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Regulating Coal Tip Safety in Wales: Summary of the Consultation Paper

Consultation Paper 255

9 June 2021

RESPONDING TO THIS PAPER

This is a summary of the full consultation paper, available on our website at <https://www.lawcom.gov.uk/project/regulating-coal-safety-tips-in-wales/>.

We are committed to providing accessible publications. If you require this consultation paper to be made available in a different format please email CoalTips@lawcommission.gov.uk

Duration of the consultation: We invite responses from 9 June 2021 to 10 September 2021.

Responses to the consultation may be submitted using an online form available at <https://www.lawcom.gov.uk/project/regulating-coal-safety-tips-in-wales/>. We are happy to accept comments in other formats. Please send your response:

By email to CoalTips@lawcommission.gov.uk

OR

By post to Regulating Coal Tip Safety in Wales Team, Law Commission, 1st Floor, Tower, 52 Queen Anne's Gate, London, SW1H 9AG.

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Regulating Coal Tip Safety in Wales: Summary of the consultation paper

The purpose of our consultation paper on *Regulating Coal Tip Safety in Wales* is to seek views on new legislation to combat the risks created by some of the more than 2,000 coal tips in Wales. The consultation period runs until 10 September 2021 and we want to hear from anyone who is affected by coal tips or has suggestions about how to make them safer. Information on how to respond to the consultation is on the first page of this document. We aim to produce a final report, making recommendations for new legislation, by early 2022.

This summary is designed to provide a readily accessible overview of the consultation paper. Further detail, including of sources, can be found in the full consultation paper, available online at <https://www.lawcom.gov.uk/project/regulating-coal-safety-tips-in-wales/>.

HOW THE PROJECT CAME ABOUT

- 1.1 The Tylorstown coal tip slide on 16 February 2020 brought down 60,000 tonnes of coal tip waste into the Rhondda Fach river in Rhondda Cynon Taf. The slide followed Storm Dennis, which brought unprecedented levels of rainfall across Wales. In response, the First Minister and the Secretary of State for Wales commissioned an urgent programme of work to ensure the safe and effective management of coal tips across Wales. This led to the creation of the Coal Tip Safety Task Force, headed by the Department for Environment and Rural Affairs. As part of this work, the Welsh Government commissioned the Coal Authority to carry out an immediate review of all coal tips in Wales.
- 1.2 The Welsh Government also invited the Law Commission to undertake an independent review of coal tip safety legislation. The project began in November 2020. The agreed terms of reference for the project are:

To review the law governing coal tips in Wales and consider options for a modern legislative framework, in line with Wales' existing legislation, including the Well-being of Future Generations (Wales) Act and Environment (Wales) Act, for regulating their safety.

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.¹

¹ In particular the project is to: (1) consider the current ownership and management of coal tips in Wales; (2) evaluate current legislation relating to the safety of coal tips, from the perspectives of human health and safety and of environmental impact, identifying gaps, inconsistencies and approaches which are unhelpful or have become outdated; (3) identify options for alternative regulatory models to be adopted in Wales; (4) identify the features needed to ensure that any proposed system is able to provide effective enforcement, and in particular a rapid and coordinated response when emergency works become necessary; (5) consider

- 1.3 It was recognised that the project was taking place alongside other coal tip safety priorities; the Welsh Government and the Coal Tip Safety Task Force are doing urgent work to mitigate the immediate risk.²
- 1.4 Our consultation paper has been prepared following discussions with a number of expert stakeholders who have helped to shape our understanding both of the law in this area and the reality of the work needed on the ground to ensure coal tip safety. There is a list of the people and organisations who met with us or helped us during this stage of the project in appendix 1 to the paper.

COAL TIPS AND THEIR SAFETY RISKS

- 2.1 Chapter 1 of the paper includes a brief history of coal mining in Wales, beginning in the Bronze Age. Coal mining was increasingly mechanised in the 19th and 20th centuries, culminating in the nationalisation of nearly one thousand working collieries across Great Britain at the end of the Second World War, by which time the population of the Rhondda had increased a hundredfold in a century. But mining had brought disaster as well as wealth. Some of the disasters are noted in chapter 1 and the still-remembered disaster at Aberfan in 1966 is described in chapter 4. Chapter 2 looks at the principal dangers that coal tips create for human life and health and the environment: instability, flooding, pollution and spontaneous combustion.

Instability

- 2.2 The greatest of the risks posed by coal tips is instability. Chapter 2 refers to a number of the coal tip slides which occurred in Wales following the dramatic growth in coal mining and mechanisation from the mid-nineteenth century onwards. Despite awareness of the precautions needed to stop tips sliding, improved practices were not adopted in time to prevent the Aberfan disaster, which claimed the lives of 116 children and 28 adults.
- 2.3 Coal tips are predominantly composed of shale, together with other material left behind after saleable coal is separated out from the material extracted from a mine. A tip is in effect a pile of loose solid material, which behaves quite differently to natural rock and soil.
- 2.4 A coal tip is likely to slide if the “disturbing” forces (that promote sliding) are bigger than the “resisting” forces. Anything that increases the disturbing forces in a tip – particularly water pressure – will make it less stable. For this reason, rainfall is a significant cause of tip slides. With 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. The current predictions are for this increase to continue.

how other countries with a significant history of coal mining approach coal tip safety, where these provide useful comparison and to the extent that such information is readily available; and (6) consider the impact of EU law and the effect on the existing regulatory framework of the UK leaving the EU.

² In order to deliver its objectives within the agreed timescale, the scope of the project was expressly limited in important respects: the project would focus on coal tips only and long-term legislation to tackle their safety risk; it would not review wider environmental law concerns except insofar as they were directly relevant to regulating the safety risk.

- 2.5 Adequate drainage is vital. But old drainage systems on tips, which have often fallen into disrepair, may not be good enough to handle the increased amount of water falling on them. Some older tips have no formalised drainage system at all. Even more modern tips, or older tips which have been re-profiled, were not engineered to withstand this heightened level of rainfall. The effect of the increased rainfall is to reduce their design life.
- 2.6 The problem of tip stability is particularly acute in South Wales, where narrow valleys led to the location of coal tips on steep slopes above areas of human activity.

Flooding

- 2.7 Tips can cause or contribute to flooding. Between 1952 and 1965, for example, 11 major flooding events occurred in Aberfan as a result of inadequate drainage on the tips above the village. The mechanisms by which tips cause flooding include the way in which they change the landscape, their lack of vegetation (which decreases their ability to hold water) and the impact of tip drainage on water courses. Where run-off contains solid particles, these contribute to the siltation of rivers, which can in turn cause flooding.

Pollution

- 2.8 The pollution in many of the worst quality watercourses in England and Wales is caused by drainage from coal tips. Coal tips release acidity, iron, manganese, aluminium and sulphate. These pollutants, released throughout the lifetime of the tip, persist in the environment if not removed. Suspended mineral particles present in the surface run-off from tips can turn rivers into salt marshes, clog the gills of fish, destroy fish and invertebrate habitats and hinder the growth of aquatic plants.
- 2.9 Acidity, known as acid mine drainage, is caused by the oxidation of iron sulphide (pyrite) in the spoil. This, together with concentrations of other minerals, is toxic to aquatic life. It is also corrosive and degrades soil. The oxidation process is the cause of orange water in impacted watercourses.

Spontaneous combustion

- 2.10 Coal tips can spontaneously combust and remain alight for many years. There have been many such fires in the UK. In 1967, the National Coal Board (NCB) owned 2,000 tips, of which 15% were classified as “burnt out” and over 50% as “burning”. Combustion can cause subsidence and form hidden cavities prone to collapse. Treating burning tips is hazardous, and has given rise to fatal accidents.

Remediation and reclamation of tips

- 2.11 But chapter 2 also describes in outline the work that can be done to remedy the hazards and to reclaim the land the coal tips stand on for other uses. Remediation is the term used for work to ensure the safety of tips; it may be precautionary, where features suggest that a failure may occur, be done to address movement or slippage that has already occurred, or consist of routine maintenance. Examples of precautionary or remedial works to increase or restore stability include reducing the height of a tip or the gradient of its slopes, improving a drainage system, and constructing a retaining wall. Routine maintenance work might include, for example,

clearing drainage channels. What is required in each case depends on an understanding of the individual tip; there is no “one size fits all” solution.

- 2.12 Reclamation aims to restore the land to beneficial use. It can include making the land able to be built upon, or to be planted with trees or vegetation.
- 2.13 Appendix 2 to the paper contains some photographs of Tylorstown and two neighbouring tips which illustrate a number of coal tip problems and remedies.

MAPPING THE COAL TIPS OF WALES

- 3.1 Chapter 3 looks at the present-day profile of coal tips in Wales: those associated with the the five mines still in use and the more than 2,000 that are disused. These range from small tips dating back to the days of unmechanised mining to the very large tips left behind by industrial mining operations. It looks at who owns the disused tips and how many of them may be potentially hazardous.
- 3.2 The historical section of chapter 1 notes the decline of coal mining in the UK since the Second World War, with the number of deep mine collieries declining to 16 by the time the industry was privatised in 1994. There are currently only five mines in Wales with associated tips. These operate under licences granted by the Coal Authority, which is the successor to the former NCB and British Coal; in Wales any new or varied licence must be approved by Welsh Ministers.
- 3.3 On provisional figures, there are 2,144 identified coal tips in Wales. Just over 70% of tips, 1,574 in total, are on private land or of unknown ownership. Local authorities own 354 tips (17%), and 183 (9%) are managed by Natural Resources Wales (NRW). The Coal Authority owns 33 tips (2%).
- 3.4 This pattern of ownership reflects the history of the coal mining industry and the three events – the nationalisation and subsequent privatisation of the coal industry and the marked decline in coal mining activity over the last half century – that have impacted on the ownership profile of coal tips in Wales.
- 3.5 Some older tips associated with coal mines were already disused at the time of the nationalisation of the coal industry in 1946. They were never nationalised and may be found on land under any type of ownership.
- 3.6 After privatisation of the industry, brought about by the Coal Industry Act 1994, land owned by British Coal was sold off directly or disposed of by way of Restructuring Schemes. At the time of sale, the cost of maintaining tips included with the sale was calculated. Many tips passed into private ownership at this time. Some were acquired by local authorities or by community groups. In some cases British Coal gave money to purchasers to contribute to the cost of maintaining the tips.
- 3.7 Where the cost of the contribution was considered to be unaffordable, British Coal, and subsequently the Coal Authority, retained ownership. It is for this reason that the Coal Authority continues to own a number of coal tips in Wales. This also explains why these tips are of a type requiring more maintenance and remediation work than many others.

- 3.8 Coal tips passed into the ownership of local authorities by a number of routes. Many were acquired through compulsory purchase, particularly under the Land Reclamation Programme, which began in 1996 and came to an end in 2012. The purchases often followed the closure of mines. Some were bought by local authorities from the Coal Authority after privatisation.
- 3.9 NRW manages coal tips owned by the Welsh Government on the Woodland Estate, which comprises the land formerly managed by the three legacy bodies of NRW: the Forestry Commission Wales, the Countryside Council for Wales and the Environment Agency Wales. In many cases the tips were acquired during the earliest years of the decline in the coal industry, beginning after the First World War, and were often used for planting trees.
- 3.10 In some case ownership of a tip is unknown or fragmented. Splits of ownership can occur when a tip had been built over, for example by a housing estate. A small number of tips are on unregistered land³ and it may be difficult to trace their ownership, particularly with the loss of specialist local knowledge within local authorities. Ownership can be made more complex by rights in common such as grazing rights held over areas containing coal tips. Open access rights also arise in some areas under the Countryside and Rights of Way Act 2000.

THE ABERFAN DISASTER AND THE MINES AND QUARRIES (TIPS) ACT 1969

The disaster

- 4.1 Chapter 4 gives an account of the Aberfan disaster and its aftermath. On 21 October 1966, a slide of material from one of the seven tips above the village of Aberfan overwhelmed two farm houses before destroying a school and a number of houses in the village. The disaster cost 144 lives, including 116 children; 109 of them, mostly aged between seven and ten, died in the village school.
- 4.2 The Aberfan Disaster Tribunal set up in response to the disaster found that the biggest contributing factor to the tip slide was the water that flowed through the tip from the streams below it, together with rainfall. The presence of streams beneath the tip was well known; in addition, subsidence beneath the tip caused by mining operations was found to have allowed water to collect under the tip. The tribunal found that there had been no regular inspection of the tips. Those inspections that had occurred had not been concerned with stability, despite expressions of concern by the local authority and engineers. The responsibility of the NCB for the disaster was found to be incontestable. The Tribunal highlighted that all tips should be regarded as potentially dangerous and treated as engineering structures.

The Mines and Quarries (Tips) Act 1969

- 4.3 The Mines and Quarries (Tips) Act 1969 was enacted in response to the tribunal's findings. Parliamentary debates on the Bill in 1968 shed light on the context in which the Bill was drafted and the intentions behind the new legislation. There was at that time an active coal industry able to take responsibility for tips associated with operational mines. It was thought that tips left behind by mines that had already

³ The ownership of land may still not be registered if the land has not been bought or sold for a very long time.

closed were less likely to be dangerous, and any problems of instability could be left to local authorities, assisted by a National Tip Safety Committee composed of engineers, surveyors and members of the NCB. Provision for the committee was not written into the Bill, however, and it appears that it was disbanded soon after the Act was passed.

- 4.4 The Act covers all tips associated with mines and quarries, not only coal tips. Part 1 of the Act, now repealed and replaced by Regulations under the Health and Safety at Work Act 1974, applied to tips associated with operational mines. The Mines and Quarries (Tips) Regulations 1971, made pursuant to Part 1 of the Act and also no longer in force, laid down duties in relation to the drainage, supervision, maintenance and inspection of all tips to which Part 1 of the Act applied. They also created an enhanced regime for “classified” tips, which, by reason of their size or location, were more likely to present a potential hazard.
- 4.5 Part 2 of the Act, which remains in force today, introduced rules around the “prevention of public danger from disused tips” (those associated with a mine or quarry that has been abandoned). It confers powers on local authorities to ensure that disused tips do not “by reason of instability, pose a threat to the public”. A tip is to be treated as unstable
- if and only if there is, or there is reasonable ground for believing that there is likely to be, such a movement of the refuse which makes up the tip as to cause a significant increase in the area of land covered by the tip.
- 4.6 Under these powers local authorities can gain access to information about tips and carry out exploratory tests. On service of a notice, the owner may be required to provide documents such as maps and surveys which could assist the authority in its assessment of the tip’s stability. The authority has a right of entry, also exercisable on notice save in an emergency, to conduct investigations to determine whether any instability might constitute a danger to the public. Exercise of the power of entry in an emergency requires reasonable ground to believe that the tip is unstable and that immediate entry is required.
- 4.7 Where the local authority is satisfied that a disused tip is unstable and constitutes a danger to the public, it may serve a notice on the owner requiring them to carry out remedial works within a stipulated time to secure the stability of the tip. The owner can instead give a counter-notice requiring the local authority to carry out the work (and the owner also has a right of appeal against the notice)
- 4.8 The local authority has a separate power to carry out the works itself, subject to giving 21 days’ notice unless it considers that there is immediate danger to the public. The authority also has power to recover the cost of the remedial works from the owner.

The Quarries Regulations 1999 and the Mines Regulations 2014

- 4.9 The regulation of tips associated with active mines originally covered by Part 1 of the 1969 Act is now covered by the Quarries Regulations 1999 and the Mines Regulations 2014, both made under the Health and Safety at Work Act 1974. The Mines Regulations apply to underground mines and the Quarries Regulations apply to open cast mines (and also to “coal washing” operations where an existing coal tip is re-worked to extract coal from the other constituents of the spoil). These Regulations

have brought mining legislation into line with most other health and safety provisions by replacing the more prescriptive approach adopted by the 1971 Regulations with goal-setting provisions.

- 4.10 An operator must ensure that a suitable appraisal of all existing or proposed tips is undertaken by a competent person to establish whether the tip is or would be a “significant hazard”. If the tip is not a significant hazard, further appraisals must be carried out at appropriate intervals, or whenever there is reason to suspect there has been or will be a change in circumstances affecting the stability of the tip. If a tip is deemed a “significant hazard”, thus becoming a “notifiable” tip, there is a duty to have a geotechnical assessment by a “geotechnical specialist” repeated every two years, or more frequently if there is reason to suspect that the current assessment might change or be flawed.
- 4.11 HM Inspectorate of Mines, a part of the Regulatory Directorate of the Health and Safety Executive, is responsible for the inspection of mines and the correct implementation of the Regulations. There is a parallel team, also operating under the Health and Safety Executive, responsible for the inspection of quarries.

OTHER LAW RELEVANT TO COAL TIP SAFETY

- 5.1 Chapter 5 of the consultation paper reviews other legislation of relevance to the regulation of coal tips, covering three EU Directives and the Regulations that have implemented them, and relevant environmental and other legislation enacted by the UK Parliament and the Senedd. It also considers new environmental legislation under consideration, and devolved legislative competence. It does so in order to explain the wider context within which the tip safety regime operates, and with which any new regulatory framework will need to be aligned.

EU Directives

- 5.2 The Directives discussed in this section are now retained EU law under section 2 of the European Union (Withdrawal) Act 2018, having been implemented in domestic legislation before EU exit, and thus continue to have effect in domestic law after exit day. They consist of the Mining Waste Directive, the Waste Framework Directive and the Water Framework Directive. A summary of their provisions is set out in the chapter.

Environmental Permitting Regulations

- 5.3 The requirements of the Waste Framework Directive and almost all of the Mining Waste Directive were transposed by the Environmental Permitting (England and Wales) Regulations 2010, replaced by the Environmental Permitting (England and Wales) Regulations 2016. (The Water Framework Directive is implemented in the UK through a river basin management planning process based on river basin districts.)
- 5.4 The 2016 Regulations require operators of (among other things) a “waste operation” or a “mining waste operation” to obtain an environmental permit. A mining waste operation is defined as the management of extractive waste that falls within the scope of the Mining Waste Directive, whether involving a mining waste facility or not. Any recovery or disposal of extractive waste which does not fall within the scope of the Mining Waste Directive will be a waste operation.

- 5.5 In granting a permit, the regulator, which in Wales is NRW, must ensure that all relevant statutory requirements will be met. It is a condition of any permit that the best available techniques (BAT) are employed to minimise any impact on the environment. Regulators are under a duty to monitor compliance with the terms and conditions of the permit, and to audit the operator's systems for the management and supervision of the facility. The regulator is also under a duty to undertake appropriate periodic inspections and can take enforcement action if the operator does not comply with requirements.
- 5.6 The 2016 Regulations create a number of criminal offences, including operation of a regulated facility without a permit and failure to comply with a permit condition. There is an emergency defence for an operator who can show that the acts in question were done in an emergency to avoid danger to human health, that all reasonable steps were taken to minimise pollution and that the regulator was informed promptly.
- 5.7 Waste from disused coal tips may be classed as inert and non-hazardous waste, or as hazardous waste. This will depend on its composition, and in particular its carbon content. Older tips typically have a higher carbon content because, in the past, more smaller pieces of coal extracted from mines were discarded as waste.

The Environmental Damage (Prevention and Remediation) (Wales) Regulations 2009

- 5.8 The Environmental Damage (Prevention and Remediation) (Wales) Regulations 2009 provide preventive powers in relation to an imminent threat of environmental damage, which could include a coal tip failure. This includes a power to require the operator of an activity that causes or may cause an imminent threat of environmental damage to take immediate steps to prevent the damage.

Other UK legislation of relevance to coal tip safety

Environmental Protection Act 1990

- 5.9 Section 79 of the Environmental Protection Act 1990 lists matters which will constitute a statutory nuisance. These include (as originally provided by the Public Safety (Coal Mine Refuse) Act 1939 in an attempt to control coal tip fires) "any accumulation or deposit which is prejudicial to health or a nuisance". Statutory nuisances are defined to include the emission of smoke, fumes or gases on premises (which include land).
- 5.10 Section 75 of the Act defines hazardous waste in Wales as meaning the list referred to in the Hazardous Waste (Wales) Regulations 2005. This in turn refers to those wastes classified as hazardous in the List of Wastes.
- 5.11 The current Environment Bill 2019-2021 will, if enacted, insert a new definition of hazardous waste into section 75 of the 1990 Act by a new subsection 8A, together with a new section 62ZA to make special provision in England and Wales for hazardous waste. This will include provision for new powers, including powers to prohibit or restrict any activity in relation to hazardous waste and for imposing requirements about how hazardous waste may be kept. Provision is also made for the creation of criminal offences and civil sanctions and for the recovery of charges for the treatment, keeping, disposal or re-delivery of hazardous waste.

Contaminated Land Regulations

- 5.12 Contaminated Land Regulations, made under Part 2A of the Environmental Protection Act 1990, place a duty on local authorities to inspect sites where land is suspected to be contaminated land. Part 2A came into force in Wales on 1 July 2001.
- 5.13 Where land is determined to be contaminated land, local authorities are required to ensure that it is remediated to an acceptable standard by one of a number of mechanisms, including agreeing remediation with the person who caused the contamination, or if that person cannot be found, the site owner or occupier. The authority can alternatively serve a notice on the person or undertake the work itself and recover the cost from that person.
- 5.14 In certain circumstances contaminated land may be designated as a special site. In this situation the role and responsibility of the local authority under Part 2A is transferred to NRW.

The Civil Contingencies Act 2004

- 5.15 The Civil Contingencies Act 2004 enables public authorities to prepare for and respond to emergencies. Part 1 is designed to deal with preparations by local responders for localised emergencies. An emergency is defined to include events or situations which threaten serious damage to human welfare or to the environment at a location within the UK.
- 5.16 Responders are divided into two categories. Category 1 responders are those at the core of the emergency response. In Wales this includes local authorities, the emergency services and NRW. Category 1 responders form multi-agency partnerships known as Local Resilience Forums (LRFs) to carry out their planning and preparation duties. A Welsh Minister has power to make an order to require a Category 1 responder to perform a function for the purpose of preventing, controlling, mitigating or responding to an emergency. Where the situation is urgent and there is insufficient time to make an order, the Minister may act by direction.
- 5.17 The threat to human welfare and to the environment of an unstable coal tip may fall within the definition of a Part 1 emergency. One of the objectives identified by the Welsh Government in its coal tip safety work is the integration of more detailed tip information into data held by local authorities and emergency services so that it is accessible to all LRFs. The intention is for the data to be held on the DataMapWales platform, a secure hosted platform within Welsh Government.

Other Welsh legislation of relevance to coal tip safety

- 5.18 Welsh primary legislation contains certain overarching principles which apply across the development of all policy, including overarching sustainable development principles established by the Well-being of Future Generations (Wales) Act 2015. The Environment (Wales) Act 2016 introduced a further set of principles to guide and support the development and implementation of policies on managing natural resources and to integrate these into the framework for sustainable development. A new regulatory framework for coal tips would need to align with both sets of principles.

The Well-being of Future Generations (Wales) Act 2015

- 5.19 The Well-being of Future Generations (Wales) Act 2015 places Welsh public bodies (including the Welsh Ministers, NRW and local authorities) under a duty to act “in accordance with the sustainable development principle”. This means that these bodies must act in a manner which seeks to ensure that the needs of the present are met without compromising the ability of future generations to meet their own needs. The objective is to assist better decision-making by ensuring that public bodies take account of the long term, help to prevent problems occurring or getting worse, take an integrated and collaborative approach, and consider and involve people of all ages.
- 5.20 Public bodies are also required to take action aimed at achieving the well-being goals set out in the Act. The most important of these goals, from the perspective of coal tip safety, are those which seek a healthier, resilient and prosperous Wales.

The Environment (Wales) Act 2016

- 5.21 The Environment (Wales) Act 2016 introduced a further set of principles, known as the Sustainable Management of Natural Resources principles, designed to guide and support the development and implementation of policies on managing natural resources in Wales. These principles include the need to consider short, medium and long-term consequences and the prevention of harm.

Environmental principles and responsibilities following EU exit

- 5.22 EU law includes four overarching environmental principles. These are the precautionary principle, the preventive principle, the rectification at source principle and the polluter pays principle. Wales has already made provision for the preventive and precautionary principles, as part of the sustainable management of natural resources principles enshrined in the Environment (Wales) Act 2016. The preventive principle is also reflected in the Well-being of Future Generations Act 2015. However, there is no equivalent of the polluter pays or the rectification at source principles.
- 5.23 A consultation was conducted in 2019 on the gaps in environmental principles and governance that might open up in Wales as a result of the UK's exit from the EU. Recommendations were formulated by an Environmental Governance Stakeholder Task Force based on the consultation responses. In late 2020, the Minister for Environment and Rural Affairs accepted the recommendation that all four EU principles should be introduced through primary legislation. She also indicated her support for a new environmental governance body for Wales that would be independent from government, able to scrutinise the implementation of environmental legislation, and provide a complaints and enforcement process. An interim environmental protection assessor has been appointed pending the introduction of legislation to implement the recommendations.
- 5.24 A reformed regulatory structure for coal tip safety would be subject to oversight by the new independent environmental governance body. This would provide scrutiny of any new regulatory framework and a complaints process.

Devolution

- 5.25 In our provisional view coal tip safety falls within devolved competence. Coal itself, including the ownership and exploitation of coal, deep and open cast coal mining, coal

mining related subsidence, and water discharge from coal mines, is listed in schedule 7A to the Government of Wales Act 2006 as a reserved matter. Land restoration is specifically excepted from the reservation. Under section 26A of the Coal Industry Act 1994, Welsh Ministers must approve licences for coal mining operations in Wales. Notification of approval is to be given to the Coal Authority. Matters relating to the environment, flood risk management and land drainage are not reserved.

CIVIL AND CRIMINAL LIABILITY FOR COAL TIP HAZARDS

- 6.1 There have been a number of cases involving the coal mining industry which illustrate how common law civil liability has provided a remedy for harm caused by a coal tip. The cases serve to highlight the distinction between regulatory action aimed at preventing harm from occurring, and the litigation which may follow after things have gone wrong, when the objective is to determine who bears responsibility for the damage caused.
- 6.2 The cases also show how difficult it is for the common law to set a specific threshold for responsibility. In contrast to a regulatory framework which can specify, for example, that all tips above a certain height should be inspected at specified intervals, the common law may consider the issue through the prism of what is reasonable in all the circumstances, or it may impose stricter liability.

Common law civil liability

The rule in *Rylands v Fletcher*

- 6.3 The rule in *Rylands v Fletcher*⁴ is a sub-species of the tort of nuisance. It establishes strict liability in the event of an escape of anything collected on a defendant's land in a non-natural use, where that escape is likely to cause harm and the damage is a natural consequence of the escape. The rule has been applied to colliery spoil tipped on a hillside without drainage provision so as to constitute a "dangerous thing".⁵
- 6.4 While the rule appears to be of sweeping application in its imposition of strict liability, it has been confined in its application to very limited circumstances. It only arises on a limited factual matrix in that it requires there to have been an escape. It is a remedy restricted to damage to land or interests in land; it does not apply to works or enterprises authorised by statute; liability is excluded if the escape is due to vandalism or unusual natural events; the circumstances of an escape not attributable to an unusual natural event or the act of a third party to which it would apply usually also give rise to an inference of negligence; and the exception for "natural" uses of land is broad and ill-defined. Another restriction on the application of the rule relates to remoteness of damage. Liability is limited to the reasonably foreseeable consequences of the escape.

⁴ (1866) LR 1 Ex 265, (1868) LR 3 H 330.

⁵ *Attorney-General and Others v Cory Brothers and Company Ltd and Others, Kennard and Others v Cory Brothers and Company Ltd* [1921] 1 AC 521, [1921] 1 WLUK 139.

Unreasonable use of land in nuisance

- 6.5 The case of *Anthony v The Coal Authority*⁶ in 2005 applied the broader principles of the law of nuisance in the context of coal tip safety. A coal tip which had operated as part of a colliery near Swansea from 1957 to 1972, when it was owned by the NCB, caught fire in 1996. The fire burned until 2000. The High Court found that by the 1970s scientific advances meant that the risk of fire had become foreseeable. From that point the owners came under a duty to do what was reasonable to abate the nuisance and were liable for the damage that followed the failure to abate it. The Coal Authority, as the successor to the liabilities of the NCB, was found liable in private nuisance.

Statutory civil liability

- 6.6 The Occupiers' Liability Acts 1957 and 1984 codify in statute the duty of care owed by those who occupy or exercise an element of control over land or premises to people who visit or trespass. Broadly, the duty of an occupier is to keep a visitor reasonably safe for the purposes for which they are on the premises. In respect of people on the premises who are not visitors, a duty of care arises if the occupier is aware of a danger or has reasonable grounds to believe it exists, and knows or has reasonable grounds to believe that the person is in the vicinity of the danger concerned. The duty of the occupier is to take such care as is reasonable in all the circumstances to see that they do not suffer injury by reason of the danger concerned.

Common law criminal liability

- 6.7 A person is guilty of a public nuisance who either does an act not warranted by law, or omits to discharge a legal duty, if the effect of the act or omission is to endanger the life, health, property or comfort of the public, or to obstruct the public in the exercise or enjoyment of their rights. The fault element is negligence.

The role of civil and criminal liability in securing coal tip safety

- 6.8 In our view the design of a new regulatory framework is the most effective approach to ensuring that appropriate steps are taken to prevent harm. Consideration of civil and criminal liability reinforces this view. While it may be able to provide a remedy after the event, we do not think that it is able to moderate the conduct of tip owners with sufficient precision to prevent harm occurring.

PROBLEMS WITH THE 1969 ACT

- 7.1 We spoke with stakeholders such as local authorities and NRW involved in the implementation of the Mines and Quarries (Tips) Act 1969. A number of shortcomings in the current regulatory regime were reported. These are discussed in chapter 7.

Loss of specialism

- 7.2 Many local authorities, particularly smaller ones, pointed to a loss of specialist skill in coal tip safety over the last two decades caused in the main by retirements, restructuring and funding constraints. A lack of resources also led to an inability to resolve coal tip safety problems proactively, for example by intervening with tip

⁶ [2005] EWHC 1654 (QB), [2006] Env LR 17.

drainage maintenance before the tip became a danger. The loss of Land Reclamation Programme funding to cover remediation work has made this problem worse.

Cumbersome procedures and inadequate powers

- 7.3 A number of problems were identified with the 1969 Act. It is outdated, as it was drafted at a time when the mining industry was active and specialist experience available. It is framed around ensuring that tips do not become a danger to the public by reason of instability, but surveying every tip to determine whether there is a danger is resource-intensive, and some authorities felt constrained by the need to show cause to suspect instability before exercising their powers. In addition, in order to exercise powers of entry in an emergency, the authority needs to be able to show that there is a danger to the public, which it sometimes cannot do without entering. Even where the authority is able to establish risk, the owner may dispute whether the work is necessary.
- 7.4 The mechanisms for serving notices were considered to be time-consuming, cumbersome and costly. Some authorities feared using the notice procedure as they risked incurring legal costs. Once a notice is issued, it can be time-consuming and costly to obtain compliance and to deal with disputes as to what work needs doing. While there are mechanisms to allow the cost of works to be recouped from the owner, the landowner might have few resources.
- 7.5 Local authorities felt there was a major gap in the legislation between inspection on the one hand and urgent remediation on the other. They were hampered by an inability to intervene to ensure that tip owners carried out routine maintenance or to do the work themselves. There was a consensus that it would be better for local authorities to be able to act proactively. Ultimately it is maintenance work that stops the tips becoming a danger. Proper maintenance would also be more cost effective: once a tip needs remediation work, the cost of the works is likely to be beyond the resources of most private owners.

Issues with landowners

- 7.6 A lack of awareness by tip owners of maintenance responsibilities was an issue. Activity on the tip can also compromise safety: modifications of use, tree felling and additional tipping can affect stability. Trespassers may vandalise drainage systems or use the tips for recreation in ways that cause erosion.

Clash of regimes

- 7.7 The 1969 Act was not designed to interact with environmental protection legislation. We were told about clashes between public safety responsibilities under the 1969 Act and the requirements of environmental legislation. These can obstruct remediation and clean-up works. Dealing with a tip slide is likely to fall within the definition of waste management in the Environmental Permitting Regulations, meaning that a permit will be required. The chapter gives examples of when this has occurred.

Declassification of tips

- 7.8 Some local authorities thought that there should be a system for declassifying tips that have been built on or remediated to such an extent that they pose little risk. Some tips have entirely disappeared, for example under motorways. Others, including

engineering experts, disagreed; if tip material was present, there would always be a risk, however small. They thought that a record should always be kept of such tips, even if there is nothing left to inspect.

Possible solutions

- 7.9 Stakeholders we spoke with identified a number of possible solutions. There was considerable support for some kind of oversight body. A supervisory body would be able to offer expertise, allocate resources to areas of greatest risk and ensure standardisation of risk categorisation and inspections. It could also offer economies of scale. Local authorities also wanted clearer powers to enter a site to carry out an inspection and to carry out or compel an owner to carry out basic maintenance works.
- 7.10 Other ideas to resolve the problems identified included powers to control destabilising activities on tips, an approved panel of engineers to ensure appropriate expertise, a fresh round of compulsory purchase, and long-term alternative uses for tip land such as for carbon capture and the protection of biodiversity. There were also proposals for resolving the problem of waste management legislation impeding tip safety work. Most suggestions involved balancing possible harms and ensuring that the solution with the least harmful long-term impact was identified.
- 7.11 The gaps and limitations in the current safety regime for disused tips described by stakeholders inform our provisional proposals in chapter 10. Before looking at how to remedy these deficiencies, we consider in the next chapters the initial coal tip safety work commissioned by the Welsh Government following the Tylorstown tip slide, and models drawn from the regulation of other environmental hazards which may provide alternative approaches.

THE INITIAL WORK COMMISSIONED BY THE WELSH GOVERNMENT

- 8.1 Following the Tylorstown slip in February 2020, the First Minister commissioned the Coal Authority to carry out an immediate review of all coal tips in Wales on behalf of the Welsh Government. This has involved two parallel work streams: data-gathering from local authorities as a first step toward building a complete database of coal tips, and emergency walkover inspections in conjunction with local authorities.
- 8.2 The data-gathering exercise involved collecting information on all tips, including their location, risk category and ownership type. Local authorities were asked for specified information on the tips in their areas, including their current risk category and any work being done on the tips. The Coal Authority found a wide range of approaches to record-keeping and no single system in place across all local authorities for assessing and categorising risk. The team adopted a provisional ABCD approach to risk rating based on the likelihood and consequences of tip failure. Under this system, D is the highest risk rating for a tip, and A is the lowest, with an additional category of R for fully restored tips.
- 8.3 By early 2021, the total number of disused tips had provisionally been recorded as 2,144. Approximately 300 tips have so far been provisionally identified as category C or D. Some 80 of these are category D, indicating a history of movement or signs of instability.

- 8.4 Walkover inspections were conducted in collaboration with local authorities on all tips which had been allocated a higher category (C and D) rating. The team provided written inspection reports and made recommendations to the local authorities, with timescales, as to maintenance requirements and remediation work needed. Where local authorities carried out the inspections, their reports were filed with the Coal Authority.
- 8.5 Following identification and inspection, the team compiled standard information for each tip. The next step involved mapping the boundaries of the tip, rather than recording a tip as a single point on a map.

Interim approach to organising tip data

- 8.6 The Coal Authority team have applied a provisional approach to the compiling of tip data. This involves the allocation of a reference number to each tip, and recording of its boundary, location, risk ranking, receptors (the land or structures that a tip slide would impact on), inspection frequency, dates of most recent and next inspection, ownership details and nearest weather station (to allow the checking of rainfall). The team envisages that specific documents such as inspection, maintenance and monitoring reports could be attached to the tip data to ensure that all relevant records were stored in one location.

Views of the Coal Authority on tip management

- 8.7 We also asked the team undertaking the work about their experiences in managing tips owned by the Coal Authority and their views on how to keep tips safe.

Inspections

- 8.8 The team assigns an inspection frequency based on risk. This may include additional inspections following heavy rainfall. Each inspection should confirm if the current risk rating remains accurate.

Maintenance and remediation

- 8.9 Maintenance and remediation options are considered based on the profile of the tip. These involve a progression of approaches including, for example, the clearing of drainage ditches, the installation of monitoring equipment, revegetating the tip, soil or slope nailing, major projects to build new drainage systems, and reprofiling to reduce the angle of slopes.

Tip management plan

- 8.10 A unique management plan is developed for each tip which includes all specified data, the risk assessment for the tip, the frequency of inspection and the maintenance and remediation work required.

Views on longer term tip management

- 8.11 The Coal Authority team drew on their experience of coal tip management to identify a number of elements which they considered important for the effective longer-term management of tips. The first of these was the creation of a single database providing the kind of standard information set out above and supported by a standardised process for inspection and reporting. They also thought that central management of all

higher risk tips was the best way to ensure the consistent assessment of risk and application of uniform maintenance standards. The application of a rigorous maintenance standard would, over time, reduce the level of risk. Uniform training standards for inspectors would support the system.

Longer-term work

- 8.12 Beyond the commissioned work described in this chapter, the Welsh Government is working with experts on longer-term best practice, including in relation to the impact of climate change and the development of a broader vision for tip reclamation. It is also trialling new technologies such as the use of sensors and satellite imaging to detect tip movement. There are plans to increase the use of drones.

OTHER REGULATORY MODELS

- 9.1 The gaps and limitations identified by stakeholders in the regime for disused tips provided by the Mines and Quarries (Tips) Act 1969 indicate where reform is needed. This chapter looks at models drawn from the regulation of other environmental hazards as possible alternatives to the existing regime. It seeks models which offer a shift away from a focus on specific and immediate safety-related problems to permit a more integrated and flexible approach to intervention.

The Reservoirs Act 1975

- 9.2 In Wales, the Reservoirs Act 1975 regulates large raised reservoirs that are capable of holding 10,000 cubic metres or more of water. The operators of these reservoirs, known as “undertakers”, are required to register them with NRW, which operates as the enforcement authority in Wales for the purposes of the Act. NRW has a duty to maintain the register and to make it available for public inspection. The register must contain the information prescribed by regulations.
- 9.3 NRW has a duty to designate a reservoir as a high-risk reservoir where it considers that, in the event of an uncontrolled release of water, human life could be endangered. Reservoirs designated as high risk are subject to an enhanced regime of inspection and supervision by qualified civil engineers engaged by the undertaker. High-risk reservoirs must be under the supervision of a supervising engineer at all times. An inspecting engineer from the appropriate panel of engineers must inspect the reservoir at intervals not exceeding 10 years and on other specified occasions provided by regulations. High-risk reservoirs are each assigned a risk categorisation to determine the technical standard to which they must be constructed and maintained. The risk categorisation is based on the consequences rather than the likelihood of failure.
- 9.4 Reservoirs not considered to be high-risk remain registered but are not subject to the same degree of inspection and supervision.
- 9.5 The Act provides for a panel or panels of civil engineers to be appointed. Where the Act stipulates that a qualified civil engineer is required, that engineer must be a member of the panel.
- 9.6 If it appears to NRW that any large raised reservoir is unsafe and that action is needed to protect people or property against an escape of water, the Act provides a power to take, under the supervision of a qualified civil engineer, “such measures as

they consider proper to remove or reduce the risk or to mitigate the effects of an escape". It has powers of entry onto land where a reservoir is situated to conduct an inspection, survey or other operation, including where the reservoir is abandoned. It also has the power to impose charges on undertakers as a means of recovering the costs incurred in performing its functions under the Act.

- 9.7 The elements in the reservoirs regime which appear to us to deserve consideration in building a new regulatory framework for coal tips are: the requirement to maintain a register; the ability to designate a reservoir as high risk in accordance with the level of hazard it poses and to create a distinct set of inspection and supervision duties where this designation is applied; the creation of a panel of specialist engineers to ensure that the work is done; and the enforcement of compliance by one central body. The approach to risk categorisation which considers the consequences rather than the likelihood of failure is also a useful model to determine the extent of intervention required.

The Quarries Regulations 1999 and Mines Regulations 2014

- 9.8 We looked at the Quarries Regulations 1999 and the Mines Regulations 2014 in chapter 4 as the regulations which replaced the provisions in the 1969 Act for tips associated with operational mines. We noted that a mine or quarry operator is placed under an overarching duty to ensure safety, and must make an appraisal of all tips to determine whether the tip is or could become a "significant hazard". If so, specific duties arise, including a duty to have a specialist geotechnical assessment at least every two years.
- 9.9 Elements of the Regulations offer a model for disused tips. They provide a blanket inspection regime to identify safety issues, rather than, as with the 1969 Act, a power to act only if a possible problem is apparent. The duty to designate higher-risk tips provides a means of distinguishing tips which require a more rigorous safety regime. They also provide a single central regulatory authority to monitor compliance.
- 9.10 As in the case of the reservoirs regime, this model places proactive duties on the operator in relation to inspection and maintenance. Unlike the reservoirs regime, it does not impose highly prescriptive duties on the operator. The rationale behind this is that those operating working mines have more familiarity with their industry and more knowledge of how best to achieve an overarching health and safety goal. In our view, a more prescriptive approach is more appropriate for disused tip owners, as they may have little knowledge of tip safety.

The Flood and Water Management Act 2010

- 9.11 Statutory powers over drainage systems to prevent flooding provide another useful model. Under the Flood and Water Management Act 2010, local authorities have a duty to establish and maintain a register of structures or features which may significantly affect a flood risk in their area. They are also required to keep a record of information about such structures and features including ownership and state of repair. The register, with the exclusion of personal or confidential data, must be available for public inspection at all reasonable times.
- 9.12 Schedule 1 to the Act also provides additional legal powers in Wales to designate assets or features which affect flood or coastal erosion risk. It increases regulatory

control over these assets or features. Designation places a duty on the owner not to alter, remove or replace the structure without the consent of the responsible authority.

- 9.13 Stakeholders explained to us that an important limitation on the power of designation was that it does not place a duty on the asset owner to maintain the structural integrity of the asset, to ensure performance, or to repair. Instead, councils have to rely on their powers under the Land Drainage Act 1991 to issue notices or to carry out necessary work and re-charge. With the addition of these duties, schedule 1 could provide a useful tool to compel tip maintenance.
- 9.14 A useful supplement to these powers would be a requirement for a tip owner to adhere to a specific maintenance plan for the tip. This could provide the information the tip owner requires to undertake the basic maintenance tasks which would prevent a tip becoming unstable. A model for such maintenance plans is provided by schedule 3 to the 2010 Act, in force in Wales but not in England. This introduces statutory standards for the design, construction, maintenance and operation of new rainwater drainage systems, and an 'approving body' to approve the drainage system before construction work can start. One of the standards stipulates that the design should include a proposed maintenance plan which addresses long-term management of the system.
- 9.15 Guidance produced by the Welsh Government recommends that the plan should include the type of maintenance activities required to ensure that the drainage system operates as designed to manage flood risk. It should also stipulate the frequency of these activities, their estimated cost and a site plan showing maintenance areas, access routes and locations where maintenance activities are anticipated.
- 9.16 A maintenance plan could provide a coal tip owner with a clear prescriptive set of maintenance obligations. As with the 2010 Act, failure to maintain could lead to enforcement action, with a right of appeal.

The Land Drainage Act 1991

- 9.17 An additional approach is to provide authorities with the power to intervene on private land to work on drainage systems on a proactive basis to prevent blockages arising. At present, powers available to local authorities under the Land Drainage Act 1991 are limited and in practice are exercised only in cases of outright drainage failure.

Contaminated land regime

- 9.18 The Part 2A regime provided by the Environmental Protection Act 1990 for the treatment of contaminated land, discussed in chapter 5 in our review of the law relating to coal tip safety, offers a hierarchy of mechanisms to authorities seeking to remediate contaminated land. These move from securing agreement with the appropriate person, to serving a notice to inform that person of what is required of them, to undertaking the work themselves after issuing the remediation statement and subsequently recovering the cost from the appropriate person. In practice, however, we learned that local authorities rarely use these mechanisms, and prefer to use the planning system to deal with contamination.
- 9.19 In certain circumstances contaminated land may be designated as a special site. In this situation the role and responsibility of the local authority as lead regulator for Part

2A is transferred to NRW. This model could be used, as in the case of the designation of higher risk reservoirs discussed above, to create a scheme for the designation of higher risk tips which would place them under the control of a single oversight body.

Non-native species

- 9.20 Powers under the Wildlife and Countryside Act 1981 (introduced by the Infrastructure Act 2015) enable NRW to control non-native species on private land which, if uncontrolled, could have significant impacts on biodiversity, other environmental interests or other economic interests. The scheme provides an example of a phased approach to intervention by an authority. Authorities investigate the presence of an invasive non-native species. Where possible, they reach a species control agreement with the landowners. Where this is not possible, a species control order may be imposed, requiring the owner to carry out species control operations or providing for the authority to do so. Orders may include provision for payment. There is a power of entry, limited by requirements of necessity and proportionality, and a right of appeal. A failure to comply with an order is a criminal offence.
- 9.21 The scheme offers a carefully graduated hierarchy of mechanisms to achieve its objectives, from agreement to order, either to compel the owner to do the work themselves or to allow the authority to undertake the work and recoup the cost. The nature of the hazard to be controlled differs from a disused coal tip. The regime does not impose a general duty to inspect; the power is exercisable where there is cause to believe the species is present. The issue of preventive maintenance does not arise.

The Environment (Wales) Act 2016

- 9.22 Section 16 of the Environment (Wales) Act 2016 provides NRW with a power to reach land management agreements for the sustainable management of natural resources. The provision permits the authority to reach an agreement with any person who has an interest in land in Wales about the management or use of the land, if doing so promotes “any objective it has in the exercise of its functions”. A land management agreement may, for example, impose obligations in respect of the use of the land, restrict the exercise of rights over the land, or provide for the carrying out of works as needed to fulfil the purposes of the agreement.
- 9.23 An extension of this power to permit management agreements to be reached between coal tip owners and the authorities charged with responsibility for coal tip safety could provide an effective approach to tip maintenance.

Control of water discharge from mines

- 9.24 Sections 4A to 4G of the Coal Industry Act 1994, inserted by the Water Act 2003, provide wide powers to the Coal Authority to control the discharge of water from mines. They are an example of a regulatory approach which allocates responsibility directly to an authority to conduct both management and remedial works, in a way which confers a wide discretion. The model is based on an acceptance that the discharge of water from mines is both a significant hazard and a liability arising from the historic mining industry which is the responsibility of the authority rather than the private owner. The powers are broad and encompass powers of entry and investigation in cases of risk both to the environment and human health, discretion as to the appropriate action to be taken, and powers of compulsory purchase.

9.25 The Coal Mining Subsidence Act 1991 is an example of a regulatory approach which places a duty directly on a regulatory authority to deal with a mining liability. Under the Act, the Coal Authority is under a duty to take remedial action in respect of subsidence damage to any property which has been caused by the withdrawal of support from land as a result of coal mining, save where the damaged land is within the area of responsibility of any person as the holder of a mining licence.

Statutory controls in other jurisdictions

9.26 We have also looked at other jurisdictions for possible regulatory approaches to disused coal tips. The approach often taken is to impose a requirement to provide a bond for the reclamation of a site at the time of the granting of a mining licence. An example of this approach is the Mining Waste Directive. This approach to regulation does not cover waste tips associated with mines abandoned before the introduction of regulatory legislation.

9.27 We were unable to discover any legislation relating specifically to the regulation of abandoned waste tips other than the 1969 Act. We were unable, for example, to find any legislation which places a duty to maintain or remediate an abandoned mine site. Instead, most models that we examined granted powers to state authorities to designate a site and to order remediation. These powers were usually accompanied by funds to finance the remediation, as well as powers of entry onto the site.

9.28 There are some interesting approaches to reclamation within Europe. In Germany, tips have been used for wind and solar energy farms. In Sweden, as long as coal waste does not have acid-forming potential, there are proposals to re-purpose the waste for construction projects. It is considered that these uses do not breach the Waste Framework Directive as long as the material is classified as a residual by-product of the main mining operation which can be used without processing, its end use is clear and use of the material is not prohibited for safety or environmental reasons. In France, tips have been used as biodiversity reserves. These initiatives provide models for projects seeking to restore beneficial land use rather than frameworks for safety-related maintenance.

PROVISIONAL PROPOSALS FOR A NEW COAL TIP SAFETY REGIME

10.1 Our review of the problems encountered in the current management of disused tips revealed a number of flaws in the 1969 Act regime. It confines permitted action to situations where there is a perceived risk to the public by reason of instability. It does not create a general duty to ensure the safety of coal tips. It does not provide a power to undertake preventive maintenance before a tip becomes a danger. It does not provide powers in respect of hazards other than instability. The powers it does create are fragmented across local authorities, leading to inconsistent safety standards and risk classifications. There is no mechanism to prioritise across all tips on the basis of risk.

10.2 We think a new regulatory framework needs to observe two principles: consistency of approach and the prevention of harm through a proactive rather than reactive approach. These principles align well with the sustainable development principle set out in the Environment (Wales) Act 2016 and the requirement in the Well-being of Future Generations (Wales) Act 2015 to act in accordance with this principle. In

particular, the sustainable development principle requires a public body to take account of the long term, to take action which helps to prevent problems occurring, and to take an integrated approach.

- 10.3 We also concluded that the framework should move away from a medium-specific to a more holistic approach. It should be capable of expansion to cover risks going beyond instability. It needs to be sufficiently robust to deal with the implications of climate change, and sufficiently flexible to work in tandem with other legislation providing environmental protection.
- 10.4 In chapter 10 we set out our provisional proposals for a new regime and ask whether readers agree with them, as well as asking for views on issues where we have not yet formulated a proposal. These questions are set out in full in the final section of this summary. There is a diagram setting out elements of our proposed regulatory framework at the end of this summary.

Tips associated with operational mines

- 10.5 Our provisional view is that it is not necessary to propose any change to the regime governing the few remaining tips in Wales associated with operational mines. We have been told that the existing regulatory legal regime, which regulates tips along with other aspects of the mining operations, is comprehensive and adequate. We think that a separate regime is needed for disused tips.

Elements of a new regulatory framework for disused tips

The definition of a disused tip

- 10.6 We ask for views on the definition of a coal tip in the light of the minor differences between the definition of a tip in the Mines and Quarries (Tips) Act 1969 and in the Mines Regulations 2014.

A single supervisory body for disused tips

- 10.7 We provisionally propose a single supervisory entity with a duty to supervise the management of disused tips in such a way as to ensure their safety. That duty could be defined in broad terms as a duty to ensure that the tips are not a danger to human life and well-being or to the environment. We do not think that the duty should be confined solely to the stability of a tip. The main benefit of a single supervisory authority is that it can monitor all disused tips and ensure compliance with all regulatory requirements to a consistent standard across Wales. The supervisory authority need not carry out all safety-related activities itself. Where appropriate, it could engage others to carry out particular activities; we canvass whether some duties should continue to fall on local authorities.

Tip register

- 10.8 We provisionally propose that one of the duties of a new supervisory authority would be to compile and maintain a tip register. The information already gathered by the Coal Authority tips response team could be the basis for the register, and we understand from the Welsh Government that work is already underway to compile a register. The register entry for each tip should include stipulated standardised information prescribed in Regulations.

- 10.9 Because it is possible that new coal tips could come to light, or active tips become disused, we provisionally consider that the authority should be able to add such tips to the register. We seek views on whether landowners should be under a duty to notify the supervisory authority of any tip on their land of which they become aware which is not on the register. We suggest that a right of appeal should be given where ownership or the identification of the area as a tip is disputed.
- 10.10 Duties to update the register will depend on where responsibility for conducting inspections, maintenance and remediation work falls. The options we consider are discussed further below. We think that the information on the tip register should be public, subject to any information which needs to remain confidential in order to comply with data protection law.

The definition of an owner

- 10.11 It will be important to have clarity about who is treated as the owner of a tip under the new regime. The definition provided in the 1969 Act, which treats any leaseholder as the owner if their lease has more than a year to run, seems to us to be capable of putting the liabilities of ownership in the wrong place. We suggest that the owner should be the freehold owner or a lessee under a lease for a term of 21 years or more.

Initial inspection and tip management plan

- 10.12 We provisionally propose that the supervisory authority should be under a duty to arrange an initial inspection of a tip for the purpose of a risk assessment and designing a tip management plan. The risk assessment could be based on the type of information currently being collected by the Coal Authority tips response team. This includes the physical profile of the tip and the areas that would be impacted in the event of a tip failure. It could include all risk factors including, for example, combustion and pollution. A single management plan for a cluster of neighbouring tips might be appropriate. Any plan would include specifications such as the frequency of inspection, any maintenance and remediation work required, and a timescale. We ask whether the Welsh Ministers should have power to prescribe the contents of management plans.

Classification of tips

- 10.13 The provisional risk classification system applied by the tips response team is by reference to the likelihood and consequences of a tip slide. We ask whether the approach adopted in the long term should have regard to other hazards as well.

Designation of higher risk tips

- 10.14 We provisionally consider that the designation of certain tips as requiring a more rigorous standard of intervention is an important dimension of a new regulatory scheme. Once a certain threshold is met, for example a “significant hazard” test as applied to tips related to operational mines and quarries, an enhanced safety regime would be applied with increased involvement of the supervisory authority.
- 10.15 We set out possible criteria for designation, and seek views on them. Given that designation would carry additional burdens for the relevant landowner, we also provisionally propose that a right of appeal against designation should be provided.

Responsibility for designated tips

- 10.16 Once a tip is designated, one option would be for the supervisory body to take over the whole of the inspection, maintenance and remediation work required by the tip management plan. This would ensure a consistent and proactive approach for each tip. It would keep all the relevant documentation up to date and in one place. It would also allow systematic prioritisation of work based on risk. An alternative could be that the tip owner is placed under a duty to carry out the work, using appropriately qualified engineers, and the supervisory authority is placed under a duty to inspect at sufficiently frequent intervals to ensure compliance and update records. The authority would also require enforcement powers in the event of non-compliance.
- 10.17 We are inclined towards the view that, in the case of designated tips, the authority should be responsible for ensuring that the work specified in the tip management plan is carried out, usually by carrying out the work itself. However, there may be cases in which a tip owner prefers and is better placed to carry out the work (or make arrangements for its carrying out) than the supervisory authority. This could in particular be so where the owner is NRW, a local authority or the Coal Authority.

Inspection by the supervisory authority

- 10.18 Where work is left to the designated tip owner, the regime would need to require and empower the supervisory authority to inspect the tips at appropriate intervals. We do not think it appropriate to leave the inspection to the tip owner. The tip management plan would stipulate the frequency of inspection for the particular tip. The authority's inspection duty should include a requirement to review the designation; where a tip is judged to have been returned to a state which no longer justified designation, the tip could be moved to the lower level regime that we discuss below.

Responsibility for lower risk tips

- 10.19 The vast majority of the tips on the tip database will not require designation. We have heard from stakeholders that the primary problem in the case of tips currently falling into the lower categories of risk is the absence of a power to ensure the carrying out of proactive maintenance work. This could prevent the tip from becoming a hazard. For this reason the application of the principle of prevention suggests a need to design a regime which operates to ensure that maintenance is carried out regularly and with a frequency dictated by the requirements of the particular tip.
- 10.20 For these tips we suggest an approach based on maintenance agreements. The relevant authority could be given a power to reach a tip maintenance agreement with a tip owner, backed by a power to make a maintenance order in the event of failure to agree or non-compliance with an agreement. These powers could be combined with a power to allow the authority to decide to carry out the work themselves. This would be a valuable option if it concludes that the cost of administering the tip agreement and securing compliance is likely to exceed the cost of the works. The maintenance agreements for the tips placed in this category could take a highly prescriptive approach to assist tip owners with low levels of knowledge of tip safety.
- 10.21 The regime would need to impose a duty to inspect the tips at appropriate intervals to ensure compliance. We do not think that it is justified to place this duty of inspection on disused tip owners. The tip management plan kept in the tip register would

stipulate the frequency of inspection for the particular tip. Following an inspection, the inspection record would be added to the tip register and in this way would keep the register up to date.

- 10.22 Adherence to the tip management plan could provide important protection for a tip owner from civil liability, as it would be a strong indication that the owner had done everything that could reasonably be required of them to prevent harm arising from the tip. This would not avoid liability under the rule in *Rylands v Fletcher*, but, as we saw in chapter 6, the rule has been confined in its application to very limited circumstances.

The authority responsible for oversight of tip maintenance agreements

- 10.23 Another choice which arises for this lower level category of tip is whether the new supervisory authority takes on responsibility for the making and oversight of maintenance agreements and orders and routine inspections. The alternative is for this to remain with the local authorities who have responsibility for disused tips at present. We can see advantages and disadvantages to each arrangement. A further alternative would be for the power to make agreements and orders to be given to the supervisory authority, and responsibility for supervising them to fall to the local authority.

Enforcement powers

- 10.24 In order to ensure that the new regulatory regime is effective, the authority tasked with its enforcement will require adequate ancillary powers. We provisionally propose that there should be a power of entry onto land containing a registered or suspected disused coal tip for prescribed purposes; we refer back to the regulatory regimes discussed in chapter 9 for possible models. We also propose that the power of entry should be exercisable for the purposes of investigating the presence of a coal tip or the need for maintenance or remediation works on a tip, and directing, supervising or carrying out works. We also set out proposals for sanctions for obstruction of entry and for non-compliance with a maintenance order.

Charging powers

- 10.25 We note in the consultation paper that Part 2 of the 1969 Act places financial responsibility for work on tips upon the owner (as defined), but that local authorities have found it difficult to recoup funds from landowners. We also note that there is no power to charge for maintenance work or for exploratory tests which do not lead to remedial works. In practical terms, it can be more cost-effective for a public body to carry out preventive maintenance work upon tips than to check up on and enforce the carrying out of this work by a landowner.

- 10.26 A possible approach to funding the work on designated tips could be to follow the reservoirs model by imposing a fee on the owner of a tip at the time of registration, and an increased annual fee on the owner of a designated tip. Alternatively, the charging structure could be designed to reflect the type of work required on the individual tip. Policy choices about the extent to which tip owners bear the cost of coal tip safety measures are a matter for the Welsh Government and not for us. We propose a general power to impose charges so as to enable these choices to be made.

Claims for compensation or contribution and appeals

10.27 The rights to compensation and contribution created by the 1969 Act are complicated and cumbersome. We summarise them in the consultation paper and ask for views on the extent to which they are still necessary, particularly in light of our proposed revised definition of an owner. We also look at possible bodies to hear claims and appeals under the new scheme. These could arise between private parties, for example in relation to compensation, or between a private party and an authority. We look at existing models for appeal rights and ask for views.

Panel of engineers

10.28 In addition to the elements we have outlined above, we provisionally consider that the creation of an approved panel of engineers with specialist qualifications to inspect and supervise operations on coal tips is a good way to ensure both consistency and safety.

Clashes between environmental legislation and tip safety

10.29 A more efficient regulatory framework will help to ensure that tip emergencies do not occur, but it is still important that the law should not act as a barrier to a solution if such an event does occur. For this reason, it is important to reconcile the need to dispose of tip material if it slides or is otherwise displaced and the requirements of environmental legislation. There are also non-urgent instances when environmental legislation clashes with tip maintenance.

10.30 We do not think that an outright exemption for tip material from environmental legislation is the answer. Part of the solution may be to provide a power drafted along the lines of the powers in the Civil Contingency Act for Welsh Ministers to give directions in the event of a coal tip emergency or threatened emergency. The directions could enable action to be taken to avoid danger to human health and safety while also requiring consideration of the need to minimise harm to the environment. They could also require the supervisory authority to seek any necessary permits or planning permission when this becomes feasible.

10.31 It might also assist to amend the emergency provision in the Environmental Permitting Regulations to ensure that not only the immediate emergency response but, where appropriate, short to mid-term actions taken are not in breach of the regulations. At present, Regulation 40(1) provides for an authority to take action in an emergency to avoid danger to human health, where all reasonable steps have been taken to minimise pollution and the regulator is informed promptly. The regulation could provide in addition for the authority to be protected in the aftermath of an emergency, until such time as it is feasible to apply for the appropriate permits to cover the longer-term solution. This could provide protection unless it could be shown that those acting were aware of the risk of environmental harm and failed to take reasonable precautions.

10.32 Alongside legislative changes, the Welsh Government is drawing up a Protocol to ensure that the authorities involved in an emergency involving a coal tip are able to coordinate their response, agree the best approach in the circumstances and keep an audit trail of their actions. Guidance supporting a more collaborative and pragmatic approach will help to ensure that all parties consider the possibilities, and weigh the

public safety and environmental harms of each course. Part of a more collaborative approach could be to have contingency plans for the storage of tip material in the event of a slide.

10.33 Once the authority is in a position to seek consents for a longer-term solution to the disposal of the material, it may remain very difficult to find a solution for the disposal of such large volumes of material. The Environmental Permitting Regulations themselves may need amendment or changes could be made at the level of guidance to allow bespoke storage solutions for tip material. We seek views on these various options.

Reclamation projects

10.34 Stakeholders have also suggested that, with the heightened risk of coal tip drainage failure created by climate change (effectively hastening the end of the design life of the tip) the time is also ripe for a fresh round of tip reclamation projects. It might be possible to combine our proposed enhanced regime for higher risk tips with a longer-term strategic development approach to identify tips for larger capital projects. The process of tip designation we have outlined above could include consideration of their suitability for reclamation. One vehicle which could be used for this would be a corporate joint committee set up under the Local Government and Elections (Wales) Act 2021.

10.35 This approach would allow the development in effect of a Centre of Excellence for tip reclamation. Sustainable development principles under the Well-being of Future Generations (Wales) Act 2015 and Environment (Wales) Act 2016 could guide policy choices around tips. These principles include the need to consider the long-term public good. The sustainable development principles can work to re-shape concepts of economic value in the context of the climate crisis. As we note in chapter 7 of the consultation paper, one option would be to use reclaimed tips for carbon capture or for the protection of biodiversity. Traditionally, reclamation projects have relied on compulsory purchase of tip sites, but alternatives can be found in recent projects to remediate metal mine sites which have been based on agreements with landowners.

10.36 These suggestions extend beyond our terms of reference, but we think their inclusion reflects stakeholder concerns, helps to future-proof the regulatory framework, and is in keeping with the wider norms governing environmental policy making in Wales. We seek views.

CONSULTATION QUESTIONS

Consultation Question 1.

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

Do you agree?

Consultation Question 2.

10.38 We seek views on whether a satisfactory definition of a disused coal tip could refer to waste from coal mining and whether it should include express reference to overburden dumps, backfill, spoil heaps, stock piles and lagoons.

Consultation Question 3.

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

Do you agree?

Consultation Question 4.

10.40 To the extent that liability under the new regulatory framework rests with the owner of land containing a tip, we provisionally propose that the owner should be defined as the freeholder or a leaseholder under a lease of 21 or more years, except where their interest is in reversion upon a term of 21 or more years.

Do you agree?

Consultation Question 5.

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

Do you agree? If not, please set out the alternative that you would favour.

Consultation Question 6.

10.42 We seek views on whether the supervisory authority should be an existing body or a newly created body.

Consultation Question 7.

10.43 If a new body is established, what form should the new body take? Should it be, for example, a central public body, a corporate joint committee of local authorities under the Local Government and Planning (Wales) Act 2021, or something else?

Consultation Question 8.

10.44 We provisionally propose that the supervisory authority's duty to ensure the safety of tips should be framed as a general one, rather than one limited to specified risks.

Do you agree?

Consultation Question 9.

10.45 We provisionally propose that a central tip register should be compiled and maintained.

Do you agree?

Consultation Question 10.

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

Do you agree?

Consultation Question 11.

10.47 We provisionally consider that

- (1) the supervisory authority should have a duty and a power to include on the register any tip of which it is or becomes aware; and
- (2) an owner of land should have a right of appeal against the inclusion of the landowner as owner of land on which a tip is situated; the grounds of appeal should be (a) that the land owner is not the owner of the land in question and/or (b) that there is no tip situated on the land.

Do you agree?

Consultation Question 12.

10.48 We seek views on whether an owner of land should be under a duty to notify the supervisory authority of any tip of which the landowner is or becomes aware situated on land owned by the landowner, unless the landowner has reason to believe that it has already been registered.

Consultation Question 13.

10.49 Do you think that the information in a tip register should or should not be publicly accessible? Are there any particular categories of information that should not be published?

Consultation Question 14.

10.50 We provisionally propose 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.

Do you agree?

Consultation Question 15.

10.51 We provisionally propose that

- (1) 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; and
- (2) the Welsh Ministers should have power to prescribe the matters to be included in a risk assessment and management plan by statutory instrument.

Do you agree?

Consultation Question 16.

10.52 We provisionally propose that the risk classification of coal tips should have regard to the risk of instability of a tip and the consequences of a slide of spoil.

Do you agree?

Consultation Question 17.

10.53 Should coal tip classification also have regard to the risk the tip presents of pollution, combustion or flooding?

Consultation Question 18.

10.54 We provisionally propose that the coal tips safety legislation should provide for the designation of a coal tip by the safety authority as “higher risk” where the tip meets criteria prescribed by the Welsh Ministers by statutory instrument.

Do you agree?

Consultation Question 19.

10.55 We seek views on whether the designation of a tip should be by reference to any of the following, or other, criteria:

- (1) the tip shows signs or has a recent history of movement or instability;
- (2) a slide of spoil from the tip would be likely to impact or affect
 - (a) buildings or areas designed for human habitation or occupation;
 - (b) a road, railway, canal or other infrastructure; or
 - (c) a watercourse;
- (3) there is a substantial risk of the tip releasing dangerous pollution into the environment;
- (4) there is a substantial risk of the tip causing flooding;
- (5) there is a substantial risk of material in the tip spontaneously igniting;
- (6) the tip requires engineering work.

Consultation Question 20.

10.56 We provisionally propose that a person aggrieved by a designation of a coal tip as higher risk should have a right of appeal.

Do you agree?

Consultation Question 21.

10.57 We provisionally propose 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 for the tip.

Do you agree?

Consultation Question 22.

10.58 We provisionally propose that an authority should be empowered to enter into a tip maintenance agreement with the owner of land registered in the tip register, providing for the carrying out by the owner of the operations specified in the tip management plan.

Do you agree?

Consultation Question 23.

10.59 Do you agree that a duty of inspection should fall to an authority to ensure compliance with the tip maintenance agreement?

Consultation Question 24.

10.60 We provisionally propose that an authority should be able to make a tip maintenance order where

- (1) the owner has failed to comply with an agreement entered into and has been given appropriate notice of that failure and reasonable opportunity to rectify it;
- (2) the owner has been offered an agreement and has refused to enter into an agreement on suitable terms or has failed to respond within 42 days, and the authority think it unlikely that the owner will agree;
- (3) the authority considers the work specified in the order to be urgently necessary; or
- (4) it has been impossible to identify the owner despite having taken specified steps to do so.

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

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

10.63 The owner should have a right of appeal against the imposition of a maintenance order.

10.64 Save in the case of an emergency order, the order must provide sufficient time within which to appeal.

Do you agree?

Consultation Question 25.

10.65 Do you think that responsibility for tip maintenance agreements for lower risk tips should fall to the supervisory authority or lie with local authorities?

10.66 If you think that responsibility should lie with the local authority, should this include both making and supervising the agreements, or should the supervisory authority be given the duty to make the agreement?

Consultation Question 26.

10.67 We provisionally propose that

- (1) 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
 - (a) inspecting or carrying out tests upon a known or suspected coal tip; and
 - (b) performing, supervising or inspecting works of maintenance or remedial operations upon a coal tip;
- (2) the power of entry should be exercisable upon 48 hours' written notice to the owner and any other person known to be in occupation of the land or in an emergency;
- (3) 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 authorising entry by force;
- (4) persons authorised to enter land under these provisions should have power to take with them other persons or equipment as necessary; and
- (5) obstruction of any authorised person or of an inspection, test or works should be a summary offence.

Do you agree?

Consultation Question 27.

10.68 We provisionally propose that failure, without reasonable excuse, to comply with a tip maintenance order should be a summary offence.

Do you agree?

Consultation Question 28.

10.69 We provisionally propose that the supervisory authority and any other public bodies having functions under the coal tip safety scheme should have a general power to charge fees and expenses to the owner of land containing a tip, which could include periodic charges.

Do you agree?

Consultation Question 29.

10.70 Is it appropriate for legislation underpinning a new coal tip safety regime to include

- (1) a power to sell material not belonging to the owner of a coal tip that is removed from a tip in the course of remedial work on the tip; if so, should it be accompanied by a duty to account to the owner for the proceeds of sale?
- (2) provision for compensation where an order to carry out remedial works is revoked?
- (3) a duty to compensate persons other than the owner of a tip for damage to or disturbance of enjoyment of land in consequence of tests or remedial operations?
- (4) provision for the discretionary award of financial contributions to the liability of an owner? If so, should the categories of person liable be as set out in section 19(1) of the Mines and Quarries (Tips) Act 1969 and the circumstances to be taken into consideration be as set out in section 19(4) of the Act? If they should not be, what alternative provision should be made?

Consultation Question 30.

10.71 Do you think that a panel of engineers with specialist qualifications to inspect and supervise prescribed types of work on coal tips is a good way to ensure consistency and safety?

Consultation Question 31.

10.72 Do you think that the Welsh Ministers should be able to give directions to the supervisory authority and other relevant parties regarding actions to be taken in response to a coal tip emergency?

Consultation Question 32.

10.73 Do you think that the power of the supervisory authority to take action in an emergency pursuant to regulation 40 of the Environmental Permitting Regulations (England and Wales) 2016 should be widened? If so, in what way?

Consultation Question 33.

10.74 Do you suggest any other approaches to deal with clashes between environmental legislation and tip safety? If so, please set them out.

Consultation Question 34.

10.75 Do you think that new tip safety legislation should be combined with provision for the consideration of tip reclamation? If so, do you favour any particular model?

DIAGRAM TO REPRESENT ELEMENTS OF OUR REGULATORY FRAMEWORK



