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Aberfan: Inevitable or preventable disaster? An examination of coal waste management and safety 1800-1967: the mistakes that led to tragedy.

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A329 The Making of Welsh History Dissertation

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‘Aberfan has become part of the
collective memory of Wales,
and was arguably a defining
moment in the nation’s history.’¹

Introduction

The South Wales Coalfield is the largest continuous coalfield in Britain, covering an area of around 1000 square miles. In its heyday around the early twentieth century almost a quarter of a million men were employed within the coalfield, and the South Wales Coalfield played an important role in the Industrial Revolution.² Although by the time this study is set this number had declined significantly, it was still a major source of coal production.³ The mining industry was dangerous, and many accidents and larger scale disasters took place throughout the nineteenth and twentieth centuries. Some of these were single deaths and others were major disasters, such as Senghenydd in 1913 where 439 workers were killed and Abercarn in 1878 where 268 lives were lost.⁴ The focus of this study is the tragedy at Aberfan at 9.15am on 21st October 1966, where a coal waste tip from Merthyr Vale Colliery slid down the mountainside destroying everything in its path. As well as several houses and a farm, the most tragic aspect of the disaster is that the slide engulfed

¹ Martin Johnes, Iain McLean, ‘Echoes of Injustice’, *History Today*, 50.12 (2000), p. 28.

² Anon., ‘Colliery Spoil Biodiversity Initiative’, Colliery Spoil Online, Available at: [Home | Colliery Spoil Biodiversity Initiative](#), Accessed 20 March 2022.

³ Anon., ‘Coal: A Teaching Resource Pack’, National Museum Wales Online, Available at <https://museum.wales/media/45813/pitheadsresourceENGLISH.pdf>, Accessed 23 March 2022.

⁴ Anon., ‘Welsh Mining Disasters’, Welsh Coal Mines, Available at: <https://www.welshcoalmines.co.uk/DisastersList.htm>, Accessed 28 March 2022.

Pantglas Junior School where pupils had just arrived for the school day. The tragedy resulted in 144 people being killed, 116 of them children.⁵ The horror of the event was felt around the world, but what made the catastrophe even more unimaginable was the news that surfaced of previous tip slides and warnings that had apparently been ignored by the National Coal Board (Henceforth, the NCB).⁶

Whilst the disaster and its aftermath are heavily documented with an immense amount of both primary and secondary sources, there is a gap in easily accessible information of coal waste management and safety at collieries in South Wales and this is dissertation aims to address this, along with the policies of the NCB. Coal had been mined in Wales from as early as the sixteenth century, but it was during the nineteenth century the industry really began to expand.⁷ The idea of there being the need for any legislative control with regards to safety within the mining industry was first advocated around the very end of the eighteenth century with regards to the need for preserving mining records showing plans and workings of the mines. Going into the twentieth century mine safety was regularly on the parliamentary agenda, frequently debated in the commons sittings and opinion was clear; 'Safety must always be in the forefront of the consideration of mining matters, because danger cannot be wholly eliminated from mines'.⁸ With the nationalisation of the coal industry and the appointment of the NCB in 1947, the responsibility for the safety, health and welfare of all employees fell under one main body.⁹ However, was this

⁵ Iain McLean, 'On Moles and the Habits of Birds: The Unpolitics of Aberfan', *Twentieth Century British History*, 8.3 (1997), p. 286.

⁶ Johnes, McLean, 'Echoes of Injustice', pp. 28-30.

⁷ Anon., 'Coal: A Teaching Resource Pack'

⁸ Lieut.-Commander Fletcher, *Safety in Mines*, (House of Commons Sittings 1938), 14 December 1938, Volume 342 cc2085-141. Available at [SAFETY IN MINES. \(Hansard, 14 December 1938\) \(parliament.uk\)](https://hansard.parliament.uk/hansard-volumes/1938/dec-14-1938/HC-deb-1938-12-14-1), Accessed 30 March 2022.

⁹ 'Records Created or Inherited by the National Coal Board, and of Related Bodies', The National Archives, Kew, Available at <https://discovery.nationalarchives.gov.uk/details/r/C58>, Accessed 1 April 2022.

enough to also protect the general public, who were the main victims in the Aberfan disaster?

For primary source material on the disaster itself there are various mediums to look at including parliamentary reports and newspaper articles from the time. Many parliamentary reports became available under the thirty-year rule, giving access to, amongst other items, the *Report of the Tribunal Appointed to Inquire into the Disaster at Aberfan* (1967).¹⁰ This 151-page document gives a thorough insight into how the coal industry was run at the time and its attitude towards safety.¹¹ The historiography on the Aberfan disaster and subsequent debate is prolific. One leading contributor is Professor Iain McLean who has published many articles on what led to the tragedy and different aspects of how it was dealt with afterwards. McLean claims that although the NCB argued the 'causes of the disaster were unforeseeable', the signs of an impending disaster had been apparent since 1944.¹² Along with historian Martin Johnes, McLean co-authored *Aberfan: Government and Disasters* (2000)¹³ which studies many documents and reports relating to the disaster and which incorporates McLean's article *On Moles and the Habits of Birds: The Unpolitics of Aberfan* (1997).¹⁴ This article asserts 'colliery engineers at all levels concentrated only on conditions underground'.¹⁵ So was mine safety purely

¹⁰ Lord Herbert Edmund Davies, *Report of the Tribunal Appointed to Inquire into the Disaster at Aberfan on October 21st 1966*, HMSO, 19 July 1967, (Glamorgan Archives), Available at https://parlipapers-proquest-com.libezproxy.open.ac.uk/parlipapers/result/pqpdocumentview:pdfevent?pgid=faf7f5d2-0536-4604-9cbd-65a6ccd916c1&rsid=17f84408af9?&pdf=/app-bin/parliamentary-paper/8/3/a/8/1966-054827_complete.pdf, Accessed 21 March 2022.

¹¹ Davies, *Report of the tribunal*.

¹² Iain McLean, 'It's not too late to say sorry', *Times Higher Education* (1997), p. 1. Available at <https://www.timeshighereducation.com/features/its-not-too-late-to-say-sorry/102417.article>, Accessed 24 March 2022.

¹³ Martin Johnes, Iain McLean, *Aberfan: Government and Disasters*, 2nd ed. (Cardiff, 2000), Welsh Academic Press.

¹⁴ McLean, 'On Moles and the Habits of Birds'.

¹⁵ McLean, 'On Moles and the Habits of Birds', p. 286.

directed at keeping mine workers safe underground, with all other aspects of safety and extended risks such as waste disposal and tip stability, disregarded as non-important? The Tribunal asserted that tips were the ‘rubbish’ of the coal mining industry, they were not the lucrative product, and because of this they were ‘largely banished from thought’.¹⁶ In her book *Aberfan: A Disaster and its Aftermath* (1974) Joan Miller refers to the claim; ‘a sequence of earlier events could and should have been interpreted as a warning of a possible disaster’.¹⁷ Previous non serious slides, that could have acted as a warning, had been brushed aside. John Preston, in his article *From Aberfan to the ‘Canvey Factor’: schools, children and industrial disasters* (2016), claims ‘there was an acute awareness by the children, parents and teachers of the school of the problems of the tip’.¹⁸ Richard A. Couto shines a different light on factors that led to the disaster. In his article *Economics, Experts, and Risk: Lessons from the catastrophe at Aberfan* (1989) Couto states that economic need was fundamental to the disaster.¹⁹ Sir Andrew Bryan’s book *The Evolution of Health and Safety in Mines* (1975)²⁰ gives a good background to the history of all safety features of the coal mining industry and Bryan himself submitted a report that was used at the Tribunal. He acted on behalf of the British and National Associations of Colliery Management, and as a former H.M. Chief Inspector of Mines and a former member of the NCB he was well placed to propose recommendations.²¹ Although his book covers a very thorough history of safety in coal mines of Great Britain, like with other publications of such nature, there is a gap in the historiography of the

¹⁶ Davies, *Report of the Tribunal*, p. 31.

¹⁷ Joan Miller, *Aberfan: A Disaster and its Aftermath* (London, 1974), p. 24.

¹⁸ John Preston, ‘From Aberfan to the ‘Canvey Factor’: schools, children and industrial disasters’, *British Journal of Sociology of Education*, 37.4 (2016), p. 616

¹⁹ Richard A. Couto, ‘Economics, Experts, and Risk: Lessons from the catastrophe at Aberfan’, *Political Psychology*, 10.2 (1989), p. 309.

²⁰ Sir Andrew M. Bryan, *The Evolution of Health and Safety in Mines* (London, 1975)

²¹ Davies, *Report of the Tribunal*, p. 137.

safety procedures and management of coal waste specifically, at collieries not only in South Wales but in Britain as a whole.

Chapter One of this dissertation will focus on the NCB and how it operated prior to, and at the time of, the disaster. There had been two previous non serious slides at the Merthyr Vale Colliery, in 1944 and 1963, and despite warnings from the local council to the NCB, agreed action which may have prevented the disaster was not taken.²² Part of this chapter will then examine the *Report of the Tribunal* to ascertain exactly what caused tip number 7 to collapse on 21st October 1966. Chapter Two will explore the event itself and how people in authority reacted in the immediate aftermath. This will touch on the reaction of the NCB and whether they were unwilling bystanders to an inevitable chain of events or the cause of them. Many contemporary primary sources are accessible in the form of newspaper reports, which can help us see how people saw the tragedy at the time. This chapter will also concentrate on the findings of the inquiry through extensive study of the *Report of the Tribunal* which will enable the question of 'inevitable or preventable disaster' to be answered. It will explore the NCB's defence and whether their procedures were justified or whether, as one father claimed at the time, the victims were 'buried alive by the National Coal Board'.²³

²² Miller, *Aberfan: A Disaster*, pp. 24/25.

²³ Sarah Williams, "'Buried alive by the National Coal Board": the fiftieth anniversary of the Aberfan Disaster Tribunal', *Revolutionary Socialism in the 21st Century*, Available at <https://www.rs21.org.uk/2017/08/03/buried-alive-by-the-national-coal-board/>, Accessed 2 April 2022.

Chapter One

Merthyr Vale Colliery was first sunk in 1869 and within six years the first coal was being produced. By 1918 over two and a half thousand people were employed by the colliery.²⁴ Before the colliery the area simply consisted of a handful of cottages and scattered farmhouses along with a public house but once the mine was completed it created the village of Aberfan. Early in the nineteenth century it had been discovered that Welsh coal was cleaner and of a better quality than Newcastle coal and a large market for Welsh coal opened up.²⁵ Early legislative control concerning mine safety arose towards the end of the eighteenth century in relation to coal mining in the north of England. The first suggestions regarding a need for mine safety was for the preservation of plans showing the scope and position of mine workings due to loss of life caused by flooding. Without such plans of abandoned mine areas it was not possible to avoid making accidental contact with derelict water-logged workings.²⁶ Although suggestions were prepared and a paper presented to the Literary and Philosophical Society of Newcastle upon Tyne in 1796, no further action was taken at the time.

Over the next 50 years mining accidents with a large loss of life continued to happen all over Great Britain, and although many recommendations were made, it was not until 1850 that a bill was introduced recommending a mine inspectorate body. Inspectors would be empowered to oversee all operations and it suggested for the first time that the keeping of mine plans should be made compulsory. This bill became the Act for the Inspection of Coal Mines in Great Britain (1860).²⁷

²⁴Anon., 'Merthyr Vale Colliery', Welsh Coal Mines, Available at <http://www.welshcoalmines.co.uk/GlamEast/MerthyrVale.htm#:~:text=Merthyr%20Vale%20closed%20on%20the,the%20history%20of%20coal%20mining>, Accessed 1 April 2022.

²⁵ Miller, *Aberfan: A Disaster*, p. 21.

²⁶ Bryan, *Health and Safety in Mines*, p. 16.

²⁷ Bryan, *Health and Safety in Mines*, pp. 51/52.

Throughout the rest of the nineteenth and into the twentieth century a number of advancements were made in mine safety, Royal Commissions were set up, reports made, and new Acts passed. As McLean asserts, all these regulations were consolidated into the 1954 Mines and Quarries Act which set out very meticulous instruction of underground inspection. However, as the title of McLean's article affirms 'moles do not understand the habits of birds'.²⁸ This insight is taken from the Tribunal itself establishing that many witnesses had been completely oblivious to the dangers of the waste tips, 'they were like moles being asked about the habits of birds'. The attention of those in the industry was focused solely on operations underground and this was the prevalent attitude in the industry. Even the Mines and Quarries Act (1954), with all its detailed orders and instructions on conduct underground was 'silent on the subject of refuse tips'.²⁹

Investigation of correspondence and other documents relating to the NCB from its inception in 1947 onwards shows that safety was an important factor and many actions were taken to prevent industrial accidents all around Great Britain.³⁰

Throughout the 1950s the subject of gas testing was high on the NCB's agenda. It was well known that gas had potential to cause large explosions or suffocate men in confined spaces and correspondence reflects this; a big drive to train all workmen in Gas Testing was carried out and both the NCB and the Ministry of Fuel and Power (henceforth, the MFP) made this a priority.³¹ Likewise industrial accidents produced a flurry of letters and memorandums. When an 'avoidable accident' involving an excavator crane killed two men in 1952, The MFP pressed for action and asked,

²⁸ McLean, 'On Moles and the Habits of Birds' pp. 306/307.

²⁹ Davies, *Report of the Tribunal*, pp. 10/11.

³⁰ Information derived from personal visit to The National Archives, Kew, 10 May 2022.

³¹ G. Bridgemore Brown, (1950) *Letter to B. Whittingham*, 7 December. COAL 29/53 MS, The National Archives, Kew.

‘should the Board be using any of these cranes?’, answers were demanded.³² In 1955 safety was so paramount that the MFP endeavoured to work with the NCB to establish an ‘experimental mine’ so that the Safety in Mines Research Establishment could take over an abandoned mine for ‘experimental work on drills and other machines equipped for dust suppression; testing new methods and testing equipment for shot firing and rescue equipment’.³³ In 1955 the MFP wrote to the NCB advising that they could no longer forward their Inspectors’ Weekly Accident Reports for legal reasons. It is clear that the NCB were still keen to be kept abreast of all accidents as the response was a request for reports to still be sent but the reassurance that they would not be circulated and would be kept ‘locked up in my private room’.³⁴ What becomes evidently clear from the NCB archives is that all focus on the matter of health and safety was on the miners themselves, and the procedures underground. There is no mention of waste disposal or tip management, and it is apparent that if there were any thoughts that any procedures at the mines could cause injury or death to the wider community, it did not seem serious enough to warrant investigation. Miners themselves were acutely aware of the conflict in mine safety regulations above and below ground. They claimed that underground they ‘cannot move a pace without encountering a safety rule’ but above ground it was very different.³⁵

³² Ministry of Fuel and Power (1952) *Letter to National Coal Board*, 15 February. Manuscript COAL 29/53, The National Archives, Kew.

³³ Ministry of Fuel and Power (1955) *Letter to National Coal Board*, 19 July. Manuscript COAL 29.53, The National Archives, Kew.

³⁴ W.F. Richardson (1955) *Letter to Ministry of Fuel and Power*, 19 August. Manuscript COAL 29/53, The National Archives, Kew.

³⁵ Anon., ‘Warning in 1964 about Aberfan threat’, *The Times*, 22 October 1966, p. 12. Available at https://go-gale-com.libezproxy.open.ac.uk/ps/retrieve.do?tabID=Newspapers&resultListType=RESULT_LIST&searchResultsType=SingleTab&hitCount=902&searchType=AdvancedSearchForm¤tPosition=4&docId=GALE%7CCS202074966&docType=Article&sort=Pub+Date+Forward+Chron&contentSegment=ZTMA-

concerning the tip's proximity to water were made, by 1944 it had grown to 147 feet⁴² and in October that year a large portion broke away and slid down the mountainside, almost reaching the disused Glamorgan Canal.⁴³ Testimony from a local resident over 20 years after the Aberfan disaster states that 'The lessons of 1944 were not learned'. Not only were they not learned, this previous slide also in part contributed to the 1966 slide as it was naturally diverted by the previous flow material from Tip 4, leading it directly into the path of the village.⁴⁴ Astonishingly the Tribunal exposed the fact that many leading officials in the mine industry did not even have knowledge of the 1944 slip until after the disaster in 1966.⁴⁵ Another serious slide occurred at Aberfan in 1963, involving the disaster tip itself, Tip 7. This slide was attributed to ground collapse due to a spring and this once again highlighted to NCB officials of the dangers of building tips over water.⁴⁶ Initially this slide was emphatically denied by the NCB at the Tribunal, however the Tribunal did go on to claim; 'The whole attempt.....has been directed to underplay the evidence on this matter'.⁴⁷ McLean states 'the unstable shape of the tips is obvious even to the untrained eye in photographs taken between 1963 and 1965'.⁴⁸ In Johnes' article he reports that in 1963 letters were sent between Merthyr Tydfil Borough Council's engineering department and the NCB's local area mechanical engineer, David Roberts. These letters were headed 'Danger from coal slurry being tipped at the rear of the Pantglas Schools'. Roberts did visit the site of the tips but his attitude to the issue made the

⁴² Davies, *Report of the Tribunal*, p. 18.

⁴³ Davies, *Report of the Tribunal*, p. 43.

⁴⁴ Couto, 'Economics, Experts, and Risk', p. 315.

⁴⁵ Davies, *Report of the Tribunal*, p. 45.

⁴⁶ Couto, 'Economics, Experts, and Risk', p. 315.

⁴⁷ Davies, *Report of the Tribunal*, p. 61.

⁴⁸ McLean, 'On Moles and the Habits of Birds', p. 293.

visit virtually pointless.⁴⁹ Experts engaged by the National Union of Teachers after the 1966 disaster reported that all three slides had one common characteristic; they all 'resulted from the fundamental mistake of tipping over surface streams and springs'.⁵⁰

The presence of streams and springs became a central feature of the Tribunal. Immediately after the tragedy the Chairman of the NCB since 1961, Lord Alfred Robens, addressed television cameras and inexplicably claimed 'it was impossible to know that there was a spring in the heart of this tip'. Robens' claims were immediately rebuked, Aberfan residents asserted that not only were the springs under Tip 7 not secret, everybody in the village knew about it.⁵¹ Prominent Welsh broadcaster Vincent Kane claimed that the NCB and the miners' union were both fully aware that the tip was built on a hillside that had two underground springs and that these springs were plainly marked on Ordnance Survey Maps of the area.⁵² It is also clear on the Ordnance Survey Maps of 1874, 1898 and 1919 that Merthyr Mountain contained many streams in the area of tipping, as well as springs under Tips 4 and 5, and crucially under the disaster tip, Tip 7.⁵³ Letters held at The National Archives from Ann Jennings, headmistress of Pantglas Junior School (who went on to lose her life in the disaster), to John Beale, the Director of Education for Merthyr Tydfil, show that in the lead up to the disaster the headmistress was aware of, and highly concerned by, the presence of water in the vicinity. The area around

⁴⁹ Martin Johnes, "'Uneasy Relationships': The Aberfan Disaster 1966, Merthyr Tydfil County Borough Council and Local Politics', *Welsh History Review*, 20.1 (2000), p. 145.

⁵⁰ Davies, *Report of the Tribunal*, p. 19.

⁵¹ Miller, *Aberfan: A Disaster*, p. 35.

⁵² John Jewell, 'Aberfan tragedy 50 years on: avoidable disaster, media dilemma, open wound', ORCA Online Research@Cardiff University, Available at <https://orca.cardiff.ac.uk/id/eprint/94715/1/94715.pdf>, Accessed 29 April 2022.

⁵³ Couto, 'Economics, Experts, and Risk', p. 315.

the school was prone to flooding after heavy rain and Miss Jennings wrote that some parents were so concerned they were refusing to send their children to school.⁵⁴ A petition from parents was forwarded to John Beale advising; 'the above parents are very anxious for improvements to be made on the road leading to The Grove...and flood makes it dangerous'.⁵⁵ Preston notes that these parents complained of 'black, slimy mud and floods', a foreboding description of the slurry that was to engulf the school the following year. They were so aware of the dangers that through 'letters, petitions and public meetings' they sought to bring the matter to the fore. Preston indicates that the depiction of the community being oblivious and innocent in the disaster was at odds with the knowledge that many in the local area had, regarding the danger the tips represented.⁵⁶ The fact that danger had been evident prior to the tragedy was highlighted by the *Daily Mail* in the immediate aftermath. In 1964 councillor Gwyneth Williams warned Merthyr Tydfil Borough Council (henceforth, the MTBC) of problems with slurry, cautioning 'If the tip moves it could threaten the whole school'. The same article then went on to quote former headmaster, Mr W.J. Williams, who had previously shared the haunting prophecy of 'One day they'll dig us out of there alive'.⁵⁷

Preston's work on children and schools being symbols of victimhood in industrial disasters highlights the fact that far from being non-agentic and passive victims of

⁵⁴ Ann Jennings (1965) *Letter to John Beale*, 14 January. Manuscript TS 58/136, The National Archives, Kew.

⁵⁵ Various (1965) *Petition from parents*, 14 January. Manuscript TS 58/136, The National Archives, Kew.

⁵⁶ Preston, 'From Aberfan to the' Canvey Factor'', pp. 614/615.

⁵⁷ Harry Longmuir, 'Warning of danger given 3 years ago', *Daily Mail*, 22 October 1966, Available at https://go-gale-com.libezproxy.open.ac.uk/ps/retrieve.do?tabID=Newspapers&resultListType=RESULT_LIST&searchResultsType=SingleTab&hitCount=498&searchType=AdvancedSearchForm¤tPosition=2&docId=GALE%7CEE1864537849&docType=Article&sort=Pub+Date+Forward+Chron&contentSegment=ZDMH-MOD1&prodId=DMHA&pageNum=1&contentSet=GALE%7CEE1864537849&searchId=R2&userGroupName=to u&inPS=true, Accessed 1 May 2022.

accidents such as Aberfan, they were ‘concerned, aware, alert and agentic citizens’. He argues that far from the dangers of the tip being unidentified, it was something that not only workers and the NCB were aware of, but also people in the village, including the children themselves. He rightly highlights the subject of class when it comes to industrial disasters and seeks to challenge the concept that the working-class are inert victims with their fears and actions often being overlooked. Preston sheds light on Skeggs’ notion that whereas middle-class subjects are autonomous and in control of their actions, the working-class are seen to be more submissive and directed by those above. In the case of Aberfan, Preston makes clear that this was not the case, and that this division between the knowledgeable opinions of the community and how they were portrayed afterwards as unaware, led some to believe that the workers of the community had somehow ‘covered up’ the problem with the tips. This was, however, only presented as mere speculation in the Tribunal.⁵⁸ Significantly, Preston’s theory is at odds with McLean’s concept of ‘moles not understanding the habits of birds’, taken from the Tribunal itself, in that the community was very aware of the dangers but their worries were continuously overlooked. This leads onto the question of ‘how hard did the community try?’

Although steps were made by the villagers and mine workers to alert authorities to the potential threat of the waste tips at Aberfan, complaints were brushed aside by the NCB with the underlying threat ‘make a fuss and the mine would close’.⁵⁹ In his article ‘*Economics, Experts, and Risk: Lessons from the catastrophe at Aberfan*’ (1989) Richard A. Couto claims that an underlying cause of the disaster at Aberfan

⁵⁸ Preston, ‘From Aberfan to the ‘Canvey Factor’’, pp. 609-615.

⁵⁹ Ceri Jackson, ‘Aberfan: The mistake that cost a village its children’, BBC News, Available at [Aberfan: The mistake that cost a village its children - BBC News](#), Accessed 1 May 2022.

was the 'economic vulnerability of the community'.⁶⁰ Many people in the village remembered long years of unemployment which led to a reluctance to make too much of a fuss, which could then in turn have led to the mine being closed permanently.⁶¹ Couto makes the point that 'the vulnerability of a community with a precarious economy makes economic considerations paramount and influences subsequent events'. Indeed, the economic state of the coal industry played a large role in how associations and individual people dealt with the hazards that were present at Aberfan.⁶² Several times in the Tribunal it pertains to the fact that people 'may' have had concerns about the stability of Tip 7 but chose to ignore those doubts lest making a fuss should cause the closure of Merthyr Vale Colliery. Although it was proved with certainty that the colliery was not at the time on the NCB's list of potential closures, the Tribunal acknowledged that 'without the tipping facilities which were available on Merthyr Mountain the future of the colliery was to some extent endangered or imperilled' and so had the issue of tip stability been pressed by certain people of authority this unwanted fate may have become a reality.⁶³ Stephen Owen Davies, the Member of Parliament for Merthyr Tydfil for many years, is stated in the Tribunal as saying that whilst holding the fear that Tip 7 may slide and indeed reach the village of Aberfan, he was warned by miners in the area that should he seek to take the matter further 'they will close down the blessed colliery'.⁶⁴ Couto quite rightly points out that that the tragedy was evidence that people live 'side by side with factors to which they are most vulnerable because they relate to the

⁶⁰ Couto, 'Economics, Experts, and Risk', p. 311.

⁶¹ Jackson, 'Aberfan: The mistake'.

⁶² Couto, 'Economics, Experts, and Risk', p. 320.

⁶³ Davies, *Report of the Tribunal*, p. 32.

⁶⁴ Davies, *Report of the Tribunal*, p. 32.

primary economic option'.⁶⁵ Put simply, the threat of closure and economic disaster was more pressing than the background threat of a potential tip slide.

⁶⁵ Couto, 'Economics, Experts, and Risk, p. 321.

Chapter Two

On the morning of 21 October 1966, the first sign of anything untoward occurred around 7.30am. The colliery workers arriving for the morning shift noticed that Tip 7, which had reached a height of 111 feet, had sunk around ten feet resulting in some of the crane track falling into the hole.⁶⁶ Unable to report this incident by telephone due to the lines being disconnected, one operative returned to the colliery to report it to the Charge Manager.⁶⁷ Although a decision was made to cease tipping and select another site (Tip 8) it was too late. According to the Tribunal, just after 9am the already waterlogged material from the tip reached the point of liquefaction and it began to move at great speed. Rapidly the structure of the tip changed from semi solid mass to a dense liquid becoming a 'dark glistening wave' which began its way down the mountainside towards an unsuspecting Aberfan. An even more frightening aspect was the presence of a light mist which prevented the people of Aberfan seeing the fast-approaching slide until the eleventh hour.⁶⁸ Professor of Soil Mechanics Alan Bishop told the Tribunal that at least 140,000 cubic yards of rubbish made its way down the mountainside on that fateful morning whilst notably an estimated 50,000 cubic yards of that breached the railway embankment reaching the village.⁶⁹ The slide then engulfed the school and destroyed around twenty houses. The silence which followed has never been forgotten. Cyril Vaughn who was teaching at the senior school next door said 'as if nature had realised that a tremendous mistake had been made and nature was speechless'.⁷⁰ Despite the

⁶⁶ Miller, *Aberfan: A Disaster*, p. 25.

⁶⁷ Anon., 'David Starkey, Aberfan, and Acts of God: A Rebuttal' *The Historical Novel*, Available at <https://thehistoricalnovel.com/2021/10/19/david-starkey-aberfan-and-acts-of-god-a-rebuttal/>, Accessed 27 April 2022.

⁶⁸ Davies, *Report of the Tribunal*, p. 27.

⁶⁹ Davies, *Report of the Tribunal*, p. 26.

⁷⁰ Jackson, 'Aberfan: The mistake'.

overwhelming amount of people who descended on Aberfan to assist with the rescue operation no one was brought out alive after 11am, less than two hours after the slide had hit.⁷¹

In the initial aftermath of the disaster, the then Prime Minister Harold Wilson immediately left for the scene. Conversely, Lord Alfred Robens, the NCB's chairman, chose not to travel to Aberfan that day but instead attended the University of Surrey where he was being installed as Chancellor. He did not arrive in Aberfan until the following afternoon.⁷² Whilst this garnered some reproach, he steadfastly refused to admit that the disaster had been foreseeable, or that the NCB were in any way to blame.⁷³ The NCB made an official statement within hours stating that 'abnormal rainfall' was what had caused the tip to move.⁷⁴ Within days of the disaster Lord Robens knew that there was a need for damage control and wrote to Prime Minister Harold Wilson advising that 'the existence of a vast number of spoil heaps.....is naturally going to be one of major public concern'. He was keen for the clearance of the dangerous spoil heaps but stressed that the cost should be covered by the Government. It is very much apparent from the large amount of correspondence from the time that the cost of removal, and who was going to cover it, was very much at the forefront of Governmental thought.⁷⁵ In his letter to Harold Wilson he states that whilst the tips remained, both the NCB and the Government

⁷¹ McLean, 'On Moles and the Habits of Birds', p. 286.

⁷² Tim Marsh, 'A Flawed Hero: From Aberfan to HSWA', SHP Safety and Health Practitioner, Available at [A flawed hero: from Aberfan to HSWA - SHP - Health and Safety News, Legislation, PPE, CPD and Resources \(shponline.co.uk\)](https://shponline.co.uk), Accessed 25 April 2022.

⁷³ McLean, 'It's not too late', p. 1.

⁷⁴ Anon., 'Abnormal rain blamed by Coal Board', *The Times*, 22 October 1966, Available at https://go-gale-com.libezproxy.open.ac.uk/ps/retrieve.do?tabID=Newspapers&resultListType=RESULT_LIST&searchResultsType=SingleTab&hitCount=902&searchType=AdvancedSearchForm¤tPosition=3&docId=GALE%7CCS17263446&docType=Article&sort=Pub+Date+Forward+Chron&contentSegment=ZTMA-MOD1&prodId=TTDA&pageNum=1&contentSet=GALE%7CCS17263446&searchId=R2&userGroupName=tou&ipS=true, Accessed 2 May 2022.

⁷⁵ National Archives, Kew, Manuscripts T 319/1264.

would be inviting 'considerable criticism'.⁷⁶ This predicament did go on to cause a tremendous amount of controversy, but this is outside the sphere of this dissertation. McLean's approach is that despite being the target of many, The NCB tried to 'spin-doctor' its way out of trouble. When speculation as to the causes of the disaster began to take hold in the press, Sir Elwyn Jones, the Attorney-General, enacted a Commons statement banning criticism or rumour as to the causes and this in effect protected the NCB, whether intentional or not.⁷⁷

The need for an inquiry into the disaster quickly became apparent as 'every kind of report and rumour is going round in the valley', and people wanted answers as to how and why this tragedy had happened.⁷⁸ Lord Justice Sir Herbert Edmund Davies was appointed Chairman of the Tribunal which commenced on 29th November 1966 and heard from 136 witnesses over the course of seventy six days.⁷⁹ As a preliminary measure sittings were conducted in Merthyr Tydfil for the presentation of local evidence and during this time the three man Tribunal panel visited the seven tips of Merthyr Vale Colliery.⁸⁰ After this the Tribunal moved to Cardiff and evidence was heard from various public organisations including the NCB and MTBC.⁸¹ As McLean explains, the NCB maintained until late into the inquiry that it was not to blame for the disaster and this refusal to accept any responsibility was heavily criticised by the Tribunal and it found the NCB's behaviour 'nothing short of

⁷⁶ Lord Alfred Robens (1966) *Letter to Harold Wilson*, 31 October. Manuscript T 319/1264, The National Archives, Kew.

⁷⁷ McLean, 'On Moles and the Habits of Birds', p. 290-291.

⁷⁸ Anon., 'Inquiry into Aberfan', *The Times*, 24 October 1966, Available at https://go-gale-com.libezproxy.open.ac.uk/ps/retrieve.do?tabID=Newspapers&resultListType=RESULT_LIST&searchResultsType=SingleTab&hitCount=902&searchType=AdvancedSearchForm¤tPosition=8&docId=GALE%7CCS151219032&docType=Editorial&sort=Pub+Date+Forward+Chron&contentSegment=ZTMA-MOD1&prodId=TTDA&pageNum=1&contentSet=GALE%7CCS151219032&searchId=R2&userGroupName=tou&inPS=true, Accessed 8 May 2022.

⁷⁹ Miller, *Aberfan: A Disaster*, p. 32.

⁸⁰ Davies, *Report of the Tribunal*, p.7.

⁸¹ Miller, *Aberfan: A Disaster*, p.32.

audacious'.⁸² The Tribunal went into extensive detail on the background of mining at Merthyr Vale Colliery and the formation of the tips. Witnesses reiterated the claim that the presence of water on the mountain was a well-known fact and the tribunal verified that this fact was 'abundantly clear'⁸³. Professor Nash, a Soil Mechanics expert called on behalf of the NCB, proved to be a negative witness for them when he claimed that with regards to tipping, 'water is the source of all evil'. He went on to condemn the NCB further by claiming that they would have had full knowledge that they should have taken proper drainage measures at the time of selecting the site in 1957, but inexplicably took no action in that area.⁸⁴ This enormous error in judgement is also observed by Johnes. He substantiates these claims in his paper, detailing how MTBC expressed concern to the NCB on a number of matters, including the placing of the tip, to which high-ranking NCB officials assured that all was well. The council assumed that the NCB would not choose a tip site without qualified experts being involved and, although this was not the case, the Tribunal felt they were justified in this assumption.⁸⁵

The national press at the time initially portrayed the NCB as diligent and committed to getting answers. *The Times* reported that the NCB had a 'regular inspection procedure for all tips', and it also stated that since the tragedy at Aberfan they had strengthened those procedures.⁸⁶ However the Tribunal proved that in No. 4 Area,

⁸² McLean, 'On Moles and the Habits of Birds', p. 287.

⁸³ Davies, *Report of the Tribunal*, p. 20.

⁸⁴ Davies, *Report of the Tribunal*, p. 20.

⁸⁵ Johnes, '*Uneasy Relationships*', p. 146.

⁸⁶ Anon., 'Aberfan inquiry will examine legal responsibilities for safety of pit heaps', *The Times*, 24 October 1966, Available at https://go-gale-com.libezproxy.open.ac.uk/ps/retrieve.do?tabID=Newspapers&resultListType=RESULT_LIST&searchResultsType=SingleTab&hitCount=902&searchType=AdvancedSearchForm¤tPosition=13&docId=GALE%7CCS134441817&docType=Article&sort=Pub+Date+Forward+Chron&contentSegment=ZTMA-MOD1&prodId=TTDA&pageNum=1&contentSet=GALE%7CCS134441817&searchId=R2&userGroupName=tou&inPS=true, Accessed 3 May 2022.

where the Merthyr Vale Colliery was located, no survey of the Aberfan tip complex was ever made. When questioned, the General Manager for No. 4 Area, Thomas Wright, had to concede that it had *never* been the practice to keep up-to-date plans of surface tipping. Although the former manager of Merthyr Vale Colliery, Geoffrey Morgan, told the Tribunal that the NCB had carried out a large amount of tip surveying in the South Western Division, it became apparent that Merthyr Vale Colliery was a 'solitary gap' in this system and no one from the NCB seemed to be able to explain why.⁸⁷ This lack of regular tip inspection procedures within the NCB is also exposed by Bryan when he points out that investigations by the NCB after the disaster brought to light 'a truly surprising lack of knowledge of the physical properties of the discard that comprises colliery spoils'.⁸⁸

As mentioned in Chapter One, The Powell Memorandum, first issued in 1939, was re-circulated in April 1965, although incomprehensively it did not reach either Thomas Wright or Thomas Wynne, the Manager of Merthyr Vale Colliery. Mention of the Powell Memorandum appears scarce, if not non-existent, in previous secondary scholarship but to appreciate the impact its neglect had in helping to cause the disaster it is important to shine focus on it. The Tribunal states that the memorandum's concluding paragraph summarised recommendations directly relating to tip management and slide prevention. Its clear instruction suggests that tip height should be limited, and no tip should be over twenty feet tall if a potential slide was a threat to property. At the time of the disaster, Tip 7 was at 111 feet and directly in its path was Aberfan. The memorandum also gave instruction for drainage of tips to be carried out and most importantly it advised that 'tipping should never be

⁸⁷ Davies, *Report of the Tribunal*, p. 31.

⁸⁸ Bryan, *Health and Safety in Mines*, p. 86.

extended over springs of water'.⁸⁹ The Tribunal expressed astonishment that the causes of the Aberfan tragedy had been highlighted and anticipated 27 years earlier and yet the warning had been ignored.⁹⁰ The Tribunal determined that following the re-issue of the memorandum in 1965, cooperation between both mechanical and civil engineers was vital for checking the stability of tips in all areas but in No. 4 Area the Area Civil Engineer, Robert Exley, took no part in the investigation at all and did not even see the final report that Area Mechanical Engineer David Roberts submitted. Although both men claimed differing reasons for this, the Tribunal dismissed their assertions concluding that Roberts ignored the fact that Exley was named on the memorandum instruction and Exley 'took it for granted' that his assistance was not wanted. This lack of collaboration was 'literally disastrous in its consequences' and the Tribunal declared that had they cooperated, the disaster which killed 144 people would 'probably have never happened'.⁹¹ Roberts' report was slammed for being 'laconic' and he was admonished for doing little more than a visual inspection. The conclusion was that he 'must be blamed for failing to exercise anything like proper care'.⁹² Both Roberts and Exley were named in the Tribunal as two of the NCB officials who were in some way censurable for the disaster occurring.

In order to ascertain whether the tragedy could have been prevented it is important to highlight how various individual's actions at the time collectively led to the disaster. More evidence of neglect of safety procedures by the NCB came to light with the regards to sinkings of the top of the tip prior to 21 October 1966. In the preceding three to four months Leslie Davies, the Tipping Gang Charge Hand, had reported to

⁸⁹ Davies, *Report of the Tribunal*, p. 74.

⁹⁰ Davies, *Report of the Tribunal*, p. 75.

⁹¹ Davies, *Report of the Tribunal*, p. 76.

⁹² Davies, *Report of the Tribunal*, pp. 78/79.

Vivian Thomas, the Mechanical Engineer for the colliery, frequent sinkings of 10-12 feet. This was denied by Thomas who claimed the deepest sinking reported to him was only 4-5 feet. On the morning of the disaster when Davies reported to Thomas that once again the tip had sunk by 10-12 feet, Thomas gave the order to stop tipping as another site had been selected for later that week. The Tribunal stated that this was a 'momentous decision to announce' requiring instruction from much higher than Thomas and therefore led them to the conclusion that Thomas had already been given the go ahead from Thomas Wynne, the Colliery Manager, to stop tipping 'when he observed anything which gave rise to anxiety'.⁹³ The frequent sinkings were a direct warning of some degree of instability in Tip 7, which neither Wynne or Thomas had reported to higher authority.⁹⁴ It is important to acknowledge that if tipping had been stopped at any point during the three to four months when these sinkings had been noticed it is highly probable the disaster would not have occurred. Davies was absolved of all blame by the Tribunal, acknowledging that he was 'entirely untrained and equally uninstructed', however Thomas was held accountable to some extent for his failure to inspect the tips at all prior to the tragedy occurring.⁹⁵ Wynne was also reproached for having prior knowledge of the tip's instability and doing 'nothing at all'.⁹⁶

In addition to the officials mentioned above, the Tribunal named five other officials who in some way also held blame for the disaster happening. Joseph Baker, although retired since 1964, had been the Group Mechanical Engineer for No. 4 Group for many years and he admitted during the inquiry that he had never giving a

⁹³ Davies, *Report of the Tribunal*, pp. 79/80.

⁹⁴ Davies, *Report of the Tribunal*, p. 81.

⁹⁵ Davies, *Report of the Tribunal*, pp. 93/94.

⁹⁶ Davies, *Report of the Tribunal*, p. 94.

'fleeting thought' to the subject of tip stability and when MVBC had expressed fears in 1960 of Tip 7 sliding, he reassured them that no danger existed. Unaccountably he claimed to have never heard of the large slide of 1963.⁹⁷ Ronald Lewis, Group Manager for No. 4 Group, also alleged that no slide had been reported to him in 1963 and the Tribunal surmised that Lewis at no time inspected the tip complex and that the 'overriding consideration' in his mind was not wanting to disturb the tipping process, which in turn would interrupt the production of coal.⁹⁸ Clifford Jones, the South Western Division Mechanical Engineer, was responsible in 1965 for unearthing and recirculating the Powell Memorandum of 1939 which had been written by his father and handed to him sometime after. Although in 1965 he handed it to his superior Divisional Chief Engineer Daniel Powell, Jones took no further action himself. The Tribunal makes it clear that whilst Jones viewed the subject of waste disposal as one of the most important issues of mechanical engineers, in his tenure in that position there had not been a 'single Minute dealing with that topic'. During the Tribunal Jones claimed that, although it was their responsibility, mechanical engineers had 'plenty to do without having to deal with tips' and he also felt that they did not have the correct knowledge to handle the safety of tips.⁹⁹ Powell acknowledged that he was solely responsible for all the tips in the South Western Division and it was suggested by the Tribunal that at the time of the Powell Memorandum resurfacing following the suspected slide at Tymawr, this was the time Powell surely should have alerted his superiors to the fact that 'absolutely no system to ensure tip safety existed'. Although Powell did circulate the memorandum, it did not reach everyone it should have and Powell himself took no further action and he

⁹⁷ Davies, *Report of the Tribunal*, pp. 96/97.

⁹⁸ Davies, *Report of the Tribunal*, pp. 97/98.

⁹⁹ Davies, *Report of the Tribunal*, pp. 100/101.

was blasted for failing to deal effectively with the need for a tipping policy.¹⁰⁰ The last NCB representative to be named was Geoffrey Morgan, the Production Director for South Western Division. The fact that no system existed for dealing with tip stability problems was never challenged by him, and although he accepted that it was his responsibility to formulate such a system, he quite bizarrely claimed that 'nothing had happened in the past to call for the formation and implementation of any tipping policy'. However the Tribunal dismissed this, Morgan had certainly known about the previous tip slides in 1939, 1944 and 1963 and he could not have disregarded the risk of danger as 'infinitesimal'. It was determined that his failure to realise the magnitude of the risks 'undoubtedly contributed materially to the disaster'.¹⁰¹

The Tribunal report was published on 3 August 1967 and it is evident from contemporary news reports that the nine men named were thrust into the public eye. The *Daily Mail* reported words from the Tribunal; 'The disaster is a terrifying tale of bungling ineptitude by many men charged with tasks for which they were totally unfitted, of failure to heed clear warnings and of total lack of direction from above'. The *Daily Mail* also stated that whilst they had the responsibility with regards to tip stability, they could not be classed as villains as they had had no specific training.¹⁰² However, whilst being held somewhat responsible, McLean observes that none of the men were prosecuted, dismissed, or suffered a pay cut and he questions why

¹⁰⁰ Davies, *Report of the Tribunal*, pp. 103-105.

¹⁰¹ Davies, *Report of the Tribunal*, pp.106/107.

¹⁰² Alex Hendry, 'The Guilty Men', *Daily Mail*, 4 August 1967, p. 5. Available at https://go-gale-com.libezproxy.open.ac.uk/ps/retrieve.do?tabID=Newspapers&resultListType=RESULT_LIST&searchResultsType=SingleTab&hitCount=349&searchType=AdvancedSearchForm¤tPosition=7&docId=GALE%7CEE1864561252&docType=Article&sort=Pub+Date+Forward+Chron&contentSegment=ZDMH-MOD1&prodId=DMHA&pageNum=1&contentSet=GALE%7CEE1864561252&searchId=R2&userGroupName=to u&inPS=true, Accessed 7 May 2022.

they escaped so lightly.¹⁰³ Whilst this is outside the scope of this dissertation, it must be acknowledged that although the question of prosecution arose, in the words of David Gibson-Watt, member of parliament for Hereford, 'I do not intend to pursue this. It is a heavy punishment indeed to be named by a tribunal of this sort'.¹⁰⁴ As well as the individual officials named, the NCB as a whole was condemned for its neglect of the stability of tips with Lord Robens himself admitting 'we had failed as a board to provide the necessary regulation (sic) to enable them to know'. The NCB acknowledged that responsibility should have begun with management but it had not. 'It need not have happened and should not have happened'.¹⁰⁵ The culmination of seventy-six days of witnesses, reports, cross examinations and speculation was summed up in the first ten words of the Tribunal Summary; 'Blame for the disaster rests upon the National Coal Board'.¹⁰⁶ At last the people of Aberfan had someone to blame.

¹⁰³ McLean, 'On Moles and the Habits of Birds,, p. 287.

¹⁰⁴ Mr David Gibson-Watt (Hereford), Aberfan Disaster, *House of Commons Sitings*, 26 October 1967, Volume 751 cc1909-2014. Available at [ABERFAN DISASTER \(Hansard, 26 October 1967\) \(parliament.uk\)](#), Accessed 1 May 2022.

¹⁰⁵ Davies, *Report of the Tribunal*, p. 81/85.

¹⁰⁶ Davies, *Report of the Tribunal*, p. 131.

Conclusion

In conclusion this dissertation has strived to show that the National Coal Board's attitude towards coal waste management and the safety issue of tip stability was lax at best. It has endeavoured to add a more thorough insight of the background of the NCB's mindset of priorities and to compliment previous historiography which focuses more on the human reaction and the aftermath. Although there is much evidence that safety was on the NCB's agenda it is blindingly apparent that this did not extend to every single aspect of the coal mining industry.

Initially, an investigation of coal mine safety from its conception was considered. Sir Andrew Bryan's work is evidence that from as far back as the eighteenth century coal mining bodies were hugely aware of the need for some sort of official control over safety and great strides were made in this area. However as this dissertation points out, underground safety was the primary, if only, focus of any policies, from departmental level to parliamentary acts. From the late eighteenth century onwards protecting miners from disasters such as underground explosions, flooding and suffocation became a highly debated topic both in Parliament and internally within the many corporations involved in the industry. Nevertheless, even lengthy publications on the subject of coal mining health and safety rarely mention issues above ground and any wider threat beyond the collieries themselves seem to be completely non-existent.

Whilst previous studies on the Aberfan disaster have highlighted various reasons for the disregard of tip safety, such as economic pressure and class restraints, the notion of absolute neglect by the NCB is apparent. Tip slides in the South Wales Coalfield were not unheard of. In addition to slides at other collieries, Merthyr Vale Colliery itself had experienced slides which should have made anyone involved in

the colliery, particularly management, stand to attention, but startlingly from the ground up no one seemed to attach any importance to them. Despite the fact that many people in the community did bring the subject of potential danger to the attention of the authorities many times, no action beyond superficial report making and memo passing was done.

Although, as mooted by Couto, there was a real threat of danger to workers livelihoods if the matter of tip safety was pressed, the matter *did* enter people's consciousness and the community did what they could to bring the problem to the forefront of the NCB's mind. The community knew that danger was present but time and time again those fears were brushed aside by the very people that should have been taking action and ultimately this led to catastrophe. This dissertation has shown that far from being oblivious to the threats of living in the shadow of waste tips, the villagers were agentic in trying to make the community safe. Although the Tribunal did recognise that fears for their economic future may possibly have led some individuals, especially the miners themselves, to keep quiet, sources have shown that without a doubt for every person who kept quiet, there was one speaking out.

In contrast to the proactiveness of the community this dissertation has demonstrated that the NCB suffered from an incredible inertness with regards to dealing with the issue at hand. The Tribunal recounts many situations where the NCB's employees had every opportunity to put in place procedures that, in all certainty, would have meant the disaster at Aberfan could have been avoided but their apparent short-sightedness negated this. What becomes abundantly apparent from this study is that the level of training within the NCB was inadequate and communication seemed at times virtually non-existent. So many opportunities to prevent the slide presented

themselves but it was either felt that the danger was minimal, or that the responsibility fell with someone else. Unsatisfactory inspections have come to light, along with what appears to be total ignorance as to the need for appropriate procedures and instruction.

Overall, this study establishes that the tragedy at Aberfan could and should have been prevented. There were many factors which led to the events on 21 October 1966, not least human error and complacency. It has shown that whilst safety was paramount in the coal mining industry, coal waste management itself was grossly overlooked and this ultimately led to what was described as one of the 'grimmest days in Welsh history'.¹⁰⁷

¹⁰⁷ Gibson-Watt, Aberfan Disaster, *House of Commons Sitings*, Available at [ABERFAN DISASTER \(Hansard, 26 October 1967\) \(parliament.uk\)](https://www.parliament.uk/hansard/db/hansard-no-26-1966-10-26), Accessed 1 May 2022.

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