TBR12 – Air Quality

Curraghinalt, Gortin

December 2025

Response to Transboundary Consultation Representations – [redacted] (Aona)

Representation Ref	Comment/Issue	Addressed in applicant's submissions to date?	Applicant's Response
TBA1493 - An Taisce – pg. 20-21	The potential for air pollution from this project arises from the fine particulate matter released from crushing of rock, dust from the dry stack tailings, and diesel fumes from fossil fuel burning (4.3 million litres per annum). Dust from mining operations has been recorded twice as far away as Dalradian's project would be to the ROI border; a study in Finland found fine ore dust of 2.5 particulate matter containing arsenic and mercury, on the leaves of trees 60 Page 21 of 27 kilometres from a goldmine at Kittila. Dalradian's proposed site is approximately 18 miles/30 km from parts of Donegal. The potential for air contaminants to blow across the northwest of the island is exacerbated by the rise in storm frequency and severity due to climate change. The recent Storm Éowyn in Febrary 2025 brought record-breaking gusts of 114mph to Donegal and Galway. No worstcase scenario climate modelling has been done to calculate and therefore mitigate for the risks of air pollution from this project to the health of humans,	Yes - as above - Reference - 2017 ES App C19_Air Quality & Dust Impact Assessment. SRK Consulting First Addendum to the ES – C.19 Air Quality Impact Assessment Addendum. SRK Consulting Second Addendum to the ES – C.19 Second Addendum to Air Quality Impact Assessment Addendum (October 2020) &	Detailed dust dispersion modelling for dust deposition and particles (PM10 & PM2.5) has been undertaken No significant impact is predicted. (See Air Quality & Dust Impact Assessment. Second Addendum. October 2020). Water bowser mitigation measures and natural rainfall levels will attenuate dust dispersion (See Construction Mitigation Measures - 2017 Air Quality & Dust Impact Assessment and 2019 Addendum. Operational Mitigation Measures - Section 7 in the 2017 Air Quality & Dust Impact Assessment and 2019 Addendum) Storm Éowyns was an exceptional weather event. The storm was accompanied by torrential rainfall which would prevent wind-blown dust in any case. Real met data has been used in the modelling to predict the risks of air pollution from this project to the health of humans, animals and ecosystems. An assessment of potential heavy metal impacts from the dry stack has been undertaken based on the particle size and content assay. The particle size assay shows relatively large particle size with only a very trace level of PM2.5 & PM10 particles (See Air Quality & Dust

	animals and ecosystems across the north of the island and across the jurisdictions of NI and ROI inclusively	ENV-1532 - DGL Rebuttal Statement 2024 Air Quality 23-11-2024.	Impact Assessment. Second Addendum. October 2020. Section 3.1.3.5 Commentary on Emission Rate Calculations. Tailings particle size distribution). Therefore, larger particles will deposit in close proximity to the dry stack. In terms of the reference to 4.3 million litres per annum – JDS has clarified Annual Average Fuel Use = 1,717,175 l/yr and Annual Peak Fuel Use = 2,143,407 l/yr during L.O.M. I have prepared a detailed assessment of NOx and NO2 emissions based on the fuel usage values as presented in the Updated Air Quality Impact Assessment (Nov 25) (See Annex to the HRA which is appended to the Ecology TBR). This report concludes that there is no predicted exceedance of the relevant ambient air quality standards at the nearest residential properties with the proposed DGL site in operation. The impact of emissions from the proposed DGL site will not be significant on air quality at the nearest designated ecological sites in relation to the Screening Threshold (Test of Likely Significance) outlined in the NIEA 'Revised operational protocol for assessing air pollution impacts on the natural environment' (issued 28th February 2025).
TBA1603 - Environmental Justice Network Ireland – pg. 12	air pollution	Yes - as above	Already addressed in assessments and rebuttals to date.
Pg. 17	Among the heavy metals to be discharged into the Owenkillew River and Owenreagh River include cadmium (known for its accumulation in the food chain, drinking water and soil), arsenic, lead, chromium and mercury, which can remain suspended in air due to its volatile nature. For example, in the Rio Tinto in Spain, pollution from copper mining has lasted over 5,000 years. Given the findings of the independent environmental and ecology assessments in relation to the impact on water quality and ecology, this is highly concerning. A world-renowned mining and groundwater expert, Dr Steven Emerman, has queried the methodology for the mine waste facility and lack of design flood in Dalradian Gold's plans. The parameters and scope of the Dalradian project continue to	Yes - as above	Already addressed in assessments and rebuttals to date. An assessment of potential heavy metal air quality impacts from the dry stack particulate emissions has been undertaken. This has been based on the particle size and content assay. (See Air Quality & Dust Impact Assessment. Second Addendum. October 2020. Section 3.1.3.5 Commentary on Emission Rate Calculations. Tailings particle size distribution).

	shapeshift in what can only be interpreted as a means of ensuring planning permission at all costs.		
TBA0010; 0015; 0020; 0031; 0037; 0044; 0046; 0047; 0048; 0049; 0050; 0052; 0053; 0057; 0065; 0067; 0068; 0069; 0079; 0082; 0086; 0100; 0112; 0115; 0129; 0135; 0137; 0149; 0155; 0157; 0164; 0176; 0185; 0187; 0192; 0200; 0205; 0209; 0213; 0216; 0222; 0233; 0235; 0244; 0247; 0251; 0256; 0263; 0273; 0277; 0278; 0280; 0282; 0285; 0286; 0291; 0292; 0294; 0297; 0298; 0299; 0305; 0311; 0324; 0325; 0331; 0348; 0356; 0365; 0370; 0375; 0376; 0377; 0380; 0384; 0390; 0407; 0417; 0428; 0429; 0434; 0439; 0442; 0448; 0450; 0456; 0477; 0481; 0483; 0486; 0491; 0492; 0509; 0514; 0518; 0523; 0524; 0528; 0532; 0537; 0538; 0540; 0543; 0544; 0546; 0550; 0556; 0560; 0574; 0578; 0588; 0607; 0614; 0619; 0625; 0640; 0647; 0651; 0656; 0662; 0666; 0670; 0671; 0676; 0681; 0692; 0697; 0699; 0706; 0712; 0717; 0720; 0728; 0730; 0740; 0762; 0766; 0785; 0786; 0787; 0791; 0795; 0798; 0801; 0805; 0813; 0816; 0817; 0820; 0825; 0830; 0831; 0833; 0838; 0841; 0847; 0850; 0852; 0875; 0877; 0881; 0885; 0893; 0894; 0898; 0905; 0907; 0910; 0911;	The waste would be stacked in the “Dry Stack Facility” which Dalradian states would need to be sprayed with water to prevent the dust, containing heavy metals such as arsenic, mercury, lead, cadmium, chromium, etc, from blowing in the wind. On the other hand, they also state it would have to be kept dry to prevent Acid Mine Drainage from forming. (That is a dilemma for them, how to keep it wet and dry at the same time!) Dalradian’s proposed elevated site in the Sperrin mountains experiences strong winds as well as heavy rainfall. When dry, the toxic dust could be blown across the island of Ireland. When wet it could leach into the water table. A study in Finland found the fine dust, 2.5 particulate matter containing arsenic and mercury, had blown on to the leaves of trees 60 kilometres from a goldmine at Kittila. Jari Natunen, a Finnish Biochemist, said that this fine particulate matter was very dangerous as it could enter people’s lungs causing respiratory diseases and cancers and that children are particularly vulnerable. (*Explosives release Ammonium nitrate which is poisonous to humans and the environment)	Yes - as above	Dust dispersion will be limited because the tailings will have a water content of approx. 13%. (See Air Quality & Dust Impact Assessment. Second Addendum. October 2020. Section 3.1.3 Dust Emission Rate Calculations) The use of a water bowser with a modest amount of water spreading will also control windblown dusts The extent of the local rainfall volumes will allow for adequate dust control -> in excess of 100 days per annum with significant rainfall (>0.2mm). An assessment of potential heavy metal impacts from the dry stack has been undertaken. (See Air Quality & Dust Impact Assessment. Second Addendum. October 2020. Section 5.2.4 Discussion of Predicted Metal Deposition Rates & Concentrations from DSF Operations)

0914; 0917; 0922; 0932; 0935; 0948; 0950; 0954; 0958; 0963; 0965; 0966; 0970; 0978; 0979; 0984; 0993; 0997; 1002; 1010; 1023; 1031; 1039; 1049; 1056; 1072; 1075; 1077; 1081; 1089; 1096; 1101; 1107; 1117; 1122; 1126; 1130; 1140; 1147; 1149; 1153; 1158; 1164; 1167; 1173; 1180; 1185; 1189; 1194; 1204; 1207; 1222; 1226; 1227; 1230; 1243; 1245; 1253; 1255; 1258; 1259; 1261; 1264; 1266; 1267; 1269; 1271; 1281; 1287; 1289; 1300; 1304; 1308; 1312; 1318; 1322; 1327; 1331; 1332; 1335; 1338; 1344; 1352; 1358; 1359; 1363; 1365; 1369; 1378; 1381; 1382; 1384; 1391; 1392; 1394; 1401; 1415; 1421; 1432; 1440; 1446; 1452; 1457; 1472; 1480; 1481; 1482; 1485; 1491; 1507; 1515; 1520; 1540; 1541; 1556; 1563; 1573; 1574; & 1591 – pg. 1			
Pg 2	Dalradian's proposed site is approximately 18 miles/30 km from parts of Donegal so all the poisonous contaminants from the waste dust, explosives, radon gas and diesel emissions can be easily transported by air. People remember the sand from the Sahara desert and the red dust from the Aughinish aluminium mine in Limerick blowing over the whole country. Air, like water, doesn't stop at borders!	Yes - as above - ENV-1532 - DGL Rebuttal Statement 2024 Air Quality 23-11-2024	The Met Office states that Saharan dust is relatively common in the UK, often happening several times a year when big dust storms in the Sahara coincide with southerly wind patterns. The Saharan dust particles are aerosols. Their particle size is a maximum of 1,100 nm or 1.1 µm. This is much smaller particle size than found in the DGL particle assay. The Updated Air Quality Impact Assessment (Nov 25) indicates no air quality impact in RoI.

TBA1603 – Pg. 39	Dust containing particulate matter (PM10 and PM2.5) from mining activities can travel significant distances, as shown by a 2019 study in Environmental Research Letters. Long-term exposure to PM2.5 is directly associated with increased cardiovascular and respiratory mortality, as documented by the European Heart Journal (2019).	Yes - as above	We have already dealt with dust dispersion assessment in detail, mitigation measures and the fact that a tiny percentage of the tailings is of PM10 and PM2.5 particle size.
Response from Donegal County Council TB Consultation 9.5.25 - Loughs Agency – pg. 95 para 21.11	"Loughs Agency strongly disagrees that implications from blasting would be limited to the lower reaches of the Pollanroe Burn. Upstream impacts such as dust deposition have the potential to impact other species such as macroinvertebrates which are a food source for Atlantic salmon, reducing the availability of food for Atlantic salmon."	Yes - as above	Dust can have two types of effect on vegetation: physical and chemical. Direct physical effects include reduced photosynthesis, respiration and transpiration through smothering. Chemical changes to soils or watercourses may lead to a loss of plants or animals via changes in acidity. These changes are likely to occur only as a result of long-term works adjacent to a sensitive habitat. The project ecologist has assessed dust impacts on sensitive habitats and plants in the study area.
TBA1501 - Friends of the Earth (JO) – pg. 2	The A5 and Goldmine have not been assessed in combination for their climate impacts and emissions of nitrogen.	No	The A5 road is greater than 15 Km (10 miles) from the Goldmine site. There will be no significant in combination or cumulative impact in terms of climate impacts and emissions of nitrogen. The A5 road already exists and a very similar future traffic volume, with or without the scheme development, will emit a very similar level of CO2 and NOx emissions to the proposed route. The background AQ surveys have assessed local air quality which would have taken account of the impact of emissions from the existing A5 road, if any at such a significant separation distance.
Pg. 2	Volatile and extreme weather events associated with climate breakdown are likely to distribute toxic air and contaminated water to RoI (from stack emissions and tailings failure) and these extreme weather implications have not been assessed.	Yes - as above	Real met data has been used in the modelling to predict air pollutant concentrations and deposition rates from this project and assess the impact to the health of humans, animals and ecosystems. The dispersion modelling has shown negligible impact beyond 2 Km from the site. The particle size assay as well as the proposal for the use of the water bowser when required and the inherent 13% moisture content of the dry stack will attenuate any potential for significant dust emissions.
Pg. 2	No assessment of the impact of wildfires and ammonia deposition on the carbon resilience of peatlands around the Irish border.	No	Wildfire impacts, even if they did occur, would be independent from the mine proposals and a significant wildfire will result in far greater emissions than the proposed mine.

			DGL propose that Subtek Velcro is the explosives product that will be used in the mine, which is a water-based emulsion. Significant advancement in modern Ammonium Nitrate (AN) based emulsions can be formulated to have a near-optimal oxygen balance, significantly reducing NOx emissions compared to older technologies, by as much as 40 times less. Ammonia (NH3) is not emitted from well managed fully detonated emulsion explosives. The Updated Air Quality Impact Assessment (Nov 25) includes nitrogen oxides (NOx) dispersion modelling and air quality impact assessment in accordance with the methodology outlined in the NIEA Revised Operational Protocol for Assessing Ammonia and Air Pollution Impacts on the Natural Environment (issued by NIEA on 28th February 2025). This report concludes that there is no predicted exceedance of the relevant ambient air quality standards at the nearest residential properties with the proposed DGL site in operation. The impact of emissions from the proposed DGL site will not be significant on air quality at the nearest designated ecological sites in relation to the Screening Threshold (Test of Likely Significance) outlined in the NIEA 'Revised operational protocol for assessing air pollution impacts on the natural environment' (issued 28th February 2025).
TBA1502 - RABHARTA – Pg. 4	Nitrate and Ammonia contamination	Yes - as above	As stated above, DGL propose that Subtek Velcro is the explosives product that will be used in the mine which is a water-based emulsion. Ammonia (NH3) is not emitted from well managed fully detonated emulsion explosives. The Updated Air Quality Impact Assessment (Nov 25) includes nitrogen oxides (NOx) dispersion modelling and air quality impact assessment in accordance with the methodology outlined in the NIEA Revised Operational Protocol for Assessing Ammonia and Air Pollution Impacts on the Natural Environment (issued by NIEA on 28th February 2025).(See Annex to the HRA which is appended to the Ecology TBR)
TBA0143 - [redacted] - pg. 1	Dust from the mine could blow across the border spreading arsenic. Diesel fumes and radon gas from	Yes - as above	Real met data has been used in the modelling to predict air pollutant concentrations and deposition rates from this project and assess the

	mining will also damage air quality and increase health risks for children and older people.		impact to the health of humans, animals and ecosystems. (See Air Quality & Dust Impact Assessment. Second Addendum. October 2020 & Updated Air Quality Impact Assessment (Nov 25)The dispersion modelling has shown negligible impact beyond 2 Km from the site. (See Air Quality & Dust Impact Assessment. Second Addendum. October 2020 & Updated Air Quality Impact Assessment (Nov 25) The particle size assay as well as the proposal for the use of the water bowser when required and the inherent 13% moisture content of the dry stack will attenuate any potential for significant dust emissions. Radon is addressed separately.
TBA0322 – pg. 1	The mine site is just 30km from parts of Donegal. Evidence from Finland, where toxic mine dust has travelled over 60km, shows us that arsenic, mercury and other contaminants do not respect borders.	Yes - as above	See response to similar objection above.
TBA0360 – pg. 1	The use of toxic chemicals such as cyanide and mercury in goldmining is well-documented to cause long-term damage to land, air and water. Contamination from the mine could impact ecosystems, farmland, rivers, and drinking water supplies in neighbouring counties	Yes - as above	There is no proposal for cyanide and mercury use.
TBA0412 – pg. 1	Radon gas diesel fumes and arsenic can contaminate the air we breathe causing multiple health issues.	Yes - as above	Real met data has been used in the modelling to predict air pollutant concentrations and deposition rates from this project and assess the impact to the health of humans, animals and ecosystems. The dispersion modelling has shown negligible impact beyond 2 Km from the site. The particle size assay as well as the proposal for the use of the water bowser when required and the inherent 13% moisture content of the dry stack will attenuate any potential for significant dust emissions. Radon issues are addressed elsewhere. The proposed use of electric powered conveyors will reduce vehicle usage in terms of transport from mine to processing building. In the 2019 Addendum, the additional road traffic movements anticipated during the operational phase versus the 'Base AADT'

			flows indicate that the traffic increases during the operation phase are below the level of change requiring further assessment against both DMRB and EPUK criteria. The 2019 Addendum states that there will be 13 HGV two-way movements per day, i.e. 26 HGV movements daily. LGV and car journeys are predicted to be 123 movements during AM Peak and PM Peak, i.e. 246 LGV and car journeys daily. Therefore, in total, there will be <100 HGV movements daily and <500 LDV movements daily. Mine vent and portal emissions have been assessed.
TBA0506 Wild Ireland Defence – pg. 1	Dalradian has applied to use 3.5million litres of diesel on site every year for the duration of the mine - the pollution potential of this has not been adequately measured in their EIA.	Yes - as above	In terms of the reference to 4.3 million litres per annum – JDS has clarified Annual Average Fuel Use = 1,717,175 l/yr and Annual Peak Fuel Use = 2,143,407 l/yr during L.O.M. I have prepared a detailed assessment of NOx and NO2 emissions based on the fuel usage values. This is assessed in the Updated Air Quality Impact Assessment (Nov 25).
Pg. 1	I suggest that we get a detailed breakdown of the suggested 4.3 or 3.5 million litres per annum? These two numbers are consistently raised by objectors. What level of fuel usage was there during the Exploration Stage? this would have been assessed during the 1-year baseline AQ surveys. This issue arises in a few replies and we do need to prepare a detailed assessment.	Yes - as above	In terms of the reference to 4.3 million litres per annum – JDS has clarified Annual Average Fuel Use = 1,717,175 l/yr and Annual Peak Fuel Use = 2,143,407 l/yr during L.O.M. I have prepared a detailed assessment of NOx and NO2 emissions based on the fuel usage values. This is assessed in the Updated Air Quality Impact Assessment (Nov 25).
TBA0596 – pg. 1-2	Dalradian proposes to store the waste in a huge 54 metres high, 1 “Dry Stack Facility” to store their waste over the proposed 25 year life of the mine and in perpetuity thereafter. When thousands of tons of rock are removed from the mine by the use of explosive twice daily. Dalradian state that the rock will be crushed into the fine consistency of flour and floated in a 'simple chemical solution' to remove the gold ore. The waste would need to be separated with water to prevent the dust, containing heavy metals such as arsenic, mercury, lead, cadmium, chromium etc from blowing in the wind. One the other hand, they also state it would have to be kept dry to prevent Acid Mine Drainage from forming. Dalradians proposed elevated site in the Sperrin Mountains	Yes - as above	Real met data has been used in the modelling to calculate and therefore mitigate for the risks of air pollution from this project to the health of humans, animals and ecosystems. The dispersion modelling has shown compliance with all relevant air quality limit values off site and a negligible impact beyond 2 Km from the site. The particle size assay as well as the proposal for the use of the water bowser when required and the inherent 13% moisture content of the dry stack will attenuate any potential for significant dust emissions.

	experiences strong winds as well as heavy rainfall. When dry, the toxic dust could be blown across the island of Ireland. When wet it could leach into the water table.		
Pg. 2	A study in Finland found the fine dust, 2.5 particulate matter containing arsenic and mercury, had blown on to the leaves of trees 60 kilometres from a goldmine at Kittila. Jari Natunen, a Finnish Biochemist, said that this fine particulate matter was very dangerous as it could enter people's lungs causing respiratory diseases and cancers and that children are particularly vulnerable.	Yes - as above	A very small percentage of the tailings is in the PM10 and PM2.5 particle size range, i.e. <5%. Therefore, with the proposed mitigation measures and mixing and covering with larger particles in the DSF, there is no potential for significant wind blown fine particulate matter impact.
Pg. 2	It is well documented that high levels of fumes from diesel emissions are poisonous - leading to increased rates of lung cancer, other heart and lung diseases and premature death. Dalradian has applied to use 3.5 million litres of diesel onsite every year for 25 years - the implications of this on human, animal and plant life has not been measured in their EIA.	Yes - as above	In terms of the reference to 4.3 million litres per annum – JDS has clarified Annual Average Fuel Use = 1,717,175 l/yr and Annual Peak Fuel Use = 2,143,407 l/yr during L.O.M. I have prepared a detailed assessment of NOx and NO2 emissions based on the fuel usage values. This is assessed in the Updated Air Quality Impact Assessment (Nov 25).
Pg. 2-3	Dalradian site is 30km from parts of Donegal so all the poisonous contaminants from the waste dust, explosives, radon gas and diesel emissions can be easily transported by air.	Yes - as above	Real met data has been used in the modelling to calculate and therefore mitigate for the risks of air pollution from this project to the health of humans, animals and ecosystems. The dispersion modelling has shown negligible impact beyond 2 Km from the site. T he particle size assay as well as the proposal for the use of the water bowser when required and the inherent 13% moisture content of the dry stack will attenuate any potential for significant dust emissions.
Pg. 7	Toxic dust would settle on the grass that is eaten by cattle, sheep and other farm animals.	Yes - as above	Assessed in the Health Impact Assessment (See Health Impact Assessment is at C14 of the ES and the ES addendum (2019))
Pg. 7	Toxic dust would settle on the grass that is eaten by cattle, sheep and other farm animals. Animals and crops would be affected by the contaminated water and toxic dust from the proposed goldmine so that milk and other farm produce would no longer be fit for human consumption and could not be sold. This would have a significant adverse impact on the livelihood of farmers and farm families not just in counties Tyrone, Derry and Donegal but across other counties in the Republic who rely on their	Yes - as above	Assessed in the Health Impact Assessment (See Health Impact Assessment is at C14 of the ES and the ES addendum (2019))

	farm produce - such as beef, dairy, chicken, eggs and crops - for their economic viability.		
TBA0741 – pg. 1	Research has shown that toxic dust, including particles of arsenic and mercury can travel more than 60km from goldmining sites. This raises serious alarms about transboundary air pollution and consequences for communities downwind.	Yes - as above	A very small percentage of the tailings is in the PM10 and PM2.5 particle size range, i.e. <5%. Therefore, with the proposed mitigation measures and covering with larger particles, there is no potential for significant wind blown fine particulate matter impact.
TBA0751 – pg. 1	The air pollution caused by toxic dust knows no political borders and will spread up to 60km beyond the Sperrins in to the Republic of Ireland.	Yes - as above	Real met data has been used in the modelling to calculate and therefore mitigate for the risks of air pollution from this project to the health of humans, animals and ecosystems. The dispersion modelling has shown compliance with all relevant air quality limit values off site and a negligible impact beyond 2 Km from the site. The particle size assay as well as the proposal for the use of the water bowser when required and the inherent 13% moisture content of the dry stack will attenuate any potential for significant dust emissions.
TBA0756 - Raphoe JPIC Committee Letterkenny – pg. 1	Opposed to Dalradian's goldmine in the AONB because there is no safe way to mine without damaging the local environment, including air and water quality.	Yes - as above	Real met data has been used in the modelling to calculate and therefore mitigate for the risks of air pollution from this project to the health of humans, animals and ecosystems. The dispersion modelling has shown compliance with all relevant air quality limit values off site and a negligible impact beyond 2 Km from the site. The particle size assay as well as the proposal for the use of the water bowser when required and the inherent 13% moisture content of the dry stack will attenuate any potential for significant dust emissions.
TBA0775; TBA0987; TBA1465; TBA0630 – pg. 1	Dust from the mine could blow across the border, spreading harmful substances like arsenic. Diesel fumes and radon gas from mining will also damage air quality and increase health risks, especially for children and older people.	Yes - as above	Real met data has been used in the modelling to calculate and therefore mitigate for the risks of air pollution from this project to the health of humans, animals and ecosystems. The dispersion modelling has shown compliance with all relevant air quality limit values off site and a negligible impact beyond 2 Km from the site. The particle size assay as well as the proposal for the use of the water bowser when required and the inherent 13% moisture content of the dry stack will attenuate any potential for significant dust emissions. Assessed in the Health Impact Assessment.

TBA0872 – pg. 1	We only have one planet and the daily use of chemicals in mining operations will have detrimental effects on the land, waterways and air quality in the surrounding area. It will poison our wildlife, water supplies and the communities living nearby.	Yes - as above	As above
TBA1247 – pg. 1	The toxic dust plumes will be a present danger, spreading by air uncontrollably for miles in all directions. The particulate matter involved will pollute air, water, grassland and settled land.	Yes - as above	As above
TBA1487 – pg. 2-3	Consider the impact of the proposed 54m high DSF which would store waste for the 25 year life of the mine and in perpetuity. There would be fine dust floating in the air.	Yes - as above	As above
TBA1490 – pg. 2-4	The proposed location of the mine and dry stack is elevated and exposed, the profile of the Sperrins offering little by way of shelter or protection from the windy conditions. NI is recognised by the World Bank as having some of the highest sustained winds across the globe (see images). This increases the risk of air pollution via dust particles.	Yes - as above	Real met data has been used in the modelling to calculate and therefore mitigate for the risks of air pollution from this project to the health of humans, animals and ecosystems. The dispersion modelling has shown compliance with all relevant air quality limit values off site and a negligible impact beyond 2 Km from the site. The particle size assay as well as the proposal for the use of the water bowser when required and the inherent 13% moisture content of the dry stack will attenuate any potential for significant dust emissions.
Pg. 4	The air pollution has potential to contaminate fresh drinking water sources in the Sperrins such as Lough Fea and Banagher/Altnaheglish Reservoir	No	Banagher/Altnaheglish Reservoir is 22.5 Km north-east of the DGL site. Lough Fea is 17 Km east of the DGL site. Based on the results of the dust and nitrogen oxides (NOx) dispersion model and impact assessment there will be no impact at these locations which are a very significant distance from the DGL site.
TBA1494 – pg. 9	It is well documented that high levels of fumes from diesel emissions are poisonous - leading to increased rates of lung cancer, other heart and lung diseases and premature death. Dalradian has applied to use 3.5 million litres of diesel onsite every year for 25 years - the implications of this on human, animal and plant life has not been measured in their EIA.	Yes - as above	In terms of the reference to 4.3 million litres per annum – JDS has clarified Annual Average Fuel Use = 1,717,175 l/yr and Annual Peak Fuel Use = 2,143,407 l/yr during L.O.M. I have prepared a detailed assessment of NOx and NO2 emissions based on the fuel usage values. This is assessed in the Updated Air Quality Impact Assessment (Nov 25).
TBA1495 – pg. 3	The elevated location of the DSF experiences strong winds and heavy rain. When dry, the dust could be blown across the island, when wet if could leach in to the water table.	Yes - as above	Real met data has been used in the modelling to calculate and therefore mitigate for the risks of air pollution from this project to the health of humans, animals and ecosystems.

			The dispersion modelling has shown compliance with all relevant air quality limit values off site and a negligible impact beyond 2 Km from the site. The particle size assay as well as the proposal for the use of the water bowser when required and the inherent 13% moisture content of the dry stack will attenuate any potential for significant dust emissions. The impact of leaching into the water table has been assessed by others.
Pg. 3	Implications of the use of diesel on the site on human, animal and plant life has not been measured in the ES.	Yes - as above	In terms of the reference to 4.3 million litres per annum – JDS has clarified Annual Average Fuel Use = 1,717,175 l/yr and Annual Peak Fuel Use = 2,143,407 l/yr during L.O.M. A detailed assessment of NOx and NO2 emissions based on the fuel usage values has been prepared, which includes an assessment of the future use of both diesel and HVO (Hydrotreated Vegetable Oil). This is assessed in the Updated Air Quality Impact Assessment (Nov 25).
TBA1496 – pg. 5-6	Impact of dust on health of animals	Yes - as above	Assessed in the Health Impact Assessment.
Pg. 18	Diesel emissions and particulate matter	Yes - as above	In terms of the reference to 4.3 million litres per annum – JDS has clarified Annual Average Fuel Use = 1,717,175 l/yr and Annual Peak Fuel Use = 2,143,407 l/yr during L.O.M. I have prepared a detailed assessment of NOx and NO2 emissions based on the fuel usage values. This is assessed in the Updated Air Quality Impact Assessment (Nov 25).
TBA1539 - Save our Sperrins – pg. 5	Use of explosives twice daily for 25 years for 900m deep mine. Explosive relate ammonium nitrate which is poisonous to humans and the environment.	Yes - as above	DGL propose that Subtek Velcro is the explosives product that will be used in the mine which is a water-based emulsion. Significant advancement in modern Ammonium Nitrate (AN) based emulsions can be formulated to have a near-optimal oxygen balance, significantly reducing NOx emissions compared to older technologies. Ammonia (NH3) is not emitted from well managed fully detonated emulsion explosives. A nitrogen oxides (NOx) dispersion modelling and air quality impact assessment for the proposed DGL Curraghinalt Project has been prepared in accordance with the methodology outlined in the Northern Ireland Environment Agency (NIEA) Revised Operational Protocol for Assessing Ammonia and Air Pollution Impacts on the Natural Environment (issued by NIEA on 28th February 2025).

Pg. 5	Heavy wind will blow dust from the DSF	Yes - as above	As above
Pg. 6	Diesel emissions and particulate matter	Yes - as above	In terms of the reference to 4.3 million litres per annum – JDS has clarified Annual Average Fuel Use = 1,717,175 l/yr and Annual Peak Fuel Use = 2,143,407 l/yr during L.O.M. I have prepared a detailed assessment of NOx and NO2 emissions based on the fuel usage values. This is assessed in the Updated Air Quality Impact Assessment (Nov 25). Detailed dust dispersion modeling for dust deposition and particles (PM10 & PM2.5) has been undertaken. No significant impact predicted. Water bowser mitigation measure and natural rainfall levels will attenuate dust dispersion.
TBA1564 - Ecojustice Ireland – pg. 4	Toxic dust would be blown across the Irish border from the DSF	Yes - as above	Detailed dust dispersion modeling for dust deposition and particles (PM10 & PM2.5) has been undertaken. No significant impact predicted. Water bowser mitigation measure and natural rainfall levels will attenuate dust dispersion.
Pg. 4	Radon gas may be released by the mine causing radioactive contaminants in the air.	Yes - as above	Radon addressed by other experts
Pg. 4	impact from diesel emissions on humans, animal and plant life has not be assessed.	Yes - as above	In terms of the reference to 4.3 million litres per annum – JDS has clarified Annual Average Fuel Use = 1,717,175 l/yr and Annual Peak Fuel Use = 2,143,407 l/yr during L.O.M. I have prepared a detailed assessment of NOx and NO2 emissions based on the fuel usage values. This is assessed in the Updated Air Quality Impact Assessment (Nov 25).
TBA1581 - Jesuit Centre for Faith & Justice- pg. 2	Dalradian has applied to build a 54m high Dry Stack Facility to store their waste over the proposed 25 year life of the mine and in perpetuity thereafter. When the thousands of tons of rock are removed from the mine by the use of explosives twice daily, Dalradian state that the rock will be crushed into the fine consistency of flour and floated in a simple chemical solution to remove the gold ore... The proposed elevated site of the Sperrin mountains experiences strong winds as well as heavy rainfall. When dry, toxic dust could be blown across the island of Ireland.	Yes - as above	Detailed dust dispersion modeling for dust deposition and particles (PM10 & PM2.5) has been undertaken. No significant impact predicted. Water bowser mitigation measure and natural rainfall levels will attenuate dust dispersion.

Pg. 3	It is well documented that high levels of fumes from diesel emissions are poisonous - leading to increased rates of lung cancer, other heart and lung diseases and premature death. Dalradian has applied to use 3.5 million litres of diesel onsite every year for 25 years - the implications of this on human, animal and plant life has not been measured in their EIA.	Yes - as above	In terms of the reference to 4.3 million litres per annum – JDS has clarified Annual Average Fuel Use = 1,717,175 l/yr and Annual Peak Fuel Use = 2,143,407 l/yr during L.O.M. I have prepared a detailed assessment of NOx and NO2 emissions based on the fuel usage values. This is assessed in the Updated Air Quality Impact Assessment (Nov 25).
TBA1583 - Rights of Nature Donegal – pg. 4	The proposed mining activities would involve the crushing of rocks into very fine particles. In the process those same heavy metals would be released and would become airborne. Not only would this be a serious health risk but given that the wind, like other natural forces does not recognise political boundaries, would also pose a serious threat to those living down wind of mining operations in Donegal.	Yes - as above	Detailed dust dispersion modeling for dust deposition and particles (PM10 & PM2.5) has been undertaken. No significant impact predicted. Water bowser mitigation measure and natural rainfall levels will attenuate dust dispersion.
TBA1584 – pg. 2	Toxic dust would be blown across the Irish border from the DSF	Yes - as above	As above
Pg. 3	Diesel emissions and particulate matter	Yes - as above	As above
TBA1585 – pg. 13	Toxic dust would be blown across the Irish border from the DSF	Yes - as above	As above
Pg. 14	Diesel emissions and particulate matter	Yes - as above	As above
TBA1592 - Centre for Global Education – pg. 5	Diesel emissions and particulate matter	Yes - as above	As above
TBA1597 - Ireland's Think-tank for Action on Social Change – pg. 5-6	Toxic dust would be blown across the Irish border from the DSF	Yes - as above	As above
Pg. 6	Diesel emissions and particulate matter	Yes - as above	As above
TBA0594 – pg. 1	Dust from the mine could blow across the border, spreading harmful substances like arsenic. Diesel fumes and radon gas from mining will damage air quality and increase health risks, especially for children and older people.	Yes - as above	As above
TBA1576 - Save inis Eoghain - pg. 7	The proposed mining activities would involve the crushing of rocks into very fine particles. In the process those same heavy metals would be released and would become	Yes - as above	As above

	airborne. Not only would this be a serious health risk but given that the wind , like other natural forces does not recognise political boundaries, would also pose a serious threat to those living down wind of mining operations in Donegal.		
TBA1566 – pg. 9	Dust from the mine could blow across the border, spreading harmful substances like arsenic. Diesel fumes and radon gas from mining will damage air quality and increase health risks, especially for children and older people.	Yes - as above	As above
TBA0005; 0006; 0009; 0014; 0023; 0024; 0030; 0033; 0034; 0036; 0042; 0061; 0062; 0063; 0064; 0087; 0088; 0089; 0090; 0091; 0092; 0093; 0095; 0097; 0098; 0099; 0104; 0105; 0109; 0116; 0117; 0121; 0122; 0124; 0125; 0126; 0127; 0128; 0144; 0145; 0153; 0156; 0161; 0163; 0168; 0169; 0170; 0171; 0172; 0173; 0174; 0175; 0180; 0181; 0182; 0183; 0186; 0188; 0189; 0190; 0191; 0193; 0194; 0197; 0214; 0215; 0221; 0226; 0227; 0228; 0229; 0230; 0232; 0234; 0241; 0260; 0266; 0267; 0268; 0269; 0274; 0275; 0283; 0284; 0293; 0295; 0310; 0315; 0316; 0317; 0318; 0319; 0320; 0321; 0329; 0335; 0336;0338; 0339; 0340; 0342; 0345; 0352; 0353; 0355; 0359; 0363; 0369; 0371; 0372; 0373; 0385; 0386; 0388; 0394; 0395; 0396; 0398; 0401; 0402; 0403; 0404; 0406; 0408; 0411; 0413; 0413; 0419; 0421;	Toxic dust would be blown across the Irish border from the DSF	Yes - as above	As above

0424; 0425; 0426; 0427; 0430;
0431; 0432; 0433; 0438; 0446;
0447; 0461; 0462; 0463; 0464;
0465; 0466; 0467; 0468; 0470;
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0508; 0542; 0564; 0565; 0569;
0570; 0582; 0584; 0585; 0586;
0589; 0590; 0591; 0592; 0593;
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0655; 0660; 0675; 0680; 0683;
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0745; 0746; 0748; 0749; 0752;
0753; 0757; 0758; 0768; 0771;
0773; 0774; 0776; 0777; 0778;
0780; 0781; 0782; 0784; 0789;
0790; 0794; 0799; 0800; 0809;
0812; 0828; 0832; 0837; 0839;
0840; 0845; 0857; 0858; 0862;
0863; 0866; 0869; 0873; 0874;
0884; 0902; 0903; 0906; 0908;
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1007; 1008; 1015; 1016; 1017;

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1368; 1373; 1374; 1375; 1376;
1383; 1390; 1400; 1403; 1405;
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1443; 1444; 1445; 1449; 1450;
1451; 1455; 1456; 1461; 1463;
1464; 1467; 1468; 1470; 1475;
1477; & 1478– pg. 1