

Mr & Mrs Denis Sheehy  
Killoran  
Moyne  
Thurles  
Co. Tipperary

06/04/10

Environmental Protection Agency  
Public Offices  
Headquarters  
Johnstown Castle Estate  
Co. Wexford

Re: Application for review of IPPC Licence from Anglo American Lisheen Mining Limited, Killoran, Barnalisheen, Ballyerk ect. Moyne Thurles County Tipperary Licence Register P0088-03.

Dear Sirs,

As we reside within close proximity to the mine, its site plant, its ancillary function points for example, SW2, air vent shafts - we have concerns not alone for the preservation of our home but for further emission points for area no. 7 or Bogzone.

Paragraph 2 of Process Description in Dr Karen Creeds inspectors report on the licence application denotes that the ore is stockpiled in an enclosed area from where it is fed to the process plant. We know however that loads of unprocessed lead and zinc of a higher grade is being transported from Galmoy Mines and dumped in the open air at Lisheen while it is waiting to be processed. Why is this the case? Why is this even allowed?

It is with great horror that we read of Lisheen's request to reduce monitoring frequency of emissions to bi-annually. Monitoring by lisheen mine over the years especially at M1 has been bordering on a falsehood. Enclosed is our latest letter which completely plays down blasts felt at M1. As far back 12/01/02 at 4.50 AM there was a huge blast, the blast was the most severe in five years our records show, environmental staff at lisheen noted that the underground fault acts as a buffer and does not allow M1 to fully record the severity of blasting.

At a Public meeting held in Moyne hall in September 2006, we publically raised questions to the manager regarding M1, only to be told that the said monitor was calibrated so that it would not be triggered by a passing lorry, when one considers the close proximity of the Monitor to the road, it is small wonder that anything is recorded on M1 not to mention a blast. We have no protection.

There is a new house build approximately 1 mile away and it has over 250 cracks in its walls

In September of 2006 a sinkhole appeared at the main entrance to the dwelling enclosed is Hayes Higgings engineers memo describing the sinkhole and reasons why it may have occurred. We have grave reservations about dewatering at bog zone, - the Killoran underground fault and heavy rainfalls.

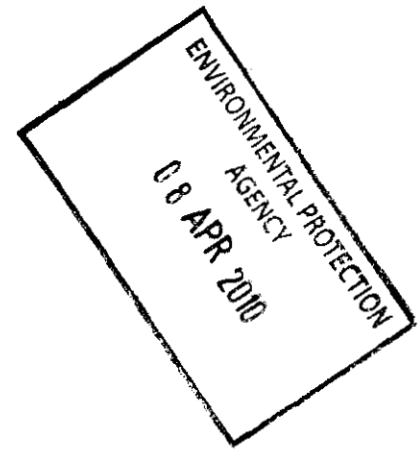
Last October rain came in at ground level by the window not far from where the main crack is in the house. Although it was never put into a report all the evidence suggests that it is coming in at roof level lodging on 18 inch thick wall and making its way to the lentil of the new walls. It is a common occurrence to hear roof timbers creak during heavy blasting locally. We do not want any more blasting within close proximity to our dwelling house.

In Dr Creeds report dealing with emissions it is imperative that the EPA maintain condition 6.11 by maintaining test populations of fish for toxicity induced by discharge from the mines. Residence close to Ballyduag and the <sup>Roostan</sup> Black river note that the trout caught cannot be eaten, or duck for that matter. We have brought this to the attention of Lisheen for many years.

Denis & Mary Sheehy

Denis Sheehy  
Mary Sheehy

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Mr and Mrs Sheehy,  
Killoran Cross  
Moyne  
Thurles  
Co Tipperary

29th March 2010

Dear Mr and Mrs Sheehy,

I am writing in response to your letter dated March 12<sup>th</sup> 2010 which refers to vibrations that you reported on the 10<sup>th</sup> and 12<sup>th</sup> of March.

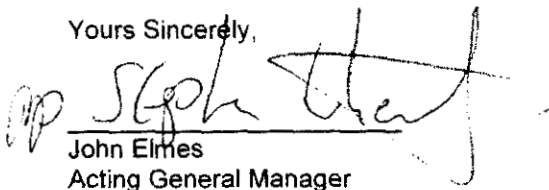
On the morning of the 10<sup>th</sup> of March there were no triggers recorded at any of our vibration monitoring stations, which demonstrates that any surface vibration would have been below the instrument trigger point of 0.6mm/sec PPV.

As you are aware the mine voluntarily suspended all night-time (21:00 – 07:00) blasting in Derryville South some years ago. Our investigation established that there were a number of night-time blasts throughout the mine (Main Zone, Bog Zone etc); any of these could have potentially generated a surface vibration which, although small, could have been perceivable at your location (M1 monitoring station). It was also established that a routine development blast took place on the southern border of Derryville East. As stated, no blast taken on the morning of the 10<sup>th</sup> resulted in a vibration of greater than 0.6 mm/sec – the night-time limit is 4mm/sec. Despite significant disruption to the mining schedule, the suspension of night-time blasts remains in place for Derryville South. However, it is possible that blasts from other areas of the mine could be perceived at the M1 location. It is not possible to implement any further restriction on night-time blasting in the Mine.

There was one trigger recorded on the evening of the 12<sup>th</sup> at 17:26, which coincides with the time that you gave. The result of 1.05 mm/sec PPV was within our daytime IPC license limit of 8 mm/sec PPV. There was no notification given from the Mine of this blast as it was a normal production blast, and not a long-hole. It was agreed that the Mine would give notice of long-hole blasts only as these are more likely to generate larger vibration levels. Production / development blasts will take place almost every evening at 17:00 in any case; therefore there is no value in notification.

It is not possible to carry out our operations without blasting and as such there will be surface vibrations related to these blasts. Our underground operations are maintained to the highest standards to ensure that vibration levels are kept to an absolute minimum. We will continue to inform your household of long-hole blasts, and carry out the twice yearly structural survey.

Yours Sincerely,

  
John Elmes  
Acting General Manager

cc Mr Pól O Seasnáin EPA

THE LISHEEN MINE

Clonabally, Co. Wick. Tel: 0469 456701 Fax: 0469 456702 www.lisheenmine.ie

Part of the Anglo American plc group



# HAYES HIGGINS

*Chartered Engineers  
Project Managers*

M E M O			
To:	John Hayes		
From:	Seán Power		
c.c.			
Date	26.09.2006		
Project:	Denis & Mary Sheehy	Project No.	01KK075
Subject	Site Inspection 21 <sup>st</sup> September 2006		

Present: Denis & Mary Sheehy,  
Seán Power (HHP)  
John ?, Geologist, Lisheen Mines  
John?, Engineer, Lisheen Mines

Prior to our inspection Mary Sheehy informed us that a circular hole approx 250mm (10') in diameter and 50mm deep appeared adjacent to the front entrance of the building on Monday 18<sup>th</sup> September. Mrs. Sheehy also informed HHP that a severe blast occurred at 5.30am on the 18<sup>th</sup> September.

A number of fine cracks appear to have widened slightly since our last inspection (June/July 2006). No movement have been recorded to the telltale monitoring device attached to the dwelling.

Lisheen mines engineer measured the location of the hole relative to front corner of the building.

Upon inspection of the hole a 2m GPS rod was pushed with relative ease into the hole. The rod was extended 2m vertically and approximately 0.5m horizontally into the fracture. The dimensions of the hole were approximately 450mm at ground level, 200mm deep and 200mm at the base of the hole.

Lisheen Mines Geologist informed us of the following:

1. The closest borehole to the dwelling is approximately 150m and was drilled vertically to a depth of approximately 75m. (See attached Map)
2. To date they had not encountered any other similar features in the vicinity of the mines.

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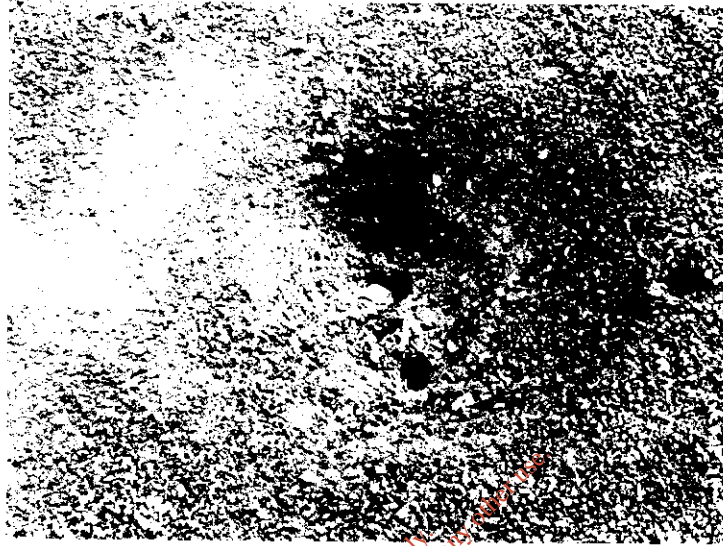
3. No mining has been carried out directly underneath Denis & Mary Sheehy dwelling. The closest mining shaft is approx. 150m from the dwelling at a depth of approx. 100m and is 4.5m wide by 6m in height.
4. A fault passes underneath the Sheehy dwelling running from back to front, which is most likely filled with a weathered sand and slopes towards the mines. The monitoring station at the rear of the dwelling is located at the opposite side of the fault as the mine where the blasting is taken place and this may contribute to the low vibration levels been recorded at the monitoring station.

In there opinion the fault is approximately 1m in width adjacent to the dwelling. A survey will need to be carried out to determine the depth and orientation of the fault.

5. It is the opinion of Lisheen Mines that the formation of the circular hole is due to funnelling of the weathered sand in the fault. Funnelling may have resulted as a result of drying of the sand due to lowering of the water table by a period of dry weather. In addition to this the vibrations caused by blasting may have accelerated the process.
6. Lisheen Mines recommend that a geophysical survey be carried out in the area surrounding the dwelling to determine the size and orientation of any faults in the area. Following this survey some excavations may also be carried out adjacent to the dwelling.
7. The geophysical survey should be carried out within 1-2 weeks of this inspection.
8. Denis and Mary Sheehy have requested that HHP be present during the geophysical survey.

# HAYES HIGGINS

*Chartered Engineers  
Project Managers*



Photograph No. 1: Hole to front of property

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