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15th October 2021

Public Consultation: Consultation opens on Draft Policy Statement on Mineral Exploration and Mining

URL: https://www.gov.ie/en/press-release/daeb6-consultation-opens-on-draft-policy-statement-on-mineral-exploration-and-mining/

 $\frac{\text{https://www.gov.ie/en/consultation/94c4e-consultation-on-the-draft-policy-statement-on-mineral-exploration-and-mining-in-ireland-and-associated-sea-environmental-report-and-aa-natura-impact-statement/}$

Deadline: 5:30pm on Friday 15th October 2021

Dear Sir/ Madam

Note that there are 14 pages in total to this submission inclusive of the cover page.

Yours faithfully,

SUBMISSION

SUBMISSION

1. We engaged with the stage one of this process and our introductory paragraph read as follows: -

The terms of this consultation are very narrow and appear to only ask 2 questions. It asks about legislative framework; i.e. policies and programmes and also impacts on the environment. It is completely silent on conservation of resources. There needs to be a focus on conservation of Irelands landscape. As we shall see from this submission, mining while underground gives rise to insatiable demand for aggregates from the surface. There should also be bans on mining of certain metals such as uranium. Consideration should also be given to backfilling material.

[Emphasis Added]

RETRIVAL from WASTE PRODUCTS

2. We believe that there is insufficient retrieval of existing resources from waste products such as mobile phones and such like. The country needs to examine this before embarking on destructive mining operations. Alternatives should be examined to avoid the destruction of natural resources. We are strongly opposed to bleeding every last resource from the landmass of Ireland. There must be an emphasis on CONSERVATION!

DEVELOPER LED

3. The current mining regime is Developer led rather than plan led. This is unsatisfactory, as developers are part of a bigger capitalist system, which is focused primarily on profit. In short there should be a focus on Sustainable alternatives in preference to ripping the bowels out of our precious earth.

Cont/d.

CONSERVATION

- 4. Having examined the 'Draft Policy Statement on Mineral Exploration and Mining' of July 2021, we are disappointed that we were unable to find reference to 'conservation' in the context of conservation of resources going forward. Please note that we are but one generation and that there will hopefully be many more generations to follow. As the custodians of the landscape, it is our responsibility to ensure that there are adequate resources' for future generations.
- 5. In his Christmas Day address of 2007, the Archbishop of Canterbury, Dr Rowan Williams said: -

"the planet should not be used as a warehouse of resources to serve humanity's selfishness"

Dr. Williams who in 2007 likened us to janitors on planet Earth, who must stop plundering the 'warehouse of natural resources' and ensure that we clean up after ourselves. He further stated that the Earth does not exist only for 'humanity's sake'; it also exists 'in its own independence and beauty... not as a warehouse of resources to serve humanity's selfishness'.

In 2015, Pope Francis has also issued an encyclical on the environment, which amongst other things states that: "The exploitation of the planet has already exceeded acceptable limits and we still have not solved the problem of poverty."

We submit that future department should adopt a much more conservative approach to resources. This is currently not reflected in the draft statement. The current drive as espoused in the Draft document is geared principally at exploitation. This is not good practice and future generations will not look kindly on our insatiable demand for resources, which are finite in nature. This is not sustainable practice.

- 6. While we accept there is a need for some resources', we are most concerned at the squandering of resources. In recent times there has been a big drive for <u>wind and solar</u> on a utility scale. These are both white elephants in that they are highly dependant on prevailing weather at any given time and are therefore intermittent and not instantly dispatchable. Indeed the summer of 2021 has been very poor for wind operators. To be squandering finite resources on such forms of energy is therefore completely irresponsible.
- 7. The current wind and solar energy strategy is driven by Irelands National Renewable Energy Action Plan [NREAP], which was submitted to the EU in July 2010 and details the renewable energy plant up to 2020. This is revised every 2 years based on whether Ireland is meeting its targets. As we understand it, currently renewable electricity ambitions are 40% of which 90% is to come from wind, which is ludicrous in the knowledge that there is a much more sustainable and less intrusive solution in the form of Deep-Geothermal. It is submitted therefore that priority be given to fully dispatchable forms of alternative energy so as to maximise use. i.e. mined metals and rare-earths should be ring-fenced for dispatchable (non-intermittent) forms of alternative energy.
- 8. To make matters even worse, the construction of data centers is also problematic in this regard. In addition to being a heavy drain on the electricity network, they are also a significant drain on natural resources. For what? Is it really so important that social media (which is heavily reliant on data centers) is permitted to draw so much on our finite natural resources so that someone can put up a photo of what they had for breakfast and that remains on a server (comprising rare earth metals) on a permanent basis? And that's not all; we are now also serving other countries with these data centers. This in madness.
- 9. The landmass in Ireland is really very small. It must be remembered that what's in the ground is finite in nature and should be conserved. There is also the added issue of sinkholes and backfilling to be considered (discussed elsewhere in this document).

Cont/d.

- 10. <u>Backfilling</u>: We conducted a word search for 'backfilling' and were unable to find any reference to this term. This is an important part of the mining process where excavated voids need to be backfilled in order to stabilise the earth and reduce the risk of collapse. It has been our experience that aggregate including cement will be imported into the mine to mix with waste material and backfilled. Please note that this aggregate (usually sand and gravel) is in itself a finite resource, which is often sourced from quarry operators who in turn will have removed it from an esker. Sadly the current generation has presided over the wholesale destruction of eskers. In the UK, sand and gravel has become so scarce, that dredging of estuaries in search of sand and gravel is commonplace.
- 11. In short, Concrete is made up of three basic components: water, aggregate (rock, sand, or gravel) and Portland cement. Cement, usually in powder form, acts as a binding agent when mixed with water and aggregates. The Rock will be quarried from an open cast quarry somewhere else, thereby necessitating excavating of rock and creating large wounds in the landscape. This is undesirable from an environmental perspective in that it takes agricultural land out of commission forever. It also creates health issues with dust, particulate matter as a result of diesel engines, etc. Moreover, it also creates significant safety issues. Numerous people (usually children) are drown each year in lakes left as a result of open cast quarrying. There are also of course a host of nuisance issues resulting from such operations.
- 12. What is even more concerning is the use of <u>finite recourses</u>. Sand and Gravel are products of glaciation where eskers were laid down in the last ice age. We have in the space of a couple of generations removed most of our eskers here in Ireland to facilitate the building boom of recent decades. In the UK, they have now all but exhausted their eskers and have resorted to dredging estuaries in search of sand and gravel. They have also been forced to impose a levy per ton of material extracted from the ground in an effort to curb extraction. Removing our remaining eskers and burying the material in the earth is ridiculous and utterly irresponsible and should not in any way be supported by the state.
- 13. <u>Unauthorised Developments</u>: We are also obliged to advise that we have observed material being sourced from unauthorised developments; i.e. developments which are entirely illegal and where the aggregate should not be removed at all. To compound matters, where this is happening, the operators have avoided paying their fair share to the authorities in terms of financing for upkeep of roads and such like.
- 14. Enforcement: We note the reference to 'robust' regulation. All too often we have come across the word 'robust' in terms of enforcement. In practice this has proved to be quiet meaningless for in reality enforcement is all too often left to the notion of 'self-policing' which is where the authorities leave it to the operators to submit various monitoring records to them in satisfaction of regulation. Our experience is that this has been little more than a box-ticking exercise where records (if even filed at all) end up being filed and are seldom scrutinised by qualified people. Moreover the notion of leaving this to a developer/ operator is frankly ludicrous and has not served the country well. It is submitted that far greater oversight be employed on the part of the authorities to ensure that the interests of the state and by extension its citizens are protected.
- 15. Land Collapse: There have been numerous instances of sinkholes associated with mining operations in Ireland. We were unable to find much discussion on this issue in the Draft proposals currently before us. We urge the department to more closely examine this issue. Given the vagaries of Climate change, which is resulting in extreme weather events, it is considered that there is an increased risk of flooding and of sinkholes forming. For your information, we have appended various media articles on the issue of mine collapse in **Schedule 1** of this document.
- 16. <u>Fatalities</u>: we were unable to find any detail or statistical analysis of fatalities associated with the mining industry in the draft proposals. We have appended some media articles on the issue in **Schedule 2** of this document. Notwithstanding, we urge the department to conduct a more in-depth analysis of the issue to help inform the debate and future policy. As with deaths in open quarry lakes, all such material should be collated and published so as to help inform policy going forward.

POTENTIAL

- 17. An enormous amount of valuable information has been built up by the mining sector in Ireland. It is submitted that this information be utilised to inform and contribute to Irelands sustainable energy needs.
- 18. In Ireland a fault line stretching from Limerick to Louth [the Caledonian fault line] exists. This is where two tectonic plates collided many millions of years ago. All along this fault line there are numerous mines; Silver Mines, Lisheen Mines, Galmoy Mines and Tara Mines in County Meath being perhaps the most notable. Indeed we understand that Tara mines have significant data on the temperatures/ underground rock formations, which can help inform research into Deep-bore geothermal energy. Kentstown Rock Formation is ideally suited for some type of deep-bore geothermal energy and we know that this lies beneath this mine. Moreover there are numerous 'hot springs' all along this line and there is in fact a townland near Enfield, County Meath known as 'Hotwell'. At times of significant rainfall events, water comes up boreholes at c.22°c, such is the geothermal activity beneath. There is enormous potential for geothermal energy in the mining sector and we believe that there is an opportunity to promote this in the document; the center of this public consultation.

DEEP BORE GEOTHERMAL

- 19. Deep-bore Geothermal Energy is essentially 'free' energy contained within the earths crust. Briefly, it entails boring 2 boreholes to depths of between 2 and 3 miles. It is dependant on the existence of a particular type of rock to conduct water from A to B. It can also be facilitated by way of a dual core pipe (single pipe). The water coming back up is superheated to temperatures of between 100°c and 200°c. A modest enough plant is all that is required on the surface to convert the energy into electricity. There are many examples around Paris, Austria, Germany, Iceland and so on. There is comparatively small investment in this energy when compared with that required to site a wind turbine. It should be noted that Heat production by surface geothermal energy represents three quarters of the energy produced in France by geothermal energy.
- 20. We strongly submit that this should be included in the document.
- 21. The ADVANATAGES of Deep Geothermal over Wind are many and may be summarised as follows:
 - a. Utilization of the knowledge built up by the mining sector.
 - b. no visually obtrusive issues,
 - c. no property devaluation,
 - d. no health issues,
 - e. no fluctuations in the availability of energy,
 - f. no spinning reserve (backup) requirement,
 - g. no wastage of finite natural resources such as sand and gravel, steel and so fourth.
 - h. There are numerous suitable geological bedrock areas in Ireland.
- 22. In essence the benefits of this form of energy should come to light in a properly conducted SEA appraisal. We are highlighting Geothermal because whatever resources are required to put it in place are far better invested in this in that this is a form of constant energy as opposed to intermittent energy from Wind and Solar. We know from our research that wind and solar are essentially white elephants and little more than a vanity exercise, which has not been properly thought out. They are only feasible when sustained by lucrative grant assistance, which in itself should be sounding alarm bells. To make matters worse, wind and solar are extremely resource hungry of finite resources.
- 23. In short we must ask ourselves what are the resources for?
- 24. Is if for sustainable dispatchable energy as opposed to intermittent 'white elephants' of wind and solar and such like?

Cont/d.

25. It is considered helpful to include some notes on the potential misuse of rare-earth metals. For example, magnets made from neodymium are fitted into most wind turbines. The mining and refining of neodymium extraordinarily dirty and toxic - involving repeated boiling in acid, with radioactive thorium as a waste product – 90% of it comes from – Baotou, China. Neodymium is a rare earth metal, which is generally sourced in China and which is causing. There are c. 4 tons of neodymium magnets in each turbine for example. China's Ministry of Industry and Information Technology estimated that the cleanup bill for southern Jiangxi Province could amount to 38 billion yuan, or around \$5.5 billion. Only a fraction of that amount has so far been spent. We invite you to read the following information on this issueL -

Rare-earth mining in China comes at a heavy cost for local villages

Pollution is poisoning the farms and villages of the region that processes the precious minerals Cécile Bontron

Tue 7 Aug 2012 13.59 BST

https://www.theguardian.com/environment/2012/aug/07/china-rare-earth-village-pollution

Rare earth mining in China: the bleak social and environmental costs

China produces 85% of global supply of the 17 chemically similar elements crucial to smartphone, camera lens and magnet manufacture - and half that output is from the city of Baotou Jonathan Kaiman in Baotou

Thu 20 Mar 2014 14.30 GMT

https://www.theguardian.com/sustainable-business/rare-earth-mining-china-socialenvironmental-costs

China Wrestles with the Toxic Aftermath of Rare Earth Mining

China has been a major source of rare earth metals used in high-tech products, from smartphones to wind turbines. As cleanup of these mining sites begins, experts argue that global companies that have benefited from access to these metals should help foot the bill. BY MICHAEL STANDAERT

JULY 2, 2019

https://e360.yale.edu/features/china-wrestles-with-the-toxic-aftermath-of-rare-earth-mining

The dystopian lake filled by the world's tech lust

By Tim Maughan 2nd April 2015

https://www.bbc.com/future/article/20150402-the-worst-place-on-earth

We need also to be very careful where our rare earth metals and products come from. Please read: -

China uses Uyghur forced labour to make solar panels, says report

14 May

https://www.bbc.com/news/world-asia-china-57124636

- 26. Rural Ireland will never accept being destroyed. Natural resources are finite. THIS MUST NEVER BE FORGOTTEN- ONCE DESTROYED NEVER RECOVERED. It is submitted that THE PRECAUTIONARY PRINCIPLE should be applied to avoid further depletion of finite resources and also to avoid destruction of Irelands landscape.
- 27. Finally, we again highlight our concerns for the sustainability of future generations. Where will they source resources' if our generation keeps on plundering them at the current scale? One would be well advised to heed the comments from the former Archbishop of Canterbury, Rowan and of Pope Francis.
- 28. SCHEDULE 1 Mine Collapse (see below for copy of published media articles on the issue)
- 29. SCHEDULE 2 Fatalities (see below for copy of published media articles on the issue)

ENDS

<u>SCHEDULE 1 – Mine Collapse</u>

Monaghan sinkhole caused by collapse of mining pillars, says report

Mining firm Gyproc defends its safety record as families unable to return to their homes

Thu, Sep 27, 2018, 01:00

The transport and storage of water, which led to the collapse of several mining pillars, was the "probable reason for the subsidence" that caused a sinkhole to open up near <u>Carrickmacross</u>, Co Monaghan.

A preliminary report into the event found the sinkhole was caused by "unique and complex" factors.

It said recent operations in an old part of a mine involving the transport and storage of water led to the collapse of the pillars, the report said. The section of the mine had not previously been used to store water.

<u>Gyproc</u> is an Irish plaster and plasterboard manufacturer that has mining operations in the area. The company met with officials from Monaghan County Council on Wednesday, to discuss the independent report into the sinkhole.

"The report indicates that these circumstances do not appear to be present elsewhere in the vicinity, though naturally the company is taking all precautions and conducting further investigations to ensure this is the case," the firm said in a statement on Wednesday night.

Earthquake trench

The subsidence has a radius of 120 metres, with the appearance of an earthquake trench, and was discovered at Magheracloone Mitchell's GAA club on Monday morning. It damaged two pitches, the GAA clubhouse and community centre building, and led to the indefinite closure of the building due to safety concerns.

We currently can't say when the families can move back or when we can give sufficient reassurances to allow them return to their homes.

"Outside of the actual disturbance zone, an area of investigation including five houses and two stretches of public road has been identified," the company said.

"Gyproc has been in regular contact with the families in the affected houses to ensure they have appropriate support and have also appointed an experienced family liaison officer from the company to ensure the families have as much help from Gyproc as possible," the statement said.

The company said it was also in contact with Magheracloone GAA Club and the Community Centre, and had offered financial support to replace the damaged clubhouse.

The company said it had a "long and respected mining history in the area for over 80 years" and operated to the highest professional standards.

Earlier on Wednesday, the chief executive of Monaghan County Council, <u>Eamon O'Sullivan</u>, said it was unclear when families could move back to their homes which were damaged by the sinkhole.

Monitoring

Monitoring and measurement of conditions will continue over the coming days, Mr O'Sullivan told RTÉ's News at One.

"We currently can't say when the families can move back or when we can give sufficient reassurances to allow them return to their homes."

Mr O'Sullivan said until the results of investigations are verified independently, the council "will have to maintain, in the interests of public safety and road safety, a precautionary approach.

"So the existing exclusion zone is currently in place and will remain. The R179, Carrickmacross to Kingscourt road, will continue to remain closed and local primary road 4900 to the school will also remain closed."

Mr O'Sullivan said the families who had to leave their homes are being accommodated in local hotels by the mining company. That was obviously not satisfactory in the long term, he added, but said nothing could be done until the root cause of the problem was determined.

https://www.irishtimes.com/news/environment/monaghan-sinkhole-caused-by-collapse-of-mining-pillars-says-report-1.3642707

See also: Investigation into Co Monaghan mine collapse

By Eileen Magnier

https://www.rte.ie/news/ireland/2018/0924/995781-monaghan-mine-collapse/

Monaghan sinkhole: Surface around five houses and along public road now being assessed

Mining company Gyproc is liaising with families and has also offered to replace the damaged GAA club building.

Source: The Journal.ie/YouTube

Sep 27th 2018 Gráinne Ní Aodha

THE EARTH AROUND five houses and along two public roads near an area where <u>a sinkhole appeared in Co</u> Monaghan is to be examined.

An Preliminary Assessment Report into what caused a sinkhole at a Monaghan GAA club has found that recent mining operations involving water storage caused pillars to collapse in some parts of the mine.

The initial report found that the transport and storage of water <u>in an old part of the mine</u> that hadn't been used for water storage previously resulted in the collapse of some pillars. It said that this was the most likely cause of the sinkhole.

Mining company Gyproc said the report "identified a unique and complex set of circumstances as being the most likely cause".

The report also indicates that the "disturbance area" or the area affected by the sinkhole, is at a 120m radius around the Monaghan GAA Club.

It added that danger signs evident here do not appear elsewhere in the area, but geological investigations are ongoing.

It's possible that the ground could split or sink further around the GAA club as the earth settles, the report said, but it would be confined to the 120m radius.

Koen Verbruggen, Director of Geological Survey of Ireland, told Morning Ireland yesterday that it was unlikely that Magheracloone GAA Club would be able to return to its grounds at the area.

When asked directly if there will be more collapses, he added:

The short answer is we don't know if there will be more collapses... The only thing is to monitor the situation.

Assessing houses in the area

Outside of the actual disturbance zone, the ground around five houses and two stretches of public road has also been earmarked for investigation.

Monaghan County Council said that the Carrickmacross/Kingscourt Road (R179) will remain closed from Drumgossatt Crossroads to O'Rourkes Filling Station at Drummond while investigations are being carried out. "Further, more detailed, geological assessment is necessary to ascertain the conditions beneath the R179 Kingscourt to Carrickmacross Road and the L4900 Drumgossat road," he said.

The LP4900 to Drumgossatt will also remain closed, and traffic between Carrickmacross and Kingscourt is being diverted via Shercock.

The road closures are projected to remain in effect until mid-October, the council said.

Gyproc says that it has been in regular contact with the families in the affected houses to ensure they have appropriate support and have also appointed a family liaison officer from the company. It said: Gyproc remains in regular contact with Magheracloone GAA Club and Community Centre and has also offered its support to replace the damaged facility.

Gyproc is in regular contact with the relevant experts from Monaghan County Council and other authorities to assess the situation and ensure appropriate support measures are in place to minimise disruption. Monaghan County Council officials, representatives of Gyproc, members of An Garda Síochána, members from the exploration and mining division of the Department of Communications, Climate Action and Environment, and a representative from the EPA met yesterday afternoon and are liaising on the next course of action.

https://www.thejournal.ie/monaghan-sinkhole-report-4256464-Sep2018/

Locals fear fresh mine as 30-metre sinkhole opens

Caroline O'Doherty January 21 2020

Another hole has opened up on lands associated with mining works in Co Monaghan.

The hole, thought to be about 30 metres deep, emerged over the weekend on the site of a smaller hole that had been filled in after it appeared last August.

It is the third time holes have appeared on lands near Carrickmacross since the dramatic collapse of ground that destroyed Magheracloone GAA Club's clubhouse and playing pitches and the local community centre in September 2018.

...

https://www.independent.ie/irish-news/locals-fear-fresh-mine-as-30-metre-sinkhole-opens-38880864.html

Mining firm in sinkholes storm bids to pump much more sulphate into river

Caroline O'Doherty April 15 2020

The mining company responsible for a spate of sinkholes in Co Monaghan wants a sixfold increase in the amount of sulphate it is allowed to discharge into a local river.

Gypsum mining firm Gyproc is being prosecuted by the Environmental Protection Agency (EPA) for breaches of its sulphate discharge licence since the 2018 underground flooding incident that sparked a series of ground collapses.

But the company says it can no longer work within the constraints of that licence, and it has applied to the EPA to have the limits increased.

The request has raised concerns within the EPA and Irish Water. The local river, the Bursk, flows into the Lagan River which becomes the Glyde River which supplies drinking water to Tallanstown in neighbouring Co Louth. Inland Fisheries Ireland has also said it is "very concerned" about the impact on fish life.

Gyproc has provided reports to show that by the time the water reaches the drinking water abstraction point, sulphate levels reduce to within current permissible levels.

It also says there is minimal effect on freshwater algae and an "absence of significant acute toxicity to freshwater fish or crustaceans".

The EPA said it was not in a position to make a decision yet. "The agency is currently awaiting additional information from the applicant in relation to this application," it said.

Gyproc's existing licence lets it discharge sulphate into the Bursk at a maximum rate of 200mg per litre. It wants to have the limit raised to 1,250mg per litre, saying the higher levels will occur only at certain times, and will not be year-round.

Sulphate occurs naturally in the ground where Gyproc mines and is discharged when the company pumps out water that accumulates in the underground chambers of its Drummond mine.

The amount of water and sulphate pumped out into the Bursk has risen sharply since the mine flooded in June 2018.

Initially, the flood water was pumped into the adjacent spent Drumgossat mine but that had to stop in September 2018 after the water undermined support pillars and parts of the mine ceiling collapsed, destroying Magheracloone GAA's playing fields and clubhouse as well as a community centre above. A series of smaller collapses has occurred in surrounding areas since.

Water with high sulphate levels has an odour, is unsuitable for livestock to drink, is damaging to freshwater plant and animal life and can cause diarrhoea in humans if it gets into drinking supplies.

Separately, it has emerged that Gyproc was reprimanded after failing to report a discharge of reddish-brown coloured water into a local stream on Christmas Day last.

EPA inspectors who visited the scene two weeks later following complaints by members of the public found a pump had tripped during heavy rain, causing an overflow of sediment-laden water from a storage lagoon.

The EPA recorded five compliance issues, including failure to notify the agency of the incident as soon as practicable; failure to produce evidence that testing of the discharged water had taken place; and failure to show evidence that daily visual inspections at discharge sites were being carried out as required.

The breaches come at a time when the company is preparing to submit a planning application for a new open-cast mine close to its existing operations.

Gyproc said in a statement that the issues over Christmas had been "resolved promptly with no impact to the area".

In relation to its discharge licence application, it said: "A review of Gyproc's industrial emissions licence relating to its mining activities is currently under way and we look forward to its conclusion."

The company added that land and road monitoring agreed after the ground collapses was continuing. "The monitoring programme is important to ensure ongoing safety and we hope it provides reassurance to the community that our focus on the mine workings has not been diluted even during this unprecedented Covid-19 pandemic," it said.

 $\frac{https://www.independent.ie/irish-news/mining-firm-in-sinkholes-storm-bids-to-pump-much-more-sulphate-into-river-39128984.html$

SCHEDULE 2 - Mining Fatalities'

Five deaths and risk of damages in legacy left by mines

Caroline O'Doherty May 28 2020

Five workers died at the Lisheen and Galmoy lead and zinc mines in accidents and incidents over a decade and a half of operation.

A report also notes records of injuries at the mines are incomplete.

The issues are raised by consultants assessing the impact of the mines that operated in counties Tipperary and Kilkenny from the late 1990s until the mid-2010s.

They said property owners left out of pocket from damage caused by mining could struggle for compensation because of confusion over who was responsible for paying up.

They warned of "significant uncertainty" over future financial provision after a mining has ceased. Modern mines, including Lisheen and Galmoy, are subject to 30-year closure plans, but there is no financial provision for damage, such as sinkholes, that can occur after that.

The report said most of the €13m provided by Galmoy as a 'closure bond' and most of the €24m from Lisheen had already been used.

"While a small amount was set aside for risk and contingency, temporary gaps in the financial provisions for the after-care period have been identified," the report said.

The issue is being addressed as a "matter of urgency", but it added: "There is still significant uncertainty regarding financial provisions for the post-aftercare period, and whether if an unexpected incident occurred in 50 years' time, for example, there would be a mechanism to ensure that those funds are readily available.

"There is need for clarity on who the insurer of last resort would be in such an instance."

Overall, the report found the mines benefited the local and national economy and their environmental impact was relatively low, as far as could be ascertained.

"It was not always possible to determine whether the mines had effects on their local environments, and in some habitats, such as water and peatland, it was not always possible to clearly separate the impact of mining activities from other environmental influences."

https://www.independent.ie/business/irish/five-deaths-and-risk-of-damages-in-legacy-left-by-mines-39239797.html

Tragedy averted as 77 trapped Tara miners rescued

GRAINNE CUNNINGHAM February 11 1999 12:11 AM

A MAJOR tragedy was avoided yesterday when 77 men were successfully evacuated from Tara Mines, having been trapped for almost six hours more than 1,000 feet under ground.

Last night technical experts were examining the scene of a blaze which started when a 50-tonne truck burst into flames in a tunnel at the mine, just outside Navan, Co Meath.

The fire immediately activated the mine's automatic emergency procedure, which involves circulating a harmless warning gas throughout the 30-35 miles of tunnels warning the 101 men in the works at the time of the danger. The 24 workers who were closest to the exits left the mine quickly while the remaining 77 headed for nine refuge stations located at various places in the tunnel network, which spans several hundred acres.

The refuge stations are specially designed to house miners in the event of major accidents. Fresh air is pumped through to the stations and telephones provide contact with those on the surface.

During their long wait underground, the miners were able to phone their families to assure them of their safety.

When the fire started, a truck driver alerted safety personnel and three specialised mine rescue teams totalling 25 people swung into action. Navan Hospital was put on alert in case of any injuries.

A witness told of the moments after the fire: ``There was an explosion, I heard a noise and ran down to see flames, the alarm was raised and we all evacuated to the safety shafts."

As soon as the company was satisfied that the situation was sufficiently stable, they began to bring groups of men up in trucks.

By 8.30pm, company spokesman Colm Conachy reported that all of the miners had reached the surface unharmed and were returning to their families.

Mr Conachy said: "Everybody is more or less on the surface and the fire on the truck has virtually gone out".

None of the miners had suffered smoke inhalation or injuries of any kind and staff at Navan Hospital casualty department had been told to stand down.

Mr Conachy said he would be unable to say what caused the fire until company inspectors had examined the vehicle. A preliminary investigation was being carried out last night but a full inquiry will proceed today. The spokesman said he was satisfied that the mine's emergency procedures had worked well. "When everything is over, we will check through the systems again to ensure that all the plans for emergencies worked the way they should have done."

There was a similar incident at the mine a number of years ago, but the Finnish-owned company has had an enviable safety record.

Men were already reporting for the night shift at the mine at 9pm last night and Mr Conachy said mining operations would continue, as normally as possible although he said some shortfall in production was probable.

The area around the burned out truck will be cordoned off until it can be removed and tests are to be carried out to ensure there has been no damage to the communications system or elsewhere.

Tara Mines, which has been in operation since 1977, is the biggest active mine in Europe, producing 10,000-11,000 tonnes of ore daily from which zinc and lead is extracted.

The metals are then exported to Europe and elsewhere for use in galvanising and rust protection. The company employs 600 people, both directly and indirectly.

https://www.independent.ie/irish-news/tragedy-averted-as-77-trapped-tara-miners-rescued-26159514.html

Tara Mines fined €350,000 over man's fatal accident

Fri, Apr 20, 2007, 01:00 Elaine Keogh

Boliden Tara Mines Ltd has been fined €350,000 for a breach of health and safety legislation in relation to an accident at its mine in Navan where one of its miners was killed.

In a statement read to Trim Circuit Court yesterday, the family of Noel O'Neill said: "We are still waiting for him to come home."

Mr O'Neill (57), a father of four from Grennanstown, Athboy, was the second member of his family to die in an accident at the mine; the last previous death had been of his brother, Martin, in 1988.

The court heard that Noel O'Neill was underground and operating a drill on frozen or unstable ground between two tunnels. He died when the ground collapsed and he fell into a void on the afternoon of June 21st, 2005. As a result the company now has barriers and warning signs around such ground.

The prosecution was on foot of an investigation by the Health and Safety Authority and its inspector, Manus Tiernan, told the court: "If barricades had been in place, he would have been outside the danger zone and possibly be alive today". State prosecutor Jonathan Kilfeather said the ground was shattered but would have appeared to be in one piece and was by nature unstable.

Mr Tiernan said that in an effort to try and remove this shattered or frozen ground, the company used further blasting as well as water, but they were unsuccessful and the decision was taken to move to a new area. It was in this area the deceased was working.

A statement read to the court said the devastation caused to his wife, three daughters and one son "is unknown to a lot of people and has changed our lives completely".

They suffer from stress and his widow, Ann, no longer sleeps, has not returned to work and no longer socialises. "We are still waiting for him to come home. The loss is unbearable," it said.

The company pleaded guilty to failing to provide and maintain suitable equipment such as chain barricades for the isolation of unstable ground as was necessary to ensure the safety and health of its employees.

The guilty plea was entered on its behalf by managing director Bert-Ove Johansson and accepted by the State on the basis that the full facts of the investigation be given.

https://www.irishtimes.com/news/tara-mines-fined-350-000-over-man-s-fatal-accident-1.1202622

The UK

Reality check: how dangerous is mining?

Five miners have now been killed in coal mines in the past month raising concern about safety standards in pits. Polly Curtis examines how dangerous the modern coal industry is.

https://www.theguardian.com/politics/reality-check-with-polly-curtis/2011/sep/28/reality-check-how-dangerous-is-mining

Collapse of mine shaft causes large sinkhole on Cork road

October 24th, 2019



The collapse of a mine shaft in Cahermeeleboe, Co Cork has caused the formation of a large sinkhole on the road linking Castletownbere to Allihies village that authorities have warned may expand.

The L-8912-0 road linking Castletownbere to Allihies is closed to the public as a matter of emergency, with Cork County Council warning the public not to go beyond to erected safety barriers near the sinkhole.

Allihies Village is home to several abandoned and dilapidated copper mines dating back to the 19th century when the area was at the heart of copper ore production in the country.

The Department and the EPA recently carried out a study to identify and assess the potential risks of historic mines across the country. The survey found high concentration of copper residue in streams in areas with historic, disused mines including Allihies, Avoca, Glandore and Ballycummisk in West Cork.

A spokesperson for the EPA told The Green News that it is not involved in the efforts to survey and assess the new situation in Allihies as its inspector believes that "this would be a matter for the local authority".

The Council has asked the Department of the Environment to survey the area where the sinkhole formed to determine the scope of the problem and to gauge the possibility of further collapses.

The Council also confirmed to The Green News that the identity of owners or those responsible for the maintenance of the abandoned mines in Allihies is unknown at this time.

"Searches for the current landowner and for the person or company with responsibility for the mines and minerals on the landholding is being undertaken," a spokesperson said.

Social Democrats Councillor for West Cork, Holly Cairns, also told The Green News that further enlargement of the sinkhole remains a worry. "I urge all members of the public not to go near to the sinkhole and to not go beyond the safety barriers," she said.

According to the Health and Safety Authority (HSA), disused mines and shafts are a "major problem" in the country as little consideration has often been given to "make these sites fully safe".

The HSA wants to see strict legislation brought in to ensure public safety in the presence of abandoned and disused mines, enforcement of which could be overseen by the Environmental Protection Agency.

Last year, several sinkholes emerged in Magheracloone in Co Monaghan on land owned by Gyproc, an Irish plaster and plasterboard manufacturer, following the collapse of a pillar in the disused Drumgossatt mine. A 100-meter sized sinkhole damaged football pitches at Magheracloone GAA club in September.

About the Author

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Shamim is a Senior Reporter at The Green News and a contributing writer to the Irish Examiner, Cork Evening Echo and the Dublin Inquirer.

https://greennews.ie/collapse-of-mine-shaft-causes-large-sinkhole-on-cork-road/