arranging the production of management plans for the higher status tips, those categorised as 1 (as proposed in Chapter 5) as these tips could pose the greatest hazards. However, where the category 1 tip is managed by a party with the relevant level of expertise, the supervisory authority can arrange for the management plan to be developed by that party.
- 6.8. Where there are higher status tips in a proximate cluster, the supervisory authority should consider leading on the development of management plans, where doing so would provide efficiencies.
- 6.9. Once the supervisory authority has met its duties in relation to mapping interdependent and proximate clusters, it can arrange for owners of remaining tips to develop a management plan for their tip or tips.

⁵⁸ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, para 4.63, Recommendation 17

⁵⁹ We use the term 'higher rated' to refer to tips categorised under the interim approach and 'higher status' under the new categories.

Scale of a Management Plan

6.10. We find value in stakeholders' comments to the Law Commission consultation on not applying a one-size fits all approach to the format of management plans⁶⁰. Owners of small-scale tips with low to no risk should not be under any onerous duty to develop a complex management plan, particularly where they may not have the relevant expertise or access to it. The new categorisation approach (see chapter 5) based on hazard levels will assist in identifying the tips, which will require a full-scale management plan and those which require a lighter touch plan. Our proposal for a 'de minimis' tip would also remove certain obligations in relation to these tips and we propose a de minimis' tip is unlikely to require a management plan.

6.11. As such we propose a two-tier approach to management plans:

- Higher rated tips and tips in an interdependent cluster - to require a full-scale management plan – (see paragraph 6.13 for details) within 18 months of the tip being added to the asset register; and
- Lower rated tips – to require a basic management plan – (see paragraph 6.16 for details) within 36 months of the tip being added to the asset register.

Minimum Content of a Management Plan

6.12. We propose the Welsh Ministers by statutory legislation can prescribe the minimum content for management plans⁶¹, this power should also enable the Welsh Ministers to amend the minimum content, where evidence and prior consultation with the supervisory authority recommends an amendment. We also propose the supervisory authority can make recommendations to the Welsh Ministers to amend the minimum content.

Higher status tips and tips in an interdependent cluster

6.13. We outlined at paragraph 3.33 our intention to collate historic records, as commented on by some stakeholders they will provide important information on a number of key aspects about the design of a tip (where relevant) and the drainage structure. We believe where these are available, they should provide valuable information for the development of a management plan. However, until the exercise to retrieve and collate these records has been undertaken, we have not included historic records as part of the minimum content but propose where these are available, they can be considered in both the hazard assessment and management plan.

⁶⁰ Ibid, Chapter 4

⁶¹ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, para 4.64, Recommendation 18

6.14. We propose the minimum content should include:

- Scheduling of inspections and appraisals - this can include additional inspections if due to the specifics of the tip it requires more inspections than required by the categorisation;
- Statement of requirements of additional types of specialist inspections - ecological, drainage, which may be required as determined by the specifics of a tip;
- Protocol for inspection response to adverse weather conditions, including timescale for inspections pre and post e.g. heavy rainfall and including, where appropriate, trigger levels such as levels of rain within a given timeframe;
- Pro-active programme of maintenance and remediation works to manage hazards identified in hazard assessment; and
- Tip Profile – inclusion of information on whether the tip is situated in a designated site, heritage site, proximity to rivers and other key environmental/ecological information.

6.15. Other information, which could be included would be the role of technology on the tip to monitor any ground or water movement.

Lower status tips not in a cluster

6.16. We propose that in general, these management plans can be more simplistic in nature and the minimum content should include the following:

- Schedule of inspections and appraisals (where applicable); and
- General tip maintenance requirements.

Guidance

6.17. We propose the supervisory authority should provide guidance on the key information to be included in management plans for both higher and lower status tips.

Approval

6.18. The Law Commission recommends that the supervisory authority should approve any management plans produced by an owner⁶². We have considered this in light of the number of disused coal tips and the potential extension to other spoil tips and consider this could be an onerous task for the supervisory authority. We believe there is value in the supervisory authority signing off management plans for higher status tips and undertaking compliance checks of management plans for lower status tips.

⁶² Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022 para 4.63, Recommendation17

Consultation Question:

12. Do you agree with the proposals for developing management plans? If not, please provide your reasons.

Access to Information

6.19. To support the carrying out of a technical inspection and the development of a management plan, we propose the supervisory authority has a power to request data and information from a tip owner relating to the tip and/or the adjacent land, where this request would not be contrary to any statutory obligations on the requested party, or the provision of the data would place an onerous burden on the party.

Chapter 7: Inspections/Appraisals and Maintenance and Maintenance Agreements

We propose:

- A three-tiered approach to on-going checks of disused tips at set frequencies;
- Responsible parties for checks depending on category of tip;
- A standardised approach to reports;
- Minimum content for inspection/appraisal reports as prescribed by Welsh Ministers in subordinate legislation;
- Requirements to undertake maintenance; and
- Introduction of maintenance agreements.

7.1. We agree with the Law Commission report on the need for coal tips to be subject to checks. The Law Commission report recommendations consider an initial inspection⁶³ and a risk assessment, which we have considered in relation to our proposed hazard assessment provided in Chapter 4. We agree an initial inspection of the tips is important and find merit in the Law Commissions recommendation that '*unless it [supervisory authority] considers that a sufficiently recent and thorough inspection has been conducted*'⁶⁴. We believe the current and on-going rounds of inspections by the Coal Authority and local authorities will help to meet this requirement.

7.2. In this chapter we focus on the requirement for on-going checks on tips and how they are maintained. There are a number of factors, which need to be taken into consideration in developing a programme of checks, which is both effective and deliverable. Under the current categorisations, while there are higher rated tips (327), there are also a significant number of tips (in the majority 2,129), which require less frequent checks. We also seek to design a regime, which can expand to include other spoil tips, which can be anywhere in the region of 20,000 plus, which would be resource intensive if all tips were subject to the same type of inspection.

7.3. A clearly defined monitoring regime is a fundamental component of any new management regime to provide public confidence that tips are being assessed and providing an up-to-date record of condition as well any necessary works being identified.

7.4. The new regime requires to be proportionate and deliverable. In light of these factors and having discussed with partners, we propose a three-tiered system of checks provided in Table 6 and Diagram 2. This includes a two-tier approach to on-going monitoring and the inclusion of a hazard assessment as covered in Chapter 4.

⁶³ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, para 4.32, Recommendation

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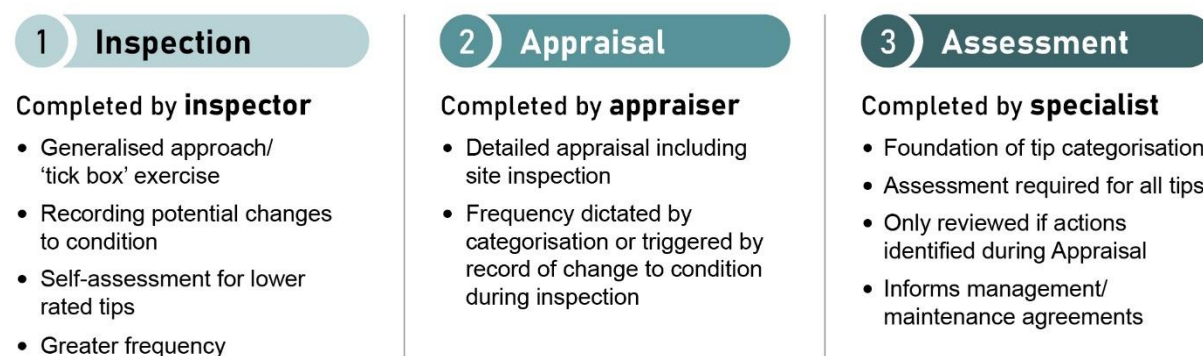
⁶⁴ Ibid

Table 6: Three-Tiered Approach

Check Type	Description	Competency of Personnel
Inspection	A 'reduced-technical' inspection where a standard pro forma is used to report the condition and performance of key feature types at the site (e.g. drainage channels). Inspections - Can be completed as a self-assessment by the responsible party for lower status sites – essentially an affirmation that nothing has changed. If an inspection reports a condition change which has the potential to alter the safe performance of the tip, then this would trigger an immediate 'Appraisal', irrespective of when the last one was completed or next one scheduled.	Inspector: Personnel with access to training, guidance and other resources to fulfil role.
Appraisal	A detailed, comprehensive technical appraisal, including site inspection. Provides a detailed catalogue of all features, their condition and general remarks on the site. Recommendations are made for maintenance works, where applicable.	Appraiser: Technical professional meeting defined minimum competency levels.
Assessment	A Hazard Assessment Form capturing the key features at a site. Crucially comprises a register of all significant hazards with accompanying assessment. The Assessment is the foundation of the tip categorisation. This document is only reviewed where significant changes/actions are record in an Appraisal – see chapter 4 for details.	Specialist: Lead technical professional meeting defined minimum competency levels.

Diagram 2:

Proposed three tiered regime



7.5. Hazard assessments were considered in chapter 4. In this chapter we focus on inspections and appraisals. To reflect the categorisations (see Chapter 5) and the potential hazard and impact on a receptor, we propose, as set out in Table 7, the following frequencies for inspections and appraisals against the five categories. We would also expect, particularly in relation to Category 1 tips, there would be inspections undertaken pre and post any significant weather event.

Table 7: Categories and Frequencies of Checks

Category	Frequency	
	Inspection	Appraisal
1	6 months	1 year
2	12 months	2 years
3	24 months	5 years
4	24 months	N/A*
5	Exempt	Exempt

*Appraisal only required when triggered by an inspection or following a report of significant change to the condition of the site

Consultation Question:

13. Do you agree with the tiered approach and the proposed frequencies of checks? If not, please specify your reasons.

Party leading on arrangements for tip inspections and appraisals

- 7.6. In relation to who would lead on making arrangements for checking the status of tips, we have taken into consideration the potential implications of the extension of the regime to all spoil tips and believe a duty for all inspections and appraisals to fall on one body would be overly burdensome and undeliverable. This is further heightened by the current general lack of skills and expertise in this area.
- 7.7. The Law Commission has recommended that the supervisory authority should be under a duty to arrange an inspection of the tip⁶⁵. We recognise this reflects the scale of the task and shares responsibility for undertaking checks, however requires the supervisory authority to delegate to others. We believe to provide clarity on roles and responsibilities, the legislation should clearly state who is responsible for which category of tip, providing parties with sufficient knowledge in advance of what responsibilities they will be required to meet

⁶⁵ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, para 4.32, Recommendation 15

7.8. We propose the following parties lead on arranging checks as set out in Table 8.

Table 8: Categories, checks and responsible party

Category	Responsible Party	Frequency	
		Inspection	Appraisal
1	Supervisory Authority	6 months	1 year
2	Local Authorities – for own and privately owned (where appropriate)	12 months	2 years
3	Owners	24 months	5 years
4	Owners	24 months	N/A*
5	Owners	Exempt	Exempt

*Appraisal only required when triggered by an inspection or following a report of significant change to the condition of the site

7.9. In line with the Law Commission’s recommendation that the supervisory authority can arrange for an inspection, we propose it can agree with a party, which has the relevant level of experience to undertake inspections and/or appraisals on its behalf. Organisations such as NRW will retain responsibility for all of its tips and can work with the supervisory authority or any other competent party in carrying out the required inspections and appraisals.

7.10. Local authorities would lead on arrangements for inspections and appraisals for their own category 2 tips and category 2 tips on private land. While organisations such as NRW will retain responsibility for its own tips and can work with the supervisory authority or any other competent party in carrying out the required inspections and appraisals.

7.11. We also propose that in relation to categories 3 and 4, the owner or occupier has a duty to immediately report any significant changes to the condition of the site (e.g. something with a potentially de-stabilising action) at any time. This is reported directly to the supervisory authority to direct action.

7.12. To provide oversight of the regime, we propose the supervisory authority should have a duty to ensure inspections and appraisals are being undertaken within the suggested timeframes (Table 9) and have a power to undertake spot checks of those tips, for which it is not responsible for carrying out inspections or appraisals. It will be for the supervisory authority to determine the level of monitoring of tips it will undertake in any given year. Rights of access to undertake this power are outlined in Chapter 8.

7.13. Our intention is also to utilise technology (as being trialled in our technology trials – see Annex 3), to support the monitoring of tips on an on-going basis and to provide information on any condition change (e.g. ground movement or land use). We propose the supervisory authority has oversight of any technological monitoring but can work with local authorities to ensure the data is received at the appropriate level for action to be taken.

Consultation Question:

14. Do you agree with the split of responsibilities for inspections and appraisals? If not please specify your reasons.

Sequencing

- 7.14. We propose for categories 1 to 3 an appraisal is the first check undertaken at the commencement of the new statutory regime and that subsequent inspections and appraisals follow on as per the timing requirements set out in Table 9.
- 7.15. At this time, it may also be necessary to undertake specific types of assessment such as geotechnical, drainage and ecological and these can be scheduled as required.
- 7.16. Where, for example a category 1 tip requires an inspection every 6 months and an appraisal every 12 months, where the inspection and appraisal time schedule coincides, these can be undertaken at the same time.

Standardised Approach

- 7.17. To ensure consistency in approach to carrying out inspections, we believe a standardised approach should be introduced. To reflect the different levels of checks – inspections and appraisals, a ‘one size all’ approach for the 5 categories would not be appropriate and the standardisation needs to reflect the level of the check being undertaken and be proportionate to the category of the tip as reflected by its hazard assessment.
- 7.18. In the third round of inspections undertaken by the Coal Authority⁶⁶, we have begun to trial what may be appropriate as minimum content for an appraisal report. Working with our Task Force partners, we have identified the following as potential key minimal information to be captured in an appraisal report:

Administrative Information

- Unique Identification Number;
- Category;
- Location;
- Date of current appraisal and last appraisal and
- Weather.

Technical Information

- Geotechnical;

⁶⁶ October 2021-February 2022

- Engineering infrastructure;
- Drainage infrastructure;
- Instrumentation and monitoring;
- Land use;
- Contamination/geo-environmental

7.19. To provide context for the information provided in the reports, we also propose photographic evidence should also be included. The location of any issues identified on the tip should also be captured in the report and marked on photographs/maps.

7.20. We propose the minimum competency for an appraiser should be a minimum of five years relevant experience.

7.21. In relation to an inspection report, we propose a simple, standardised approach regarding the status of the tip. In this report the key information will be whether the tip condition has changed. We propose the following as minimal content:

Administrative Information

- Unique Identification Number;
- Category;
- Location;
- Date of current inspection and last inspection and
- Weather.

Technical Information

- Ground Movement;
- Drainage information – both surface and sub-surface – for example - are surface water drains, ditches and culverts satisfactory, are sub surface drains in tip adequate and satisfactory;
- Erosion – for example any erosion or undercutting of slopes;
- Any signs of seepage;
- Land use; and
- Pollution.

7.22. Photographs for each of the relevant technical information will also be important to capture in the report.

7.23. Of significance, will be for an owner to report if there is any new or worsened ground movement. If this has happened this should trigger an appraisal.

7.24. The minimum content for inspection and appraisal reports to be prescribed by the Welsh Ministers in subordinate legislation. On recommendation from the supervisory authority, the minimum content can be amended by the Welsh Ministers.

Timing requirements for maintenance works

- 7.25. It will be important to provide an indication of whether any works identified in an inspection or appraisal are urgent or routine. We propose a timeframe status is provided in reports to indicate the expediency of the work requirements.
- 7.26. We recognise a number of factors can influence the commencement and also the progress of work, including but not limited to:
- Access to the site, in particular due to the tip's location and lack of accessible roads;
 - Design requirements;
 - Logistics, in particular whether special machinery is required; and
 - Weather conditions.
- 7.27. In light of these factors, to comply with any timeframe requirement provided in a report, an owner should at least demonstrate some form of action has been undertaken within the specified timeframe such as further inspections, preparation of design works or further consultations on the appropriate action to be taken.

Consultation Question

15. Do you agree with the proposal for minimum content of reports and if so what do you consider is essential information?

Maintenance/Remediation

- 7.28. Maintenance and remediation of tips is essential to help ensure their long-term safety.
- 7.29. We follow the same principles of who should be lead on the arrangements for maintenance works as for inspections and appraisals and draw upon the Law Commission report and recommendations. In the report, the Law Commission have focused on the distinction between higher (designated) and lower designated tips. We believe our approach as presented in the list of categorisations (see paragraph 5.11) reflects this distinction between higher and lower status tips.
- 7.30. We propose in Table 9, who can lead on arranging for maintaining and remediating tips. We have again considered the implication of the possibility of extension of the regime to non-coals and the impact this would have on any single body. Being a lead party does not mean this party has to carry out the works but can arrange for a suitably qualified third party or contractor to carry out the works on its behalf.

Table 9: Responsible Party for arranging maintenance and remediation of tips

Category of Tip	Responsible Party
1	Supervisory Authority
2	Local Authorities – for own and privately owned (where appropriate)
3	Owners
4	Owners
5	Owners but exempted

7.31. The Law Commission recommends the supervisory authority “should be responsible for works on designated tips (higher rated tips) but also recommends the authority could contract to another and recommends *an authority can enter into a tip agreement with the owner or occupier of land registered in the tip register, providing for the carrying out of the operations specified in the tip management plan*⁶⁷”.

7.32. Table 9 reflects the maintenance of the highest status tips falling to the supervisory authority (category 1) and the lower status tips (categories 3 and 4) to the owners. We will consider maintenance agreements later in this chapter. This approach ensures the highest category of tips are prioritised and promote a timely, consistent and reliable approach.

7.33. In light of the number of tips, we have, however, also recommended that local authorities lead on making arrangements for the maintenance works on category 2 tips, owned by local authorities and private landowners, where this would be appropriate, and they will have the same powers as the supervisory authority where the tip is located on private land. This would reflect the current activities of local authorities leading on making arrangements for the maintenance works for their own and privately owned tips but like the supervisory authority, they would be able to enter into maintenance agreements with tip owners.

7.34. Organisations such as NRW will still retain responsibility for all of its tips and can work with the supervisory authority or any other competent party in carrying out the required maintenance works.

7.35. There may be occasions where the supervisory authority has determined it may require to carry out the work, where it is considered necessary or convenient. In this instance the supervisory authority may consider charging the costs to the owners as outlined in Chapter 8.

7.36. The aim is to reflect the various responses to the Law Commission consultation as outlined in its report where some stated a maintenance duty should fall on owners, but others highlighted that some owners may be financially constrained.

⁶⁷ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, paras 5.40 and 6.117 Recommendations 21 and 27,

7.37. The Law Commission report helpfully sets out at paragraph 6.112 how a tip agreement would assist the supervisory authority on carrying out works on a designated tip and we would extend this to local authorities for carrying out any works on category 2 tips.

“We envisage that, where the supervisory authority determines that it needs to carry out works or to require work to be done on a tip, it would in the first instance seek to reach a tip agreement with the tip owner and occupier and other relevant parties. This would be backed up by the power to make a tip order in the event that agreement is not reached or an agreement not performed. In the case of a designated tip, the agreement would be likely to provide for the supervisory authority to do the work.”⁶⁸

7.38. Where a category 1 tip is owned by a local authority, it would also be possible for the agreement to provide for the work to be contracted out to suitable bodies, or for the owner to do the work itself.

Maintenance Agreements

7.39. Chapter five of the Law Commission report is dedicated to securing the maintenance of lower risk tips. We do not propose to consult on many of the aspects of maintenance agreements as they have been consulted on by the Law Commission and were in the main agreed upon.

7.40. A maintenance agreement provides a pro-active approach to prevent tip safety problems developing and for tip owners to understand what is expected of them in helping to ensure coal tip safety.

7.41. We acknowledge there will need to be sufficient resources available to enable owners to deliver any maintenance requirements. A number of owners may also fall under different land management agreements under existing or newly proposed schemes for farming or sustainable land management. There may be opportunities for synergies and economies of scale, if maintenance agreements were rolled into existing management agreements. Further research and analysis is required on whether there may be any potential cross-overs.

7.42. A maintenance agreement provides sufficient flexibility to determine if the owner is the most appropriate party to undertake the work, for example basic maintenance or fairly straightforward remediation measures capable of being undertaken or commissioned by a private owner. In contrast to where substantial remedial work is needed, in which case it may be more appropriate for the commissioning or carrying out of work to be undertaken by the supervisory authority or a local authority.

7.43. The Law Commission recommends the supervisory authority makes the agreements and local authorities supervise the agreements and orders⁶⁹. As we

⁶⁸ Ibid para 6.112

⁶⁹ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, para 5.123, Recommendation 24

would seek to ensure economies of scale, we would wish to consider whether the supervisory authority is the only body who can make maintenance agreements.

7.44. As has been outlined in relation to hazard assessments and management plans, priority for establishing an agreement with an owner or occupier will be for the higher status tips (category 1 and 2) and as the agreement will relate to the carrying out of the operations specified in the tip management plan, we propose the timing will be as outlined for management plans (paragraph 6.11).

Monitoring Tip Management Agreements

7.45. It is vital that there is oversight of the regime and we set out at paragraph 8.2 the oversight powers of the supervisory authority. While the Law Commission proposes local authorities supervise agreements and orders, we also believe the supervisory authority needs to be able to oversee the entire regime and this includes compliance with maintenance agreements and orders.

7.46. There is merit in the supervision of maintenance agreements being provided by a wider group, particularly in light of the number of tips (just under 90% of the 2,456 coal tips are lower rated under the interim categorisation approach), it would be an onerous duty on any single body to inspect all of the lower status tips to ensure compliance.

7.47. The Law Commission recommendation is for a duty to arrange an inspection, should fall to an authority to ensure compliance with a tip maintenance agreement, with a power to delegate inspections to suitably qualified third parties⁷⁰.

7.48. Due to the scale of the task, we believe the supervisory authority should have a duty to ensure compliance with maintenance agreements and believe it will be for the supervisory authority to determine the percentage of spot check inspections it or a qualified third party undertake in any given year to deliver on this requirement.

7.49. This will also provide monitoring of the self-reporting of inspections of category 3 and 4 tips to ensure that these reports reflect the current state of the tip.

7.50. We also agree a maintenance agreement can be made by the supervisory authority with an owner, where the owner has been identified as a suitable party to arrange for its own maintenance works of a higher status tip.

⁷⁰ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, para 5.50 Recommendation 22

Tip Maintenance Orders

7.51. The Law Commission also recommended that the supervisory authority should have the power to make tip orders in response to specified non-compliance⁷¹.

7.52. We agree that a tip order should be issued where:

- an owner or occupier has failed to comply with a maintenance agreement, and where appropriate notice has been given,
- the owner or occupier has been offered an agreement and has refused to enter into an agreement on suitable terms or has failed to respond within 42 days;
- work specified in the order to be urgently necessary; or
- it has been impossible to identify the owner or occupier despite having taken specified steps to do so

7.53. The measures provided in any issued order should be proportionate to the objective to be achieved.

7.54. The order must either require the owner or occupier to carry out the operations or provide for the authority to carry them out.

7.55. The owner or occupier should have a right of appeal against the imposition of an order, but the exercise of the right of appeal should not operate to prevent work which is urgently necessary.

7.56. Save in the case of an order made where work is urgently necessary, the order must provide sufficient time within which to appeal.

7.57. We do not propose consulting on these matters as they were captured in the Law Commission consultation and report.

⁷¹ Ibid, para 5.87 Recommendation 23

Chapter 8: Oversight, Enforcement, Charging and Appeals

We propose:

- New rights of access to undertake inspections, appraisals and maintenance;
- Introduction of civil sanctions;
- Provision of charging powers; and
- Rights of appeal

8.1. In this chapter, we set out the enforcement, charging and appeals process to support the oversight and compliance with the regime.

8.2. In Table 10 we summarise the proposed oversight functions of the supervisory authority.

Table 10: Supervisory Authority – Oversight Functions

Function	Description	White Paper Reference
To oversee asset register	Including updates to the register on inspections, inspection reports, maintenance and remediation works, commencement, progress and completion.	Para 3.47
To approve management plans for higher status tips	Where management plan developed by an owner.	Para 6.17
To ensure consistent approach applied across regime	To inspections, appraisals and assessments.	Para 2.31
To oversee assessments of tips have taken place within timeframes	All higher status tips have been inspected within 12 months of a tip being added to the asset register where no inspection has been undertaken by the Task Force and all lower status tips have been inspected within 36 months of a tip being added to the asset register where no inspection has been undertaken by the Task Force.	Para 4.6
Spot check inspections	Where owner or third-party undertaking inspections/appraisals, power to undertake spot check inspections to ensure inspections/appraisals and maintenance are being undertaken.	Para 7.48
Oversee Register of Professionals		Para 3.63

Enforcement powers

8.3. We recognise the importance of effective and proportionate enforcement powers to ensure the regulatory regime is effective.

8.4. We welcome the recommendations set out in the Law Commission’s report and will consider them for inclusion in a new coal tip safety regime⁷².

⁷² Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, Chapter 8

Access

- 8.5. Under the 1969 Act, the powers available to local authorities have been limited requiring to evidence that a tip poses a danger to the public. We believe a power of access is required but the process associated with the power should be different where the power is exercised to address an emergency, in contrast to when the supervisory authority is undertaking its general oversight functions.
- 8.6. We propose a power of entry for the supervisory authority and local authorities (in relation to category 2 tips) for:
- a) inspecting, carrying out tests or sampling upon a known or suspected coal tip;
 - b) performing, supervising or inspecting works of maintenance or remedial operations or installing and monitoring instrumentation upon a coal tip; and
 - c) gaining access to a coal tip for the above purposes
- 8.7. We would expect the supervisory authority and local authorities to make arrangements with a private landowner for access without the use of any right of access power. However, if there was either a negative or no response to a request, then this power could be used.
- 8.8. In circumstances where this power relates to the undertaking of general functions, this power of entry should be exercisable upon 48 hours' written notice to the owner if identifiable and any other person known to be in occupation of the land.
- 8.9. In an emergency situation, we propose the power of entry shall be without notice.
- 8.10. Where a person is authorised to enter land, as outlined in this chapter, they should have power to take with them necessary equipment, providing that notice includes a description of any heavy machinery to be taken onto the land.
- 8.11. Obstruction of any authorised person or of an inspection, test or works we propose shall be a summary offence.
- 8.12. In some situations, entry may be required over a third party's land to access a coal tip and we propose the written notice should be extended to cover any other routes, where a tip can only be accessed through a third party's land.

Tip Orders

- 8.13. As outlined in Chapter 7 a failure to comply with a tip maintenance agreement would result in the issuing of a tip order. The Law Commission have recommended that failure, without reasonable excuse, to comply with a tip order

should be a summary offence punishable by imprisonment for a term not exceeding 51 weeks or by a fine or both⁷³.

8.14. The Law Commission have also recommended that the Welsh Government consider the use of civil sanctions in respect of infringements of a tip maintenance order⁷⁴. We believe there is merit in considering civil sanctions for non-compliance of a tip order, which would enable the summary offence recommendation to apply as a last resort for any persistent or incidents of serious non-compliance.

8.15. Civil sanctions can provide a proportionate response to non-compliance, in particular where a minor breach has occurred and may relate, for example, to administrative requirements such as updating the asset register. They enable a regulator to respond appropriately to the circumstances of each case.

8.16. Potential civil sanctions available include:

- Fixed monetary penalties - a fine of £100 for individuals or £300 for a body corporate;
- Variable monetary penalties - monetary penalties which we can impose directly for more serious offences;
- Compliance Notice – a written notice which requires a person to take specified steps within a stated period to ensure that an offence does not continue or happen again and bring a party back into compliance;
- Stop Notice - a written notice that prohibits a person from continuing an activity. It can also prohibit an activity from continuing until specific steps have been taken;
- Restoration notices- a written notice requiring a person to take steps to restore harm caused by non-compliance, so that the position is restored, so far as possible, to what it would have been if no offence had been committed;
- Enforcement undertakings - a proposal to take steps that would make amends for non-compliance and its effects – these are legally binding voluntary agreements.

8.17. We seek stakeholders' views on the appropriateness of civil sanctions and their role in the new regime. Table 11 lists the potential breaches within the regime.

8.18. Prior to a civil sanction being applied, it would be expected for the Supervisory Authority to inform a party that a requirement had not been met. A civil sanction would apply if there was continued failure to comply.

⁷³ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, para 8.49, Recommendation 31

⁷⁴ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, para 13.43, Recommendation 31

Table 11: Function Breaches and Potential Civil Sanctions

Function Breach	Potential Civil Sanction
Failure to upload an inspection/appraisal report to the asset register within required timescale.	Fixed monetary penalty.
Failure to update progress/status of maintenance and remediation works to the asset register.	Fixed monetary penalty.
Failure to inspect/appraise coal tip within required timeframe.	Compliance Notice.
Failure to deliver any maintenance and remediation requirements without reasonable cause.	Compliance Notice.
Failure to comply with a maintenance order.	Compliance Notice.
Carrying out activities on a tip, which could cause stability issues (see chapter 9).	Stop Notice, possibly followed by a Restoration notice.

8.19. In current legislation, bodies such as NRW may have discretion about which civil sanctions to apply to address a specific breach but in a number of cases the legislation specifically states, which civil sanction is available.

8.20. We believe the supervisory authority will require discretion in addressing non-compliance particularly if it relates to a category 1 tip, where actions may be more immediately required than for a category 4 tip.

8.21. In its capacity as a regulator, the supervisory authority will be required to produce guidance on enforcement and civil sanctions, setting out its decision-making approach and use of both criminal and civil sanctions available to it under the new legislation.

CONSULTATION QUESTION:

16. Do you agree civil sanctions should be utilised by the Supervisory Authority to ensure compliance? If not please specify your reason.

17. Should the Supervisory Authority have discretion over what sanctions to use or should the sanction be stipulated in the legislation for each breach?

Other Summary Offence

8.22. The Law Commission also recommends there:

“...should be a summary offence, punishable by a fine, to fail to notify the supervisory authority, within a prescribed time limit, of the existence of a coal tip particulars of which are not included on the tip register.”⁷⁵

8.23. We agree with the premise of this recommendation and that it should apply to a freehold owner of land containing the whole or part of such a coal tip and the owner of a leasehold interest in such land originally granted for a term of more than seven years. This to apply where they have reasonable grounds to believe that the land contains all or part of a coal tip⁷⁶.

Charging powers

8.24. The Law Commission report recommended that the power to make a tip order should include power to:

- charge fees and expenses to a person named in the order;
- provide for the making of payment to a person named in the order;
- direct the sale of any materials recovered from a coal tip;
- direct the payment of the proceeds of sale of such materials to a person named in the order; and
- require the payment of compensation by a person named in the order to another person named in the order⁷⁷.

8.25. We believe it is important for any recommended charging scheme to be fair, proportionate, transparent and consistent across Wales. Guidance should be provided on how the power will be utilised.

8.26. We propose the Welsh Minister by statutory instrument set out principles governing the allocation of financial responsibility for tip safety work between persons or entities in the public and private sectors.

Appeals

8.27. We set out below where we consider appeals should be available in the new management regime:

- owner or occupier should have a right of appeal against registration on the asset register where there is no tip situated on the land;

⁷⁵ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, para 3.101, Recommendation 11

⁷⁶ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, para 3.102

⁷⁷ *Ibid*, Chapter 9

- owner or occupier should have a right of appeal against the imposition of a maintenance order;
- owner or occupier should have a right of appeal against the imposition of any charges for the work under a maintenance order, where there is disagreement about the cost.

8.28. In the Justice in Wales for the People of Wales, The Commission on Justice in Wales Report⁷⁸, the Law Commission recommended that “*Welsh tribunals should be used for dispute resolution relating to future Welsh legislation*”.

8.29. The Welsh Government has welcomed the report and has made clear that it broadly supports the reform proposals recommended. Work to pursue the recommendations is at an early stage and unlikely to be in place before a coal tip safety Bill is introduced.

8.30. We will continue to work with our Justice colleagues to assess the most appropriate approach to provide an appeals mechanism to support the new management regime.

⁷⁸ Recommendation 27, Justice in Wales for the People of Wales, The Commission on Justice in Wales Report, October 2019, <https://gov.wales/commission-justice-wales-report>. Sir Wyn Williams, President of Welsh Tribunals, was a member of the Commission.

Chapter 9: Activities on Disused Coal Tips

We seek views on the types of activities on tips, which stakeholders consider may require to be banned or require consent.

9.1. Certain activities on disused coal tips could have an impact on the status of the tip. In this Chapter we briefly consider some of these activities and proposals to assess whether these activities should be banned or require permissions.

9.2. Our partners in the Coal Tip Safety Task Force have identified some of the following activities as having potential negative impacts on coal tip status:

- Excavation / alteration of tip profiles (e.g. mineral extraction or new access tracks);
- Uncontrolled tipping of materials on plateaus or slopes that can overload said areas or compromise the drainage infrastructure;
- Uncontrolled storage of materials on plateaus or slopes that can overload said areas or compromise the drainage infrastructure;
- Blocking / diversion of drainage / watercourses;
- Unauthorised removal of drainage infrastructure or alterations to said infrastructure.
- Unauthorised construction of buildings without due consideration for the difficulties presented by spoil tip sites.
- Unofficial recreational use such as the use of motorcycles and bicycles – for example off road vehicles cutting up and down the berms creating scour and rutting that changes and exacerbates the local surface scour, damage vegetation and ecology;
- Camping activities that generate the risk of campfires and ignition sources within the tip complex;
- Burning activities on the tip surface;
- Positive infiltration i.e. use of soakaways etc;
- Uncontrolled removal of vegetation, grass swards or trees
- Overgrazing, which could destabilise the top surface and lead to a greater risk of surface water scour potential
- Impounding of water on tip areas

9.3. These activities fall into the following three categories:

- Trespassing and vandalism;
- Actions with the potential to change the condition or performance of a tip (e.g. have a potentially de-stabilising action); and
- Land use changes.

9.4. The appropriate response to these three categories may be very different and depending on the circumstances could range from improved communication and education to criminal or civil sanctions.

9.5. Some of the activities under paragraph 9.2 for example relating to any drainage infrastructure will be captured in a management plan and therefore in a management agreement. Any non-compliance of a maintenance agreement could lead to the issuing of a maintenance order and as set out at paragraph 8.13 non-compliance of an order can lead to a summary offence.

9.6. While the planning regime will control any development associated on or near a tip, there are a number of the activities listed in paragraph 9.2 which have no control mechanisms in place.

9.7. Activities such as excavation, blocking of on drainage infrastructure can have a significant impact on tip. We, therefore, seek stakeholders' views on whether greater control is required of activities on disused coal tips, particularly in relation to higher status tips. Potential controls could include:

- Banning certain activities, where the hazard assessment indicates particular sensitivities on a tip;
- Consent required either from local authorities or supervisory authority to undertake certain activities; and
- Provision of civil sanctions in relation to controlling certain activities.

9.8. A further consideration is the impact of planned/proposed development, where this is within the proximity of a tip or may even cut across/into a tip. Such development activities can add new receptors within the proximity of a tip and as such alter the categorisation. The planned development for example could also change the direction of a water course with a potential impact on a tip.

9.9. We therefore propose for consideration by stakeholders the following:

- Supervisory authority to be a statutory consultee for developments that are planned within proximity of a higher status tip (categories 1 and 2);
- Coal tip assessment is undertaken by the developer for developments that are planned within the proximity of a higher status tip (categories 1 and 2).

Consultation Question:

18. Do you agree with the list of activities? If not which activities do you consider need to be controlled on disused coal tips?

19. What control mechanisms do you consider need to be introduced to control certain activities on tips?

20. Do you agree with the proposals relating to development activities in the vicinity of higher status tips?

Chapter 10: Tip Safety and Environmental Legislation

- 10.1. The Law Commission consultation sought views on the potential conflicts between coal tip safety and environmental legislation. The aim was to consider whether there were potential solutions to ensure any urgent works on tips were not substantially delayed in order to meet timescales for permits and licences set down in environmental legislation
- 10.2. The Law Commission report states that the 1969 Act “*is not designed to interact with modern environmental protection. It prioritises public safety, while environmental legislation imposes requirements that can obstruct remediation and clean-up works*”⁷⁹.
- 10.3. In its report, the Law Commission recommend that in an emergency situation, *the Welsh Ministers should be provided with a power to give directions to the supervisory authority regarding actions to be taken in response to a coal tip emergency*⁸⁰. Such a power should also include a requirement, where possible, to consult the supervisory authority and other relevant authorities as to the terms of any direction.
- 10.4. The Law Commission also recommend:
- “...that the Welsh Government give consideration to the desirability of providing, in the legislation creating the power or in environmental and planning legislation, an exemption from any requirement to seek advance consent under planning or environmental legislation. Any such exemption should be subject to a duty to seek required consents retrospectively.”*⁸¹
- 10.5. There would need to be clearly defined circumstances on as and when this power of direction could apply and limited to ‘emergency’ situations.
- 10.6. One of the key clashes is in relation to the definition of an ‘emergency’. To assist in providing clarity, the Law Commission have recommended that the Environmental Permitting Regulations be amended to define an emergency in the context of tip material⁸².
- 10.7. Birmingham University has been undertaking a project to provide the Welsh Government with an overview of where there are potential conflicts between tip safety and environmental legislation. This project considers a wide spectrum of legislation covering waste, forestry, environmental impact assessment, and nature conservation. We are expecting the report from this research to be provided after the publication of this White Paper.

⁷⁹ Law Commission Report, *Regulating Coal Tip Safety in Wales*, 2022, para 11.1

⁸⁰ Ibid, para 11.27, Recommendation 35

⁸¹ Ibid, para 11.29, Recommendation 35

⁸² Ibid, para 11.46, Recommendation 36

10.8. Once this research has been completed, we will consider the Law Commission recommendations in light of the findings from the research and will consult with stakeholders at this time.

Glossary

Active tip: Under the Mines and Quarries (Tips) Act 1969 an active tip is a tip associated with an active mine or quarry. See also **Closed tip**.

Adit: A horizontal or sloping passage leading into a mine.

Closed tip: Under the Mines and Quarries (Tips) Act 1969, a closed tip is not on premises deemed to form part of a mine or quarry, but the mine or quarry with which it is associated has not been abandoned and the premises on which the tip is situated continue to be occupied exclusively by the owner of that mine or quarry.

Coal Authority: The Coal Authority is an executive non-departmental public body, sponsored by the Department for Business, Energy and Industrial Strategy, a UK Government department. It was established under the Coal Industry Act 1994 and manages the effects of past coal mining, including subsidence damage and mine water pollution.

Disused tip: A tip which is no longer being tipped upon which is not associated with an operational mine. In other words, this is a tip which is neither an active nor a closed tip under the 1969 Act.

Hazard - A feature or condition(s) at a tip location that has the potential to have adverse effects or undesirable consequences with respect to the Receptor Levels identified.

Hazard Level – Determined by the likelihood multiplied by the Receptor Level to inform the class.

Maintenance: Routine tip maintenance includes the clearing out, re-cutting and improvement of drainage ditches and culverts, and checking and clearing screens designed to capture detritus after heavy rainfall.

Receptors: A feature that could be impacted by a coal tip slide (such as a house, school or road).

Receptor Level – Defined receptor classifications for the 5 key groups identified

Reclamation: The process by which derelict, despoiled or contaminated land is brought back into a specified beneficial use.

Remediation: The process by which health and safety and environmental risks are reduced to an acceptable level. The aim of coal tip remediation is to ensure the safety of coal tips.

Senedd: The democratically elected body which makes legislation for Wales (within certain subject areas). It is known both as the Welsh Parliament and the Senedd Cymru. In this report we refer to it by its commonly used Welsh name, the Senedd.

SSSI: Site of Special Scientific Interest, a conservation designation.

Annex 1: Questions

1. Do you agree with the proposed approach to phase in non-coal tips over time, where this is appropriate?
2. Do you agree the new supervisory body should be a new Executive Welsh Government Sponsored Body?
3. Do you agree a 'de minimis' tip definition should be included in the Bill? If you agree – what attributes should be included?
4. Do you agree an owner of a 'de minimis tip' should be excluded from the duties outlined? If not please state your reasons.
5. Do you agree with the minimum content set out in this chapter? If not, please state what you consider would be appropriate minimum content?
6. Do you agree with the approach to adding new tips to the register?
7. Do you agree with the proposed approach to update the asset register? If not, please provide details on how you consider the asset register should be updated and by whom.
8. Do you agree with the proposal for the type of information to be made publicly available and which will be classed as excluded?
9. Do you agree with the proposed approach to measure hazard level? If not please specify your reasons.
10. Do you agree with the approach to developing categorisations? If not please specify your reasons.
11. Do you agree with the approach for interdependent and proximate clusters of tips?
12. Do you agree with the proposals for developing management plans? If not, please provide your reasons.
13. Do you agree with the tiered approach and the proposed frequencies of checks? If not please specify your reasons.
14. Do you agree with the split of responsibilities for inspections and appraisals? If not please specify your reasons.
15. Do you agree with the proposal for minimum content of reports and if so what do you consider is essential information?
16. Do you agree civil sanctions should be utilised by the Supervisory Authority to ensure compliance? If not please specify your reason.

17. Should the Supervisory Authority have discretion over what sanctions to use or should the sanction be stipulated in the legislation for each breach?

18. Do you agree with the list of activities? If not which activities do you consider need to be controlled on disused coal tips?

19. What control mechanisms do you consider need to be introduced to control certain activities on tips?

20. Do you agree with the proposals relating to development activities in the vicinity of higher status tips?

21. We would like to know your views on the effects that the proposed new regulatory framework for disused coal tips in Wales would have on the Welsh language, specifically on opportunities for people to use Welsh and on treating the Welsh language no less favourably than English.

What effects do you think there would be? How could positive effects be increased, or negative effects be mitigated?

22. Please also explain how you believe the proposed policy could be formulated or changed so as to have positive effects or increased positive effects on opportunities for people to use the Welsh language and on treating the Welsh language no less favourably than the English language, and no adverse effects on opportunities for people to use the Welsh language and on treating the Welsh language no less favourably than the English language.

23. Do you have any other comments or useful information in relation to any of the proposals in this White Paper?

Annex 2: Law Commission Recommendations

Recommendation 1.

We recommend that the existing regulatory regime for tips associated with operational mines should not be altered.

Recommendation 2.

We recommend that any new legislation should not apply to a tip to which the Quarries Regulations 1999 or the Mines Regulations 2014 apply.

Recommendation 3.

We recommend that a supervisory authority with responsibility for the safety of all disused coal tips should be established.

Recommendation 4.

We recommend that the supervisory authority should be a new body.

Recommendation 5.

We recommend that the supervisory authority should be a central public body.

Recommendation 6.

We recommend that the supervisory authority should be subject to a general duty to perform its functions so as to ensure the safety of coal tips, without limitation to specified risks.

Recommendation 7.

We recommend that a central tip register should be compiled and maintained by the supervisory authority.

Recommendation 8.

We recommend that the contents of the tip register should be prescribed by the Welsh Ministers by statutory instrument.

Recommendation 9.

We recommend that the supervisory authority should be under a duty to include on the register any tip of which it is aware.

Recommendation 10.

We recommend that an owner or occupier of all or part of land identified in an entry on the tip register should have a right of appeal on the ground that there is no tip situated on the land.

We recommend the exercise of the right of appeal should not be permitted to delay urgent work.

Recommendation 11.

We recommend that it should be a summary offence, punishable by a fine, to fail to notify the supervisory authority, within a prescribed time limit, of the existence of a coal tip particulars of which are not included on the tip register.

We recommend that the offence should be capable of being committed by

- (1) a freehold owner of land containing the whole or part of such a coal tip; and
- (2) the owner of a leasehold interest in such land originally granted for a term of more than seven years

who has reasonable grounds to believe that the land contains all or part of a coal tip.

Recommendation 12.

We recommend that the prescribed content of the tip register should be governed by whether it is in the public interest for particular information concerning coal tips to be publicly available.

Recommendation 13.

We recommend that there should be public access to the tip register, providing an accessible summary of relevant information.

Recommendation 14.

We recommend that the Welsh Government engages with the Law Society, the Coal Authority and local authorities in Wales with a view to establishing a search of the tip register as part of a standard conveyancing search in relation to property in Wales.

Recommendation 15.

We recommend that, upon the entry of a tip onto the register, the supervisory authority should be under a duty to arrange an inspection of the tip unless it considers that a sufficiently recent and thorough inspection has been conducted.

Recommendation 16.

We recommend that, at the time of inspection, there should be a duty on tip owners and occupiers to provide to the supervisory authority documents in their possession of relevance to the tip or the land on which it is situated.

Recommendation 17.

We recommend that

- (3) the supervisory authority should be under a duty to arrange for the compilation of a risk assessment and management plan for any tip included on the register;
- (4) the supervisory authority should be under a duty to approve the tip management plan;
- (5) the supervisory authority should allocate a risk classification to each tip based on the inspection report and risk assessment.

Recommendation 18.

We recommend that the Welsh Ministers should have power to prescribe the matters to be included in a risk assessment and tip management plan by statutory instrument.

Recommendation 19.

We recommend that the risk classification of coal tips should have regard to the risk of instability of a tip and the consequences of a stability failure.

Recommendation 20.

We recommend that the risk classification of coal tips should also have regard to the risk the tip presents of pollution, combustion or flooding.

Recommendation 21.

We recommend that the new legislation should provide for the making of agreements between authorities and the owners or occupiers of land registered in the tip register, providing for the carrying out of operations specified in the tip management plan.

Recommendation 22.

We recommend that an authority should be under a duty to arrange for inspections to ensure compliance with a tip maintenance agreement, with a power to delegate inspections to suitably qualified third parties.

Recommendation 23.

We recommend that an authority should be able to make a tip order where

- (6) the owner or occupier of land has failed to comply with a tip agreement entered into by them and has been given appropriate notice of that failure and reasonable opportunity to rectify it;
- (7) the owner or occupier has been offered an agreement and has refused to enter into an agreement on suitable terms or has failed to respond within 42 days;
- (8) the authority considers the work specified in the order to be urgently necessary; or
- (9) it has been impossible to identify the owner or occupier despite having taken specified steps to do so.

The authority must be satisfied that the measures proposed are proportionate to the objective to be achieved.

The order must either require the owner or occupier to carry out operations or provide for an authority to carry them out.

The owner or occupier should have a right of appeal against the imposition of an order, but the exercise of the right of appeal should not operate to prevent work which is urgently necessary.

Save in the case of an order made where work is urgently necessary, the order must provide sufficient time within which to appeal.

Recommendation 24.

We recommend that power to enter into tip agreements and to make tip orders for lower risk tips should fall to the supervisory authority, and a duty to supervise the agreements and orders, including to carry out inspections, should fall to local authorities.

Recommendation 25.

We recommend that coal tip safety legislation should provide for the designation by the supervisory authority of tips that meet criteria prescribed by the Welsh Ministers by statutory instrument.

Recommendation 26.

We recommend that the criteria for designation should be developed by the Welsh Government in consultation with experts.

Recommendation 27.

We recommend that in the case of a designated tip the supervisory authority itself should normally be under a duty to carry out the operations specified in the tip management plan.

We recommend that the supervisory authority should have power to contract out this work or to provide in a tip agreement for the tip owner or occupier to carry out the work where it is appropriate to do so.

Recommendation 28.

We recommend that provision for the carrying out of work on designated tips, whether by the supervisory authority or a tip owner or occupier, should be made by way of a tip agreement or order.

Recommendation 29.

We recommend that, to the extent that liability under our recommended scheme rests with the owner, in economic terms, of land containing a coal tip, that owner should be regarded as the owner of the freehold estate or the owner of a leasehold estate of 21 or more years, save where the freehold or leasehold estate is in reversion on a leasehold estate of 21 or more years.

Recommendation 30.

We recommend that persons authorised in writing by the supervisory authority or any other public body charged with functions under the coal tip safety scheme should have a power of entry upon land for the purposes of

- (10) inspecting, carrying out tests or sampling upon a known or suspected coal tip;
- (11) performing, supervising or inspecting works of maintenance or remedial operations or installing and monitoring instrumentation upon a coal tip; and
- (12) gaining access to a coal tip for the above purposes.

We recommend that the power of entry should be exercisable upon 48 hours' written notice to the owner if identifiable and any other person known to be in occupation of the land or without notice in an emergency.

We recommend that the supervisory authority or any other public body charged with functions under the coal tip safety scheme should have power to apply to a justice of the peace for a warrant authorising entry by force where a person has prevented or is likely to prevent the exercise of the power of entry, and it is reasonable to use force in the exercise of that power; the warrant may require those entering pursuant to it to be accompanied by a constable.

We recommend that persons authorised to enter land under these provisions should have power to take with them necessary equipment, provided that notice includes a description of any heavy machinery to be taken onto the land.

We recommend that obstruction of any authorised person or of an inspection, test or works should be a summary offence.

Recommendation 31.

We recommend that failure, without reasonable excuse, to comply with a tip order should be a summary offence punishable by imprisonment for a term not exceeding the maximum penalty for a summary-only offence, or by a fine or both.

We recommend that the Welsh Government give consideration to the use of civil sanctions in respect of infringements of a tip maintenance order.

Recommendation 32.

We recommend that the provision that can be made in a tip agreement or order should include provision

- (13) for the making of payments of by a person named in the agreement or order;
- (14) for the making of payments to a person named in the agreement or order;
- (15) for the sale of any materials recovered from a coal tip;
- (16) for the payment of the proceeds of sale of such materials to a person named in the agreement or order; and
- (17) for the payment of compensation by a person named in the agreement or order to another person named in the agreement or order.

Recommendation 33.

We recommend that principles governing the allocation of financial responsibility for tip safety work between persons or entities in the public and private sectors should be laid down by the Welsh Ministers by statutory instrument.

Recommendation 34.

We recommend that the Welsh Government enters into discussions with academic institutions and professional and industry bodies in the field of tip safety work with a view to securing compilation of a register of professionals competent to undertake tip safety work.

Recommendation 35.

We recommend that the Welsh Ministers should have power to give directions to the supervisory authority regarding actions to be taken in response to a coal tip emergency.

We recommend that the power be subject to a requirement, where possible, to consult the supervisory authority and other relevant authorities as to the terms of such directions.

We recommend that the Welsh Government give consideration to the desirability of providing, in the legislation creating the power or in environmental and planning legislation, an exemption from any requirement to seek advance consent under planning or environmental legislation. Any such exemption should be subject to a duty to seek required consents retrospectively.

Recommendation 36.

We recommend that the Environmental Permitting Regulations be amended to define an emergency in the context of tip material.

Annex 3: Technology Trials

Deformation cameras

Specialist cameras are being installed to record ground deformation at two sites in Rhondda Cynon Taf. Cameras of this type are typically used for monitoring landslides in alpine regions. Following installation in early 2022, we will assess their ability to give advanced warning of changes in stability performance and their overall suitability for coal tip monitoring.

Drones

In 2021, we funded local authorities to purchase drones and camera units and invest in the necessary training and certification for their drone operators. This is helping local authorities to integrate modern surveying techniques into their tip management practices.

GroundSat soil moisture mapping

The GroundSat project involves Earth Observation techniques – using satellite imagery to map soil moisture in and around 69 higher-rated tips.

GroundSat is adapting technologies used to search for water on other planets in order to characterise and assess tip performance with respect to both surface and groundwater regimes. It will confirm the effectiveness of existing tip drainage systems and identify any hidden moisture which could represent a future risk.

The project will compare data from satellite images captured at drier and wetter times of the year. Initial results are expected in April 2022.

PRIME (PRoactive Infrastructure Monitoring and Evaluation system)

PRIME is a non-intrusive geophysical survey system developed by the British Geological Survey (BGS) to provide detailed imagery of sub-surface conditions.

The solar powered-system uses electrical resistivity tomography (ERT), a technique widely used in medical physics, to remotely monitor the internal physical condition of infrastructure earthworks.

PRIME can help to characterise tip conditions and provides opportunities to monitor groundwater regimes and surface ground movement.

We will explore whether the system's ability to provide near real-time updates on the condition of an asset could indicate changes in its engineering performance. This would enable authorities to predict, not just respond to, incidents in future.

We will start trials of PRIME at a site in Rhondda Cynon Taf in 2022.

Real-time borehole installations

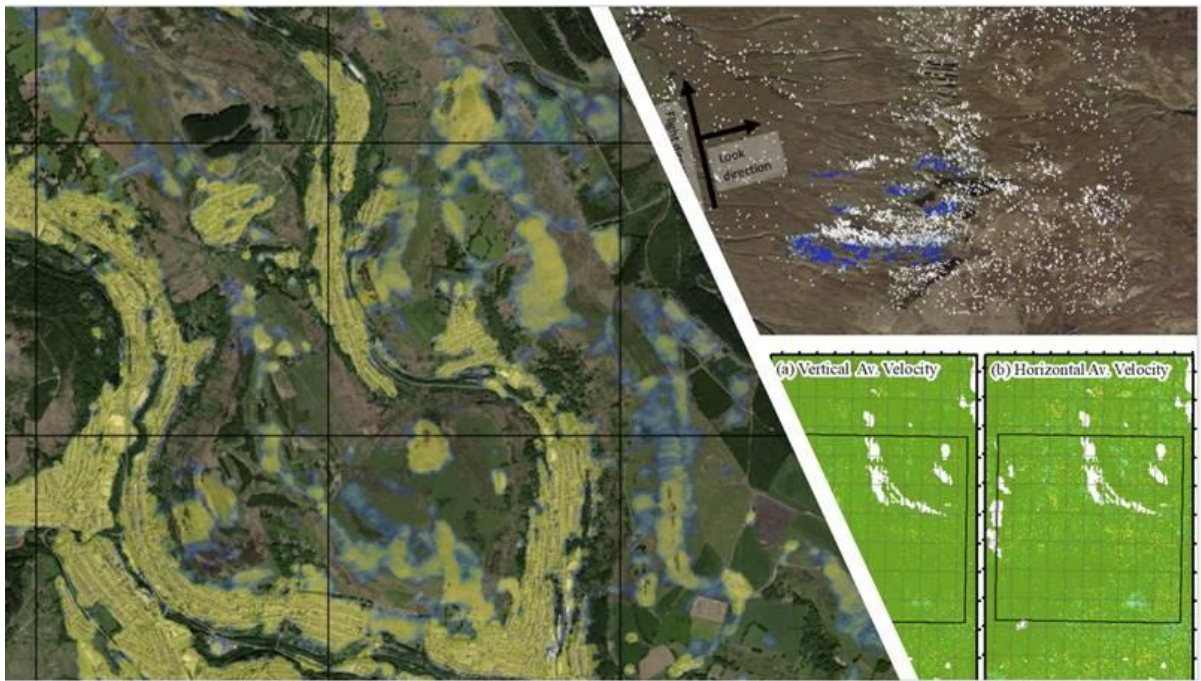
We are investigating the use of downhole instrumentation within boreholes for monitoring ground movement and groundwater regimes. Rhondda Cynon Taf County Borough Council began site investigations at Craig Ddu Dinas tip in October 2021, ahead of the installation of instrumentation in early 2022.

Satellite Applications Catapult – SAR data

The Satellite Applications Catapult is coordinating on behalf of Welsh Government a pilot project to evaluate whether Synthetic-Aperture Radar (SAR) data can be used to monitor potential ground movement on disused coal tips. The Satellite Applications Catapult has selected three companies to analyse and interpret satellite data on five disused coal tips using different technical approaches. The project is split into three phases:

- Phase one will involve monitoring of soil subsidence (sinking) or uplift (rising) as crucial indicators for potential risks at the selected sites
- Phase two will use satellite data to assess the benefits of installing corner reflectors on tip sites
- Phase three will evaluate the use of commercial space data for tip monitoring.

This project began in September 2021 and is expected to run until early 2023.



Composite image shows three different approaches to satellite data analysis

Tiltmeters

Tiltmeters can be used to monitor small movements of potential landslides. In April 2021, we began a 12-month trial to determine their suitability for monitoring disused coal tips, including potential warning system functions. Several arrays of tiltmeters have been installed across the Wattstown National tip in Rhondda Cynon Taf to monitor potential ground movement. The tiltmeters are complemented by water sensors monitoring critical drainage channels.

Annex 4: Economic Impact Analysis – Domestic Properties

1. Objective of the analysis

- 1.1 The main objective of this exercise was to provide an evidence base to determine cost implications of coal tip failures on domestic dwellings / properties particularly in the South of Wales and contribute to making informed decisions regarding the sustainable management of the disused coal spoil tips.
- 1.2 In particular, this task sought to investigate the following questions:
- What is the impact of a coal tip failure on the housing market, with particular emphasis on house prices?
 - What is the cost of a coal tip failure?
 - What impact could coal tip failures have on insurance premiums and liabilities?

Scope and limitations

- 1.3 The following summarises the scope of analysis.
- 1.4 *Coverage:* the scope of this exercise was limited to South Wales, based on the location of the vast majority of coal tips. However, examples from landslides in other parts of Wales were considered where house pricing and house sales data was available to coincide with the timeline of such landslides events.
- 1.5 *Focus area:* properties (dwellings) within 100 metres of a coal tip were considered for this analysis, focusing on coal tips around areas classed among the 10% most deprived using the Welsh Indices of Multiple Deprivation (WIMD).
- 1.6 *Receptors:* the initial focus has been on the residential market, with particular emphasis on house prices, house sales as a proxy for mortgages, and the degree of insurance coverage. Other receptors such as schools, small retail outlets, and critical infrastructure were not considered in this analysis.
- 1.7 *Risk profile of tips:* the focus of the exercise is on higher rated spoil tips – those tips with a greater risk potential. This is based on the current interim risk categorisations which reflect the recommended periods of inspections required. The categories range from A to D, with D requiring more frequent inspection. An additional category, R, refers to tips that have undergone reclamation works. This analysis focuses only on category C and D tips.
- 1.8 *Selected tips:* 10 tips across seven local authorities in South and North Wales were selected for this exercise.

- 1.9 *House prices*: average house prices were considered on a postcode basis, using monthly average prices paid at conclusion of the sale of the property as published for all property types by her Majesty's Land Registry (HMLR). A minimum historical time frame of 25 years was considered and, where possible, prices were drawn from 1995 to September 2021.⁸³
- 1.10 *Sales volumes*: property sales volumes were also considered over the same time frame, using the absolute number of completed transactions in the selected postcode area per month.

2. Impact of Coal Spoil Tip Failure on Residential Properties

House price impact

- 2.1 There does not appear to be an obvious and sustained long-term negative impact of these landslide events on house prices. House prices in the region have tended to not be adversely impacted by similarly destructive events that were considered as proxies for the destructive impact of coal spoil tip failures, such as floods and landslides.
- 2.2 The analysis showed that house prices in South Wales tended to follow similar trends over the years and bore characteristics of seasonality. Landslide events such as the Pantteg landslide of December 2012 in Swansea and the Pentre Flooding of February 2020 in Rhonda Cynon Taf were superimposed on a plotted graph of house prices in the surrounding area and did not show any notable evidence of sustained negative price movement post-event.
- 2.3 A possible explanation for this observation could be that the risks associated with such events as landslides and floods are already priced in, especially considering the historical tendency of such areas to be prone to flooding. Using more localised data – in particular, transactions closed as of the deed date for the property sale – would provide a more granular picture.

Property sales and mortgages impact

- 2.4 Similar to the house price impact findings, there appeared to be little or no long-term negative impact on property sales following adverse events of landslides or floods. Nine landslide and flooding events were considered using the same approach applied in assessing the house price impact, namely: the Tylorstown floods of February 2020, the Nefyn Beach landslide of April 2021, the Pantteg and Cyfyng events of December 2012 and August 2017 respectively, the flooding in St Asaph in 2012, the February 2020 flooding in Pentre, the February 2020 flooding event in Llanrwst, the Pontypridd flood of October 2020, and the January 2021 flooding that resulted from a mine shaft blowout in Skewen.

⁸³ It is worth noting that HMLR data in this regard is not available earlier than 1995. Therefore 1995 is the limit.

2.5 In all of the analysed events, the average number of property transactions in the six months following the disasters either equalled, were higher than, or hardly declined significantly below the averages recorded over a similar six-month average prior to the event, as well as over longer periods of up to 10 years.

3. Cost implication of coal tip landslide

3.1 Cost implications of coal spoil tip failures were estimated, both in terms of the costs of damage and resulting compensation, and in terms of insurance liability. Damage costs from the more familiar effects of floods and soil subsidence were used in this analysis as proxies for the impact of coal tip failures on such sensitive receptors as residential houses.

Impact of coal tip failure on insurance

3.2 A common finding from such events like the Skewen floods (as a result of a mine shaft blowout due to a blockage in an old drainage) is an absence of sufficient insurance coverage for damage to property. Residents were found to either have been underinsured or not insured at all. Reasons for this included low-income levels in the affected areas and properties for which the mortgage had been fully paid up and as such the owners decided against purchasing further insurance.

3.3 At £128 per annum, Wales has the second lowest average combined contents and buildings insurance premium in the UK, with residents paying about 17% less than the national average.⁸⁴ However, this premium is understood to be about 22% higher than the average in 2017.

3.4 In the areas considered among the 10% most deprived according to the Welsh Index of Multiple Deprivation (WIMD), such changes in insurance premiums can be – and have been – significant and have been understood to force opportunity cost decisions between buying property insurance and other more important priorities such as food or electricity.

3.5 Insurers consider that climate change could trigger more frequent and more violent bouts of extreme weather, resulting in floods, storms and related damage. They also recognise that some areas of the country are more prone to flooding or subsidence. The flooding and landslide events in Wales, as considered in this analysis over the selected time period, do not sufficiently explain the rises in insurance premiums over the years.

3.6 According to the Association of British Insurers (ABI), the estimated average cost of residential insurance claims from flooding as a result of Storms Ciara

⁸⁴ Source: <https://www.moneysupermarket.com/home-insurance/price-comparison-index/>, last visited 02/02/2022

and Dennis was estimated at around £32,300. Given the average house price from the 10 selected areas under analysis is around £166,000, the degree of underinsurance is estimated as follows:

$$1 - [32,300 \div 166,000] = \text{approx. } 80\% \text{ underinsurance}$$

- 3.7 Noting that the ABI average is for claims from all residential property types following Storms Ciara and Dennis and considering that only 10 tip sites were used for this analysis, a more generous level of underinsurance was assumed for this exercise, at 50%.
- 3.8 If there are no obvious and enduring adverse effects of coal tip failure on house prices and sales, the estimated cost of coal tip failure can thus be argued to be the degree of exposure caused by the underinsurance gap. Therefore, for a property worth £166,000, the degree of exposure caused by underinsurance were this property to be destroyed in the event of a coal spoil tip failure would be £83,000. This was considered as part of the overall cost calculation.

Calculating the cost of a coal tip landslide

- 3.9 The cost of a coal spoil tip failure is expressed as the sum of the property value, repair costs within the property, and clearance costs for the tip, all adjusted for the extent of under-insurance and extent to which damage is reparable.
- 3.10 This is expressed as an average across the number of spoil tips analysed and is illustrated below as follows⁸⁵:

$$\circ = [\sum((V_r \times Q_{ty} \times U_i), (C_r \times Q_{ty} \times U_i \times LF_{cr}), LF_{pd}) + C_{tc}] / n$$

Where

V_r = Value of the receptor e.g. house price using latest average price for the area

Q_{ty} = Number of receptor units e.g. number of houses within 100 metres of the tip

=

U_i = Degree of under-insurance, where 100% is completely uninsured

C_r = Cost of repair per unit, based on adaptation of available literature for flood damage

LF_{cr} = Loss factor for cost of repair, where the factor is 0 for total irreparable damage and 1 for reparable damage

LF_{pd} = Loss factor for property damage, where the factor is 100% for severe (irreparable) damage

=

C_{tc} = Clearance cost for the tip, using recently recorded costs for tip failure in Tylorstown

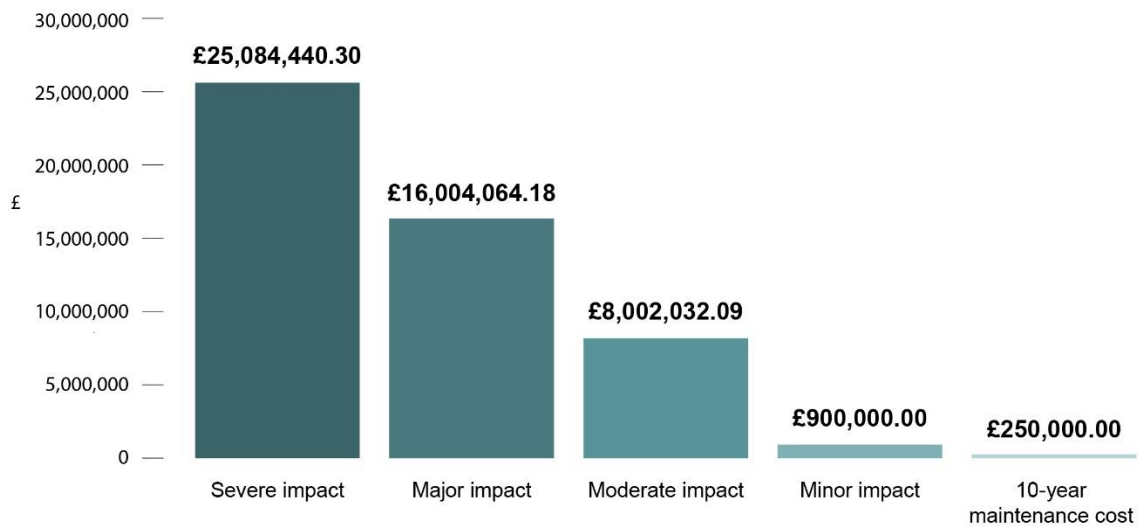
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n = Number of coal spoil tips considered

⁸⁵ An Excel model is provided as Annex A to this report

3.11 The following figures summarise the results. The calculations show that the total cost of a coal tip failure event could range between £900,000 if the impact is minor, according to the assumptions used for this analysis, and £25.1 million if the impact is severe.

Potential cost implication of coal spoil tip failure on residential properties



3.12 The findings of this exercise underscore the importance in undertaking preventive measures, ranging from proactive maintenance and management regime for the coal tips to measures that address the insurance gap that could potentially be created in the event of a disused coal tip failure.

Consultation Response Form

Your name:

Organisation (if applicable):

email / telephone number:

Your address:

1. Do you agree with the proposed approach to phase in non-coal tips over time, where this is appropriate?
2. Do you agree the new supervisory body should be a new Executive Welsh Government Sponsored Body?
3. Do you agree a 'de minimis' tip definition should be included in the Bill? If you agree – what attributes should be included?
4. Do you agree an owner of a 'de minimis tip' should be excluded from the duties outlined? If not please state your reasons.
5. Do you agree with the minimum content set out in this chapter? If not, please state what you consider would be appropriate minimum content?
6. Do you agree with the approach to adding new tips to the register?
7. Do you agree with the proposed approach to update the asset register? If not, please provide details on how you consider the asset register should be updated and by whom.
8. Do you agree with the proposal for the type of information to be made publicly available and which will be classed as excluded?
9. Do you agree with the proposed approach to measure hazard level? If not please specify your reasons.
10. Do you agree with the approach to developing categorisations? If not please specify your reasons.
11. Do you agree with the approach for interdependent and proximate clusters of tips?
12. Do you agree with the proposals for developing management plans? If not, please provide your reasons.
13. Do you agree with the tiered approach and the proposed frequencies of checks? If not please specify your reasons.
14. Do you agree with the split of responsibilities for inspections and appraisals? If not please specify your reasons.
15. Do you agree with the proposal for minimum content of reports and if so what do you consider is essential information?
16. Do you agree civil sanctions should be utilised by the Supervisory Authority to ensure compliance? If not please specify your reason.
17. Should the Supervisory Authority have discretion over what sanctions to use or should the sanction be stipulated in the legislation for each breach?
18. Do you agree with the list of activities? If not which activities do you consider need to be controlled on disused coal tips?

19. What control mechanisms do you consider need to be introduced to control certain activities on tips?
20. Do you agree with the proposals relating to development activities in the vicinity of higher status tips?
21. We would like to know your views on the effects that the proposed new regulatory framework for disused coal tips in Wales would have on the Welsh language, specifically on opportunities for people to use Welsh and on treating the Welsh language no less favourably than English. What effects do you think there would be? How could positive effects be increased, or negative effects be mitigated?
22. Please also explain how you believe the proposed policy could be formulated or changed so as to have positive effects or increased positive effects on opportunities for people to use the Welsh language and on treating the Welsh language no less favourably than the English language, and no adverse effects on opportunities for people to use the Welsh language and on treating the Welsh language no less favourably than the English language.
23. Do you have any other comments or useful information in relation to any of the proposals in this White Paper?

Responses to consultations are likely to be made public, on the internet or in a report. If you would prefer your response to remain anonymous, please tick here:

