MINING SUBSIDENCE AND LEGAL REMEDIES IN BRITAIN

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Abstract: Subsidence as a consequence of mining activity has been an onerous problem associated with mineral extraction in Britain. However, compensation for damage as a consequence of mineral extraction has only been available in the UK for just over 100 years. This paper will outline the legal implications and the areas for which compensation is available as it applies to the UK. Particular reference is made to both the extraction of coal and salt in brine together with the protection of public utilities.
Keywords: Subsidence; compensation; coal; mining codes

1 Introduction

Mining subsidence is usually referred to as the vertical movement of a point on the earth's surface to a lower elevation that can be accompanied by lateral movement of the surrounding surface. The vertical lowering, horizontal displacement and associated compressive and tensional strains may result in damage to surface and sub-surface structures. Subsidence is therefore a consequence of the withdrawal of support from superjacent strata and the surface following the creation of a mining void.

The law relating to compensation for surface damage as a result of mineral extraction and the removal of surface support, has developed over many years, and is regulated both by the state through mining statutes and, also through civil law proceedings between individuals. This paper will provide an outline of the areas for which remedies are available to both individuals and public bodies, it will consider the historical development of statute as a result of the industrial revolution and will indicate the responsible bodies that exist today. The paper will not focus on precedents that have been established, as these are too numerous to be considered at this time. It is hoped that such a paper will stimulate debate amongst colleagues involved in ground control and hence prove mutually beneficial.

As stated above, compensation for subsidence can be divided into two main areas, namely:

i Common law: Compensation based upon title deeds that has developed through the courts, and

ii Statute: Compensation based upon statute passed by the British Parliament.

1.1 Common Law

British Land Law is based on the principle that the owner of the surface owns the underlying minerals (subject to important exceptions such as Crown Minerals and Coal). Allied to this, unless there is evidence to the contrary there is a presumed right of support attached to the land. The right can be defined as the right to keep the surface at its ancient and natural level. Unless the landowner has relinquished this right, as indicated by the title deeds, then the right will pass with the land to any subsequent landowner. Additionally, the right of support includes both subjacent and adjacent support and will extend laterally to all landowners whose ground is dependent upon that particular land for its natural support. Minerals can be sold separate from the surface (severed) or leased through negotiation between the parties to reach agreed terms. Such negotiations would have included rights to withdraw support from the surface (either implied or specific) and may have included provisions to make good the damage caused or pay compensation. In many cases the landowner granted full rights to withdraw support without the need to repair damage or pay compensation, this resulted in considerable hardship for homeowners living on the associated land and this led to the introduction of statutes to enable householders to secure a remedy for damage caused. In other instances the landowner made proper provision in the severance or lease for the repair of surface damage and the payment of compensation. Whatever rights related to the withdrawal of support and the repair of surface damage, compensation could only apply to the specified land and could not extend laterally to adjoining land. Over the past two centuries many claims have been brought to the British Courts by surface owners aggrieved by the damage caused by the underground extraction of minerals and the Court decisions have established precedents that have been applied to subsequent situations.

1.2 Statute

The provision of a legal remedy for subsidence as conferred by British statute. The primary legislation of relevance today is concerned with the extraction of coal, the extraction of salt in brine, the protection of public utilities through Mining Codes and the use of Working Facilities Orders.

2 Extraction of Coal

The 1938 Coal Act unified the ownership of coal in a body called the Coal Commission. The Act gave the Commission statutory rights to facilitate the withdrawal of support in situations where the ownership of the surface and coal were previously in the same ownership and no rights to withdraw support had been established (known as paragraph 6 coal). Where the Commission published the appropriate "Notice to Withdraw Support" the coal could be worked subject to an obligation to pay proper compensation for damage caused to the surface or to make good the damage with the surface owners consent.

Where the ownership of the surface and the coal had previously been severed, the rights to withdraw support remained as set out in the terms of severance or mining lease (known as paragraph 5 coal). No additional rights were given to the surface owner where there was no liability to carry out repairs or pay compensation.

The Coal Commission's rights to withdraw support from the surface were inherited by the National Coal Board (later to become British Coal) when the coal industry was Nationalised by the Coal Industry Nationalisation Act 1946. These rights remained unchanged until the introduction of the Coal Industry Act 1975. The provisions of this Act were subsequently replaced by the Coal Mining Subsidence Act 1991 and the Coal Industry Act 1994.

The growing public concern about subsidence damage in coal mining areas led to the introduction of the Coal–Mining (Subsidence) Act 1950 which provided a statutory remedy for damage caused to the owners of small houses who had no right of support or other means to secure repair or compensation. Theses statutory provisions were then modified and extended by the introduction of the Coal-Mining (Subsidence) Act 1957. In 1981 the Commission on Energy and the Environment (CENE) published a report on Coal and the Environment. In this report the Commission identified that more should be done to predict coal-mining subsidence, repairs to properties should be carried out speedily and there should be payments for loss in property values after completion of repairs. In response the Government agreed to appoint the Waddilove Committee to address the concerns identified by the Commission. The final outcome was the passage of the Coal Mining Subsidence Act 1991 which replaced the 1957 Act and introduced new procedures relating to coal mining subsidence damage.

The provisions of the 1991 Act can be summarised as follows;

i The Act required British Coal to notify owners of any proposals to work coal that might cause subsidence damage,, repeat such notification annually and to de-notify when mining operations ceased or were no longer likely to cause damage.

ii Where subsidence damage occurred the owner needed to serve a "Damage Notice" on British Coal who then had the responsibility to consider the claim and take remedial action where appropriate. The notice had to be served within six years of the damage occurring and not from when the related mining activity took place.

iii Permanent repair of the property could be deferred until it has been considered that the ground was stable. If it was decided to defer permanent repair to the property, a 'stop notice' was served. Whilst the stop notice was in force only temporary repairs would be undertaken. The notice could be extended , after which time permanent repairs must be carried out.

iv The primary duty of British Coal was to carry out repairs. However under certain circumstances, payments in lieu could be made. These can be where a claimant wishes to carry out the repairs himself or use a contractor; where the subsidence repair works are merged with other works or where the property is being redeveloped; or where the cost of the repairs exceeds the depreciation in value of the property by at least 20 percent. Property depreciation payments could also be made if the property was to be demolished because of the mining damage and if after the repairs the value of the property has depreciated due to tilt or structural distortion.

v Additional remedies available to claimants include home loss payments, relief from temporary dispossession, care of vacant dwellings, compensation for inconvenience if the claimant has had to remain in the property while it is being repaired, crop and farm loss payments, loss of profit for small business (20 employees or less) as a result of mining damage, and damage to moveable property.

vi For ancient monuments and listed buildings, these are to be always restored as far as reasonably practical to their former condition.

vii The Act also provided an opportunity for preventative or precautionary works. These could be carried out to new and existing buildings in cooperation with British Coal if they would have resulted in financial benefit to the Corporation and where there would be social and environmental benefit.

vii In the case of disputes, a simple and impartial method of dispute resolution was provided by the Chartered Institute of Arbitrators.

The provisions of the 1991 were modified slightly by the de-nationalisation of the coal industry with the introduction of the Coal Industry Act 1994, which established the Coal Authority to administer the coal estate on behalf of the nation. The most significant change was introducing the term "responsible person." In active coal mining areas the mining companies became the responsible person" with responsibility for dealing with coal mining subsidence claims (within defined Areas of Responsibility) and the Coal Authority became the "responsible person" elsewhere (dealing with claims in old coal mining areas). The 1994 Act also modified the Coal Industry Act 1975 to allow "licensed operators" to publish notices relating to the withdrawal of support subject to the approval of the Coal Authority. In addition the Coal Authority has the power to revoke any notices relating to the withdrawal of support affecting any land

In accordance with the provisions of the Coal Industry Act 1994 any prospective coal mining operator must obtain a coal mining licence from the Coal Authority. Before this licence is granted, the operator must satisfy the Coal Authority that they have sufficient security to meet any future subsidence liabilities. The Coal Authority's guidance note states that when estimating the cost of damage to houses, the area of surface influence from a working panel should be considered in 3 zones.

> Zone 1 this zone embraces the area of maximum movement within an area of 0.1x depth of working (0.1d) around the panel projected to the surface perpendicular to the seam gradient.
>
> Zone 2 this is the area between 0.1d and 0.5d outside the panel, adjusted for seam gradient as above.
>
> Zone 3 this is the area beyond 0.5d outside the panel.

Within zone 1 it is assumed that the number of subsidence damage claims will total 100 percent of the number of properties, while in zone 2 it will be 60 percent. For zone 3, claims will be based on local experience and could be about 10 percent of homes in this area. The average claim rate is then used to estimate the potential subsidence liability. Further estimates have to be made for potential damage to roads, utilities, public buildings such as schools, hospitals etc.

3 Extraction of salt by brine pumping

Extraction of salt by brine pumping has continued at Cheshire, England for several centuries.

Salt is removed in solution, from an underground deposit of rock salt extending into an indefinable area beneath the surface. With several companies operating in the area during the nineteenth century, surface damage, became considerable. Accountability for the damage caused as a result of the withdrawal of surface support from the brine extraction below a particular surface area was impossible, because landowners were unable to specify which of several companies was responsible for extracting the brine from below their property. Even as recently as 30 years ago, over 2 million litres of brine were pumped annually in the Cheshire area from underground .sources.

To provide an answer to the ongoing subsidence problem and to overcome the problem of lack of direct accountability by the brine pumping companies for surface damage, the Brine Pumping (compensation for subsidence) Act 1891 was passed by Parliament.

The Act provided for the establishment of Compensation Boards, to collect an annual levy of £0.01 (€O.0067) per 4,500 litres of brine pumped within their district.

The revenue raised would contribute towards the cost of repairs for properties affected by subsidence as a result of brine extraction. Interestingly, individuals, companies and industries that directly benefited from the salt trade were excluded from claiming compensation for any damage that may have occurred to their property as a result of salt extraction. In 1952 the Act was strengthened so that anyone intending to build within areas liable to subside, the "salt defining areas", had to consult with the Local Planning Authority and the Compensation Board. Structural precautions could be recommended and these would be implemented at the Compensation Boards expense. The Acts also provided for controlled pumping and mineral companies were encouraged to use alternative means of extraction, such underground mining operations adopting a room and pillar method for future mineral planning applications. There is still one operator utilising this method of extraction, and the Brine Pumping Compensation Board has now meets every 3 months to consider claims. It is also further funded through a charge on householders for brine stability reports. After November 2006, there will be a general levy on all UK mining stability reports that will be utilised to provide compensation for damage to surface structures as a result of brine pumping.

4 Protection of Public Utilities such as Railways, Canals and Water works and the Compulsory Purchase of Land.

During the industrial revolution of the nineteenth century, disputes between the interest of surface owners and mineral companies became more common. This was particularly the case with the great expansion of infrastructure and public services. Consequently, legislation was put in place progressively to minimise areas of dispute and offer a mechanism to provide some protection to public utilities. Collectively the Statutes were called the "Mining Codes." There are differences between the various "Mining Code" statutes but they are generally based on the following principles. The owner of the canal, railway, waterworks, reservoir or sewage facility did not need to acquire the underlying minerals at the time of surface acquisition to facilitate construction. As and when the adjacent and subjacent minerals (coal, ironstone gypsum, fireclay etc) were being worked the person extracting the minerals had to serve a "Notice of Approach" on the utility owner, who could then decide whether to allow under working to take place or pay compensation to prevent damage from the withdrawal of support through the serving of a "Counter Notice." In the early enactments the prescribed distance for serving a Notice of Approach was 37m, but as mining progressed to greater depths and the risk of damage from the withdrawal of lateral support increased this was deemed to provide insufficient protection. After a notable court case (Howley Park Coal vs. L.N.W. Railway Co. 1913) legislation was introduced in 1923 which amended the "Mining Codes" to require mine owners to give at least 30days "Notice of Approach" of their intention to work within 37m of a specified facility or a distance equating to "half the depth of the workings" measured laterally from the boundary of the facility.

Where a "Counter Notice" was served by the utility owner the company could then, either purchase the minerals outright or pay compensation at the following rates. Full compensation of the loss of profit was to be paid by the surface owner for minerals in the inner zone, i.e. within the zone bounded by the 37m boundary, while one third compensation would be paid for minerals in the outer zone, i.e. those outside the 37m up to the half depth boundary. Where no "Counter Notice" was served, the mine owner could extract the underlying mineral in a proper workmanlike manner but became liable for paying a significant contribution to the costs of remediation for any damage to the utility caused by the withdrawal of support. For railways, 85 percent of the surface damage costs would be payable by the mine and mineral owner. Additionally for both railways and canals, the utility owner was responsible not only for the payment of compensation for the sterilised minerals within the protection area that were providing support for the railway or canal, but also for any other minerals if they were sterilised because of the enactment of the mining code.. Compensation would also be available due to any enforced changes in working practice as a result of the counter notice being served.

Today, private agreements have resulted in operators giving at least 3 months notice of their intention to work within the prescribed area with mine operators also agreeing that if possible, 6 months notice would be given.

The Land Acquisition Act 1981 provides processes for the Compulsory Acquisition of land and within the provisions of the Act there is an ability to apply the "Mining Codes" within the Compulsory Purchase Order. The need for such inclusion is a matter for the acquiring body dependant upon the circumstances.

5 Working Facilities Orders.

Because the ownership of minerals can be complex there became a danger of minerals being permanently unworked because it was not reasonably practicable to obtain by private agreement the rights needed to work them. The Mines (Working Facilities and Support) Act 1923 introduced provisions to overcome the impediments to the working of minerals. This Act was superseded by the 1966 Act, which was further amended by the Mines (Working Facilities and Support) Act 1974. The application for a Mines Working Facilities Order to mine must be made to the Secretary of State for Trade and Industry, and thence to the High Court. Where such an Order is awarded it will probably contain provisions for the repairing of damage and payment of compensation where withdrawal of support happens as a consequence of mining authorised by the Order.

It should also be noted that the same legislation contains provisions for the granting of a Support Order, whereby a person who has no adequate right to support for buildings or works, and cannot obtain such a right on reasonable terms, may obtain the rights, if it can be demonstrated that it expedient in the national interest to restrict the working of minerals. However compensation would need to be paid for the sterilisation of the minerals.

These procedures are seldom used.

8 Conclusions

The law as it relates to mining subsidence has developed so that unless expressly exempted, it covers most property in the Britain. It has developed firstly through civil law remedies and latterly through Statute. Compensation for surface damage ensures that surface owners are not left out of pocket or experience undue hardship because of mining activity and enables both mining operators and those affected by their operations to coexist. . The Town and Country Planning legislation in Britain also considers mining activity as development requiring planning permission. Mining is also considered a material consideration when considering the granting of planning permission for surface development in mining areas. Hence, the needs of the public at large are properly considered. The National need is however balanced against the local need and planning officers must take this into consideration when assessing applications for mineral extraction.

References

1 www.bgs.ac.uk/minerals/planning/legislation/minewaste

2 www.bopcris.ac.uk/cgi-bin/displayrec.pl

3 Powell, G.T.; Leighfield, K; The law as it relate to subsidence as a consequence of mining activity in Britain; Proceedings of the XII International Congress of International Society for Mine Surveying; Fuxin-Beijing; China; 2004

4 Subsidence damage manual; British Coal Property; 1992

5 Coal Industry Act 1994; Operating licences security; The Coal Authority; 1194

6 Ministry of Housing and Local Government and Department of the Environment; Ironstone Restoration Fund; Registered Files and Plans 1942-1985.

7 National Archives, National Record Office; Kew; catalogue 7475

8 Vincent, Peter; Law and Mineral Land Management; An Introduction for Minerals Surveyors; Peter Vincent + Co. 1986

9 Report of the Subsidence Compensation Review Committee 1984-Mining Subsidence Damage.

10 Whittaker and Reddish: Subsidence; Occurrence, Prediction and Control (Developments in Geotechnical Engineering)of Mining : Elsevier1989..

11 Waters A.H.S Restoration Problems in the Ironstone Industry in the Midlands, 1946 HMSO.