

## Land, Soil & Air

The detailed monitoring and action plan for groundwater and surface water should be agreed with Northern Ireland Environment Agency.

The monitoring plan should address data collection (flow, level, quality) during the different phases of the project taking into account that some phases can run parallel to each other. Possible phases are: collection of baseline data, operational phase of mine, recovery phase and post-recovery phase.

An action plan including trigger levels should be developed addressing unexpected issues that could pose a significant environmental risk, for example the quality of the discharged water is poorer than predicted; the discharged volumes are considerably smaller or bigger than predicted.

### Other comments:

- a) Section 4.3: The local government district is called Fermanagh and Omagh District Council under the Local Government Reform Programme since 1 April 2015. However, the census data might have been collected before the Local Government Reform.

## **Natural Heritage & Conservation Areas**

**Section Reference:** LA10/2016/0030/PAD.

### **Considerations.**

NIEA Landscape Architects do not hold any specific information on the site. However it should be noted that the site lies within the Sperrin AONB.

In considering the landscape and visual impact of the proposed development, the latest available guidance on Landscape and Visual Impact Assessment methodology should be used. NIEA Landscape Architects recommend the methodology advocated by the "Guidelines for Landscape and Visual Assessment" 3<sup>rd</sup> Edition by the Landscape Institute and the Institute for Environmental Management and Assessment published April 2013 is used. The Landscape Institute Advice Note 1/11: "Photography and Photomontage in Landscape and Visual Impact Assessment" should also be considered.

Please also refer to the NI Regional Landscape Character Assessment (NIRLCA) 2016 and the NI Landscape Character Assessment 2000 which can be found at <https://www.doeni.gov.uk/articles/landscape-character-northern-ireland>.

## Natural Heritage & Conservation Areas

Section Reference: CB 22977

Date of NED response: 05/02/16

### Considerations

NED has been consulted on a draft scoping document for environmental assessment of the proposal, which is being considered, and will be responded to in detail separately. The scoping document notes national and regional designations; habitats including EU Habitats Directive Annex I Habitats and NI priority habitats and other valued habitats in the local and wider context and protected, rare and notable species of flora and fauna

Any environment impact assessment should include consideration and assessment of impacts of the proposed development on Curraghinalt and Curraghinalt Burn earth science conservation review sites/ <http://www.habitats.org.uk/escr/>

Based on the information submitted, NIEA Natural Environment Division (NED) considers that the proposal is likely to have significant environmental effects with regard to the Planning (Environmental Impact Assessment) Regulations (Northern Ireland) 2015.

NIEA Standing Advice can be found at:

[http://www.planningni.gov.uk/index/advice/northern\\_ireland\\_environment\\_agency\\_guidance/standing\\_advice.htm](http://www.planningni.gov.uk/index/advice/northern_ireland_environment_agency_guidance/standing_advice.htm)

All surveys should be guided by NED survey specifications. NED also recommends that all survey works comply with British Standard 42020:2013, which came into effect on 31 August 2013. The British Standard provides recommendations and guidance for those engaged in planning and development, whose work might affect or have implications for conservation, or the enhancement of biodiversity.





## Environmental Health Department

### Consultation Response in respect of Planning Application

APPLICATION REFERENCE	LA10/2016/0030/PAD
PROPOSAL	Request for Scoping Opinion: Planning (Environmental Impact Assessment) Regulations (NI) 2015 Regulation 7(1)(b) Regulation 7 EIA Regs
LOCATION	Dalradian, Curraghinalt approximately 127km west of Belfast by road, 15km north east of the town of Omagh and 7km east of the village of Gortin
DATE CONSULTED	26-01-16
DATE OF RESPONSE	18-03-16

The Environmental Health Department (EHD) has considered the Scoping Report for the Curraghinalt Environmental Impact Assessment process.

EHD is aware that the application is an iterative process and further information will be presented when available.

There are a number of regulatory authorities which have an input into the proposed application, including the Industrial Pollution and Radiochemical Inspectorate (IPRI) and Waste Management (Land and Groundwater Team).

EHD's primary focus is noise and dust impact from selected processes at the site.

EHD notes information presented by IPRI relating to processes covered by a PPC permit issued under the Pollution Prevention and Control (Industrial Emissions) Regulations (Northern Ireland) 2013.

EHD concurs with IPRI that the Noise Impact Assessment should be carried out in strict accordance with BS4142: 2014. Dust monitoring should be carried out in accordance with best available practices.

The consultancy is advised to make contact with the EHD or IPRI as appropriate, in advance of undertaking noise/dust monitoring, to discuss monitoring locations, duration and parameters selected.

Issued on behalf of  
Environmental Health

# Meeting

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Project: Curraghinalt: FODC and NIEA IPRI

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Venue: Dalradian Gold Limited Offices and on-site Date: 18 April 2016

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Present:

[Redacted names]

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Circulation: Project Team

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Notes Action

1. [Redacted] provided an overview of the matters raised by NIEA IPRI and FODC. He explained the methodology and approach taken by Envest Environmental (EE) in respect of noise and dust monitoring. He confirmed that additional seasonal surveys would be carried out in June 2016 (initial round of monitoring 24<sup>th</sup> Feb until 9<sup>th</sup> March) and any further seasonal surveys will depend on the submission of the planning application. Baseline noise information available from 2012. The six noise monitoring locations were selected as they relate to the application site.
2. [Redacted] explained that PM<sub>10</sub> monitoring was carried out two separate locations. Low levels recorded in October 2015. Other monitoring previously carried out will also be presented within the ES.
3. [Redacted] asked [Redacted] to confirm whether or not the existing air quality is good, background levels? [Redacted] responded by stating that low levels of metal concentrations have been recorded. No spikes, very low concentrations.
4. [Redacted] explained that a health specialist has been appointed and he will assess the existing soil quality. 70-80 samples collected.
5. [Redacted] stressed the importance of having a comprehensive baseline as issues were raised before.

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6. [REDACTED] explained that deposition data is hit or miss and therefore it is difficult to identify trends.
7. [REDACTED] queried the quality of the data. DOE and the Council will not be carrying out their own. National standards to be applied. The public will have a go at the quality of the data. The baseline will effectively be the benchmark for the assessment. Assess on facts and compare to the relevant standards.
8. [REDACTED]. noise calibration. Digital available. I-lab and UCAS accredited. The data presented needs to be readable. PC agreed. Transparent and fair.
9. [REDACTED] explained that monitoring has been ongoing for a number of years and that the data sets will be presented as one. Baseline studies currently being pulled together. Factual information.
10. [REDACTED] asked whether or not the background levels relevant to the monitoring location points varied in comparison to the average value?
11. [REDACTED] replied by stating that slightly higher noise levels were recorded at Rousky due the proximity of the monitoring location to the Crockanboy Road. The monitoring location at Camcosy Road is away from the existing operation however considered to be representative. In respect of air quality limited variation.

**Radon**

12. [REDACTED] asked whether or not FODC were responsible for radon. BGS data good baseline. Latest review was carried out in 2015. Down to one sq km. For HSE it is an issue for staff on-site. Difficult to anticipate any impact on residential properties.
13. [REDACTED] explained that in terms of responsibility it either falls under the remit of building control or else it will be sign posted to the Public Health Agency (PHA).
14. [REDACTED] referred to his colleague Dr Julian Rosa who deals with licencing and permitting and should be able to assist FODC EH.
15. [REDACTED] explained that it is important to know whether or not there are any thresholds.
16. [REDACTED] suggested someone from HSE (Ken Logue). Raised through the Drinking Water Inspectorate due to the potential impact on pathways and aquifers especially if there are proposals to abstract.
17. [REDACTED] confirmed that the mine will be dewatered.

**Suitability of the Monitoring Locations / Initial Monitoring**

18. [REDACTED] asked for comments on the monitoring locations.
19. [REDACTED] queried the location of NML1 and its proximity to the processing plant and suggested a second monitoring location close to the plant itself. From FODC

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- perspective it is important to have another monitoring location. He also recommended that DGL/EE consider an additional monitoring location within a group of houses.
20. ■ suggested an additional location in Greencastle. Additional monitoring to be carried out in June.
21. ■ stressed that it important that continuous monitoring is carried out post construction. Something to consider.
22. ■ asked EE/DGL to confirm how they can be confident that NML4 has not been contaminated with existing activities. He suggested trying to revert back to the original background pre-exploratory works or alternatively relocating/dropping NML4.
23. ■ confirmed that NML4 is located approximately 350m away from the existing site and sheltered form direct noise impacts. The Owenkillew River dominates bkg noise levels in this area. He suggested that there is some relevance of having NML4 as there will be some form of traffic on Camcosy Road.
24. ■ asked whether or not there is a day/night time split. MK responded by explaining that the baseline assessment has considered day/evening/night time periods..
25. ■ explained that ESTU guidance advises against monitoring beside a watercourse. ■ explained that the Owenkillew river flows as well as stream in the area dominate the noise climate in the valley.

**Mine processing / activities and responsibility**

26. ■ a more definitive description of the processes however her initial advice was that crushing and screening would fall under Part B unless wet. BF explained that if the crushing is dry two aspects. Noise falls under the remit of FODC. Dust exempt or controlled by NIEA. An initial discussion took place in respect of the different components of the proposals and whether or not the permitting / control fell under the remit of NIEA or FODC.
- (a) 2<sup>nd</sup> vent . FODC (dust from the vent)
  - (b) Blasting . FODC (controlled by FODC however relevant to both consultees FODC and NIEA)
  - (c) Underground mining to the crusher . FODC
  - (d) Construction phase . FODC
  - (e) Haul of material (transportation) . FODC
  - (f) Processing of bulk cement (Part C) FODC however if it is a directly associated activity e.g. refining (furnace) may come to NIEA
27. ■ explained that the processing of cyanide may fall under Part A (an integrated process water, waste and noise). Boundary line to be drawn and NIEA to determine. If refining could be Part C (strong link).
- (a) Part A . NIEA
  - (b) Part B . noise aspects FODC EH and dust aspects NIEA

(c) Part C . FODC

Based on the above, NIEA IPRI will permit the following operations only;

- Primary Crushers - Crushing and Screening Activities (proposed Dry process) . Part B Permit (Air Emissions Only)
- Processing Building - Carbon-in-leach / Carbon strip & Electrowinning . Part A Permit (all emissions)
- Refining / Smelting using a furnace . Part C Permit (Air Emissions Only)
- Cement Operations - Use of cement in backfill paste - Part C Permit (Air Emissions Only)

28. ■ suggested further discussions should take place between NIEA and FODC. Important to understand static equipment and the mobile parts of the process and that the cyanide process will take place in one building.

#### **Lighting Assessment**

29. ■ requested that a full lighting assessment should be carried out and submitted as part of the planning application taking into consideration downward lighting, security lighting, LUX levels and any potential amenity issues.

#### **Noise Assessment and Regulations**

30. PC referred to NIEA's response which specifically refers to BS4142: 2014. In compliance with BS4142: 2014 the noise generated by the processes should be the same as the background at the sensitive receptors.

31. ■ explained that the proposal is not a quarry therefore industrial processing regulations (BS4142: 2014) should apply. If this is not the case need to challenge now.

32. ■ followed up by confirming that the current background level is 30dB at average wind speeds of 3 m/s. Very low noise levels of 20 dB have been recorded during still periods. This may result in overly stringent noise target levels. MK queried where using a very stringent BS 4142 assessment as per IPPC Horizontal Guidance Note H4 takes preference over or vice versa over BAT.

33. To achieve minimal impact and deliver BAT the engineers will consider different types of cladding, submerging the processing plant etc. If the predicted noise level reaches 45dB this will comply with the old WHO guidance. PC acknowledged that the WHO guidance is helpful context however it is important that the design team carries out a cost benefit analysis in order to justify BAT e.g. to get 20dB could equate to £100m, to get 30dB could equate to £20m. The design team needs to consider what they can practically do e.g. submerge the building, berms etc Low frequency attenuating noise is a key consideration.

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34. ■ explained that DGL and EE have looked at the existing site which has been regulated for noise. There may be some parts which will need to be re-designed.
35. ■ stressed that it is important to determine background noise which is representative, what is the absolute level. Need to consider the likely impact outside and in.
36. ■ re-emphasised the point that the proposed development is not a quarry therefore the rationale for assessing noise impact in accordance with specific regulations needs to be set out. The extraction of the mineral up to processing plant, stopping at the crusher, may not fall under BS4142: 2014 and FODC EH may need to take some advice on this specific point. Need to consider which regulation(s) are the most relevant.
37. ■ made the point that up until the processing plant is akin to quarrying.
38. ■ confirmed that dry stack tailings falls within the mining waste directive.
39. ■ highlighted that FODC will be the first point of call for complaints. In the interests of public amenity need to ensure that the proposal meets reasonable standards. The accompanying management plan is an important document which should detail any of the proposed mitigation measures. Minimal impact on receptors advisable.
40. ■ confirmed that an accurate baseline should be available over the next couple of months. Happy to discuss levels in advance of publishing the ES.
41. ■ asked DGL/EE to confirm the hours of operation. MK explained that this detail will be set out in the project description. Crushing will be carried out during the day however the processing plant will operate 24/7.
42. ■ requested a list of the comparative mines.

**Follow Up Actions**

- (a) FODC & NIEA IPRI to revert back to EE/DGL in respect of the additional monitoring location(s).
- (b) FODC & EE to consider the appropriate regulations.
- (c) FODC & NIEA IPRI to liaise in respect of the different components of the proposal and who is responsible for regulating/conditioning which parts.
- (d) FODC to follow up with Dr Julian Rosa from NIEA in respect of radon.
- (e) Project team to consider the request for the lighting assessment.

**Contact**

Sheila Murphy





Ref: ENV-1532 - Dalradian Gold ES

Date: 5<sup>th</sup> May 2016

Fermanagh & Omagh District Council  
Environmental Health Department  
The Grange  
Mountjoy Road  
Omagh  
Co. Tyrone  
BT797BL

Attention; [REDACTED]

Dear [REDACTED]

**Re: Consultation Response in respect of Planning Application LA10/2016/0030/PAD.**

Further to a Pre-Application Discussion (PAD) meeting held on Friday 15<sup>th</sup> January and receipt of the Fermanagh & Omagh District Council Environmental Health Department (FODC EHD) scoping response (copy enclosed), a site visit was held on Monday 18<sup>th</sup> April 2016. Representatives from FODC EHD, the Northern Ireland Environment Agency, Industrial Pollution and Radiochemical Inspectorate (NIEA IPRI), Department of Environment (DoE), Turley, Envest Environmental Ltd. and Dalradian Gold Ltd. attended the meeting.

The purpose of the site visit was to review the baseline monitoring locations, monitoring duration and monitoring parameters selected. This site visit entailed a presentation at the DGL offices in Omagh and a tour of the proposed development area. The relevance of *BS4142: 2014 Methods for rating and assessing industrial and commercial sound* and the Planning Practice Guidance 'Assessing Environmental Impacts from Mineral Extraction – Noise Emissions' (March 2014) was also discussed.

**BS 4142: 2014 Methods for rating and assessing industrial and commercial sound**

BS4142: 2014 describes methods for rating and assessing sound of an industrial and/or commercial nature (Para 1.1), which includes:

- a) sound from industrial and manufacturing processes;
- b) sound from fixed installations which comprise mechanical and electrical plant and equipment;
- c) sound from the loading and unloading of goods and materials at industrial and/or commercial premises; and
- d) sound from mobile plant and vehicles that is an intrinsic part of the overall sound emanating from premises or processes, such as that from forklift trucks, or that from train or ship movements on or around an industrial and/or commercial site.

BS4142: 2014 is not intended to be applied to the rating and assessment of sound from the following sources (Para 1.3):

- a) recreational activities, including all forms of motorsport;
- b) music and other entertainment;
- c) shooting grounds;
- d) construction and demolition;
- e) domestic animals;
- f) people;

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- g) public address systems for speech; and
- h) other sources falling within the scopes of other standards or guidance.

Specific planning guidance is in place for mineral extraction (Planning Practice Guidance 'Assessing Environmental Impacts from Mineral Extraction – Noise Emissions' (March 2014)) and therefore, BS4142: 2014 is not applicable to the mineral extraction activities proposed.

In accordance with paragraph 1.1 (a) of the *BS4142: 2014 Methods for rating and assessing industrial and commercial sound* a noise impact assessment will be carried out for Part A Permit processes on site. The assessment will be undertaken in accordance with the relevant methodology outlined in the Integrated Pollution Prevention and Control (IPPC) Horizontal Guidance for Noise: Part 1 Regulation and Permitting and Part 2 Noise Assessment and Control (2002).

It is our understanding that the following components of the proposed development will be permitted by NIEA IPRI according to the Schedule in Pollution Prevention and Control (Industrial Emissions) Regulations (Northern Ireland) 2013 (PPC Regulations);

- Part A Permit (All emissions including noise) - Processing Building, Carbon-in-leach / Carbon strip & Electrowinning.
- Part B Permit (Air Emissions Only) - Primary Crushers, Crushing and Screening Activities (proposed Dry process)
- Part C Permit (Air Emissions Only) - Refining / Smelting using a furnace and Cement Operations, Use of cement in backfill paste

With regard to *BS 4142: 2014 Methods for rating and assessing industrial and commercial sound*, NIEA IPRI require all submissions referring to BS 4142 to follow the 2014 standard and that Part A installations with a history of noise complaint should note that any new assessments should be carried out in accordance with the 2014 standard, as it may significantly alter the impact (as compared to the BS 4142:1997 method).

### **Planning Practice Guidance 'Assessing Environmental Impacts from Mineral Extraction – Noise Emissions' (March 2014)**

The Department of the Environment's 'Strategic Planning Policy Statement for Northern Ireland' - Planning for Sustainable Development (SPPS) (September 2015) refers to the Noise Policy Statement for Northern Ireland (September 2014). The Noise Policy Statement for Northern Ireland states the following with regard to noise limits, "*Unlike air quality, there are currently no European or national noise limits which have to be met, although there can be specific local limits for specific developments*". Therefore, in terms of guidance for assessing noise from mineral workings and associated activities in Northern Ireland, the established practice is for the Department and Local Councils to consider the English Planning Practice Guidance 'Assessing Environmental Impacts from Mineral Extraction – Noise Emissions' (March 2014) (PPG).

For example, Planning Application K/2012/0373/F is for an underground mine and associated surface level works to include car parking area, ancillary buildings (including fan room, miners dry room, ore storage building, mill building, general storage compound), plant (including conveyor belt, material transfer station) and equipment and removal of rock off-site at Cavancau in Co. Tyrone, which was granted on 27<sup>th</sup> July 2015. FODC EHD replied in a Consultation Response dated 25<sup>th</sup> March 2015 that "*The consultant has made reference to guidance contained in the Mineral Planning Policy Statement 2 "Controlling and Mitigating the environmental Effects of Mineral Extraction in England" in carrying out the assessment. It should be noted that this evaluation criterion has now*



*been superseded by guidance provided in the Technical Guidance to the National Planning Policy Framework. This document retains the key elements of Mineral Policy Statement 2 when establishing the relevant noise assessment criteria and provided the noise standards to be achieved for such mineral workings as outlined below;-*

*"Subject to a maximum of 55 dB  $L_{Aeq\ 1\ hour}$  (free-field) the aim should be to establish a noise limit at the nearest sensitive receptor that does not exceed background by more than 10 dB(A)".*

The Technical Guidance to the National Planning Policy Framework (TGNPPF) has now been replaced by the Planning Practice Guidance on Assessing Environmental Impacts from Mineral Extraction published in March 2014. The fundamental principles and standards of assessing noise provided for within MPS2 and the TGNPPF are replicated within the PPG. Therefore, on the basis of the above, the mineral extraction components of the DGL Curraghinalt Gold Mine Project should be assessed against the Planning Practice Guidance 'Assessing Environmental Impacts from Mineral Extraction – Noise Emissions' (March 2014).

Therefore, all mineral extraction activities, including the underground mining activities and its ancillary noise sources, crushing and screening activities, refining / smelting using a furnace, cement operations and the proposed 'dry stack tailings' should be assessed in accordance with Planning Practice Guidance 'Assessing Environmental Impacts from Mineral Extraction – Noise Emissions' (March 2014). As outlined above, these activities are 'mineral extraction' rather than industrial processes and BS4142: 2014 should not apply to these activities.

Yours Sincerely

For and on behalf of Envest Environmental Ltd.



**Mervyn Keegan**

Director

Tel. – 087 9136491

Email – 

## Environmental Health Department

### Consultation Response in respect of Planning Application

<b>APPLICATION REFERENCE</b>	LA10/2016/0030/DETEIA
<b>PROPOSAL</b>	Request for Scoping Opinion: Planning (Environmental Impact Assessment) Regulations (NI) 2015 Regulation 7(1)(b) Regulation 7 EIA Regs
<b>LOCATION</b>	Dalradian, Curraghinalt approximately 127km west of Belfast by road, 15km north east of the town of Omagh and 7km east of the village of Gortin
<b>DATE CONSULTED</b>	18-05-16
<b>DATE OF RESPONSE</b>	10-06-16

The Environmental Health Department (EHD) has considered correspondence of 5 May 2016 entitled Consultation Response in respect of Planning Application LA10/2016/0030/PAD.

The correspondence discussed various procedures to assess noise from proposed operations. EHD's understanding is that the process is iterative and aspects of the development proposal will be regulated by the Northern Ireland Environment Agency (Industrial Pollution and Radiochemical Inspectorate), whilst other aspects will be regulated by the EHD.

The correspondence makes reference to:

- BS4142: 2014 Methods for rating and assessing Industrial and Commercial Sound
- Planning Practice Guidance . Assessing Environmental Impacts from Mineral Extraction

The correspondence considers that all mineral extraction activities including the underground mining activities, crushing, screening refining cement operations and dry stack tailings should be assessed in accordance with Planning Practice Guidance Assessing Environmental Impacts from Mineral Extraction . Noise Emissions rather than BS4142: 2014.

EHD considers that BS4142: 2014 does have a role in considering environmental impact. The consultancy should consider potential noise impact from various parts of the process and present narrative on the appropriate assessment methodology. It may be the case that aspects of the development will be considered as mineral extraction whilst other aspects may be considered to be industrial noise and BS4142: 2014 would be more appropriate as an assessment methodology.

EHD suggests that the developer considers both assessment methodologies in presenting impact from the mineral processing aspects of the development.

EHD will liaise closely with the Industrial Pollution and Radiochemical Inspectorate in terms of considering noise impact. The views of the Industrial Pollution and Radiochemical Inspectorate should be sought.

Issued on behalf of  
Environmental Health