

Our Ref: U7511 ES Addendum_Clarifications_NIWater_Letter_final.docx

01 April 2020

Mr Alan Moore
Northern Ireland Water
Water Regulation Team
Westland House
Old Westland Road
Belfast
BT41 6TE

RE: UK7511 –CURRAGHINALT GOLD PROJECT CLARIFICATIONS TO THE ENVIRONMENTAL STATEMENT ADDENDUM

1 Environmental Statement Addendum Clarifications

This letter provides clarification in relation to questions raised by Northern Ireland Water following the submission of the Curraghinalt Environmental Statement in 2017 and subsequently the ES Addendum in July 2019. The questions were submitted in the form of two letters that were registered on the Northern Ireland Planning Portal on 5 April 2019 and 2 December 2019.

In the table below, the Reference Number assigns a unique reference number to each response to assist with identification of specific queries and cross reference replies where appropriate.



Registered Address: 21 Gold Tops, City and County of Newport, NP20 4PG,
Wales, United Kingdom.
SRK Consulting (UK) Limited Reg No 01575403 (England and Wales)

Group Offices: Africa
Asia
Australia
Europe
North America
South America

1.1 NI Water Points for Clarification

Ref No.	NIW letter ref	Consultee comments	Reply
1.	No ref	The quantities of water needed during mining activities will potentially have an impact on local water resource availability. This water demand may be required to be met from the public water supply, in which case NI Water will have to assess the availability of the water supply and the ability of the existing infrastructure to provide a water supply, or it could be direct abstraction from surface water or an aquifer, which may have an impact on the volume of water available for our raw water abstraction requirements and water resource planning.	Potable water requirements are expected to be 12-15 m3 per day. DGL have been in correspondence with NI Water in this regard. The initial discussions involved the potential for a supply of significantly more potable water (up to 35m3 per day). NI Water indicated this could be provided via a connection to the existing potable water system by extending the existing watermains supply which is present adjacent to the Greencastle Gaelic Athletic Association Club and along the Mullydoo Road towards the proposed infrastructure site. (see Appendix A to this response document). NI Water has proposed a new water pumping station at the junction between Mullydoo Road and Greencastle Road as part of the proposed supply works. Also see section 4.7.4 in Chapter 4 of the Environmental Statement (ES). 12-15 m3 per day is the extent of requirement from the public water supply.
2	No ref	The area under consideration for the proposed development is within the drinking water catchment areas for a number of NI Water's Water Treatment Works (WTWs) and drinking water abstraction points.	DGL understand from pre application discussions that there are no public water supply abstraction points within 5km of the application site.
3	1.1	NI Water must be given unequivocal assurance and it must be robustly demonstrated that there will no risk to the quality of the public drinking water supply	The ES includes comprehensive surface and ground water impact assessments which are Appendix C4 and C6 respectively to the ES. The assessments show there is no risk to the quality of any public drinking water supply. The EIA process has demonstrated that predicted concentrations of groundwater quality at the mine boundary show all calculated concentrations at the mine boundary are below drinking water guideline levels for public water supplies (see section 6.3.4, 6.3.5, 6.4 and 8.2.2 in ES Appendix C6 – Groundwater Impact Assessment).
4	1.1	<p>NI Water must be provided with unequivocal assurance that:-</p> <ul style="list-style-type: none"> Chemicals used are subject to approval by environmental regulators and should be classified as non-hazardous On-site storage of chemicals is managed by proper site practices and appropriate regulation to minimise the risks to the environment and public health. Stringent pollution prevention control measures are in place to protect the drinking water sources from spillages of any potential pollutants. Discharge consent conditions set by NIEA are appropriate for a DWPA, to protect the safety of the public drinking water supply and drinking water quality, and that the consent conditions are complied with. 	<p>Chapter 4 of the ES (2017) describes all reagents (section 4.6.3) originally proposed to be used at the mine and process plant.</p> <p>The ES also describes management measures for the correct use and storage of reagents to be used at the proposed development. Chapter 4, section 4.8.3 notes that detailed operating procedures associated with the storage and use of reagents will be developed as part of the site wide operating procedures.</p> <p>As described in the 2019 ES Addendum, DGL have removed the requirement for cyanide in the process plant. As a result the project no longer requires a PPC permit, does not fall under COMAH regulations and no longer requires a Hazardous Substances Consent.</p> <p>DGL understand that a number of the comments made by NIW are directed at NIEA to consider as potential conditions to be proposed as</p>

Ref No.	NIW letter ref	Consultee comments	Reply
			part of the planning process.
5	1.1	The developer must provide details to NI water on the proposed water quality sampling programme and analysis in the vicinity of the site and also in relation to the drinking water abstraction points for NI Water's WTWs. This water quality analysis must be made available to NI Water as requested on an ongoing basis.	A draft water monitoring programme is included as Appendix D2 to the ES Addendum.
6	1.1	Any spillages to a watercourse must be reported immediately to NIEA and to NI Water.	DGL understand that NIEA will consider this as a possible planning condition. Section 4.3.1 of the draft surface water and groundwater environmental monitoring and action plan includes a commitment to developing spill mitigation/prevention/response measures in conjunction with NIEA in advance of the start of construction.
7	1.2	It must also be robustly demonstrated and unequivocal assurance provided that there will be no risk for loss of the raw water source for abstraction due to contamination of the surface water supply. Loss of the raw water source would result in the loss of supply to our customers in the WTW supply area	Please see response No 3
8	1.2	The quantities of water needed, if required to be supplied by NI Water, could have a significant impact on local water resource availability. The developer is therefore encouraged to engage with NI Water as early as possible to establish their needs can be met without impacting the security of supply to existing customers	Please see response to No. 1
9	1.3	An assessment would also be required to be undertaken regarding the risk to our underground assets and infrastructure from any potential seismic activity induced by the mining processes	At the scoping stage of the Environmental Impact Assessment process, NI Water was consulted in relation to the development. NI Water indicated that the proposed development would not have a significant impact on NI Water infrastructure (see Appendix B to this response table) The ES (Appendices C20 and C21) assesses impacts associated with vibration and subsidence. This demonstrates no impacts at the properties nearest to the development (at approx. 200 metres), which are in significantly closer proximity than any NIW infrastructure.
10	1.4	NI Water may be asked to accept discharge of contaminated effluents recovered from the operational processes involved in the mining activities. Information in relation to the expected volumes and chemical and biological composition of waste water as well as preferred disposal routes must be provided to NI Water.	As set out in Chapter 4 of the ES, no discharge of sewage or domestic wastewater to NI Water systems is proposed. Sewage waters from the on-site staff facilities will be treated via a dedicated sewage treatment plant on site and the treated effluent discharged via the water management ponds. In addition, all water leaving the site from the east and west management ponds will pass

Ref No.	NIW letter ref	Consultee comments	Reply
			through the reverse osmosis water treatment plant. Brine and salt residue from the reverse osmosis water treatment plants will be disposed of off-site by an appropriately qualified contractor Please see Chapter 4 of the ES (sections 4.7.8 and 4.7.9).
11	2.3	The risk assessment must demonstrate that impacts on drinking water and drinking water sources are fully taken into account and that there are robust measures in place to ensure that the water supplied to our customers is a safe, clean and wholesome supply	Please refer to response No 3
12	3.1	A detailed, site specific Construction Method Statement including e.g. Construction Environmental Management Plan, Risk Assessment, Pollution Prevention and Contingency Plan must be completed and made available to NI Water prior to the commencement of any works.	Appendix B2 to the ES Addendum outlines the Construction Environmental Management Plan (CEMP) for the development. Section 4 of the CEMP describes specific plans for the management of water and sediment during construction. and Appendix D6 to the ES Addendum sets out an Emergency Preparedness and Response Protocol.
13	3.3	Any potential effect on the hydrology of the area resulting from the construction and operation of the proposed development must be assessed and the findings presented in the Environmental Impact Statement/Environmental Appraisal accompanying the planning application. This must include an assessment of effects on natural drainage patterns, base flows/volume, retention/run off rates and potential changes to water quantity. Any required mitigation measures and proposed monitoring must also be detailed in the Environmental Impact Statement or Environmental Appraisal accompanying the planning application.	A full EIA has been carried out and is documented in the Environmental Statement and the ES addendum. There are dedicated chapters and appendices that describe the assessment of potential impacts to surface and groundwater. These are backed up by extensive baseline data reports.
14	3.4	When constructing roads, drainage ditches and trenches, drainage should not be directed into adjacent catchments but retained within the existing catchment. Measures must be put in place to prevent the risk for runoff and sediments to reach watercourses during road and site access construction	Please refer to ES Addendum Appendix B2 (2019) that outlines the CEMP for the project. DGL believes this document addresses the points raised in this query.
15	3.5	Any potential pollution risk which could affect water quality must be considered and mitigation measures implemented to prevent deterioration in water quality and pollution incidents. This includes sediment run-off, soil or peat erosion, management of chemicals and oils, etc. This must be considered for operations at all stages of development including pre- and post- construction.	This has been carried out as part of the EIA process. Please see the various water assessments referred to above as well as the CEMP. In addition, there is a specific Peat Management Plan (Appendix B8 to the ES Addendum - 2019) that describes measures related to the excavation, temporary storage and reinstatement of peat habitat.
16	3.6	Method Statement/Construction Environmental Management Plan prior to work starting onsite. Any measures implemented must be regularly checked, maintained and improved, if pollution occurs	See response 12 above. DGL understand this is a recommended condition for NIEA to consider.
17	3.7	Watercourses that feed into any watercourses or reservoirs that NI Water abstracts from must be considered when developing new road or access	This requirement is noted and was considered during the course of the

Ref No.	NIW letter ref	Consultee comments	Reply
		infrastructure. Any crossing of these watercourses should be kept to a minimum. Pollution prevention measures should be put in place at each crossing point and silt traps, or equivalent, should be installed at regular intervals to minimise the risk from pollution. Once constructed, site roads and access routes should be regularly maintained to ensure minimal erosion, and hence run-off and pollution, from the road surface.	EIA process. Please refer to the various water assessments as well as the outline CEMP. The ES Addendum also includes a draft Surface Water and Groundwater Environmental Monitoring and Action Plan as Appendix D2
18	3.8	No refuelling or storage of fuel or hazardous materials should take place within the drinking water catchment area. If this can be demonstrated to be impracticable, then the appropriate Pollution Prevention Guidelines must be followed. There must be dedicated oil storage areas created. Spill kits must be located within all vehicles, plant and high risk areas. Waste storage, concrete preparation and all washout areas should not be within the drinking water catchment area. If this can be demonstrated to be impracticable then these should be in dedicated areas 50m from a watercourse and designed to be contained and to prevent escape of materials / runoff to the environment.	Please refer to the draft CEMP. Sections 5.4 lists the good industry practice guidance that will be applied. This includes, among others: GPP 2: Above ground oil storage tanks PPG 3: Use and design of oil separators in surface water drainage systems PPG 7: Safe storage - The safe operation of refuelling facilities GPP 8: Safe storage and disposal of used oils GPP 13: Vehicle washing and cleaning GPP 21 Pollution incident response planning Control of Water Pollution from Construction Sites – Guide to Good Practice (SP156) Control of Water Pollution from Construction Sites – Guidance for Consultants and Contractors (C532) Control of Water Pollution from Linear Construction Projects – Technical Guidance (C648) Control of Water Pollution from Linear Construction Projects – Site Guide (C649) Environmental Good Practice – Site Guide (C650), 2005 The SUDS Manual (C697) Section 3.4.12 of the CEMP also describes waste management and segregation during construction including storage and bunding of hydrocarbons.
19	3.9	The proposed method of managing welfare and waste-water facilities should be detailed in the Environmental Impact Statement or Environmental Appraisal accompanying the planning application.	The management of welfare and waste water is described in section 4.7.9 of Chapter 4 of the ES. The surface infrastructure site includes various welfare facilities and a dedicated sewage treatment plant as noted above. The sewage treatment plant will receive waste water from the

Ref No.	NIW letter ref	Consultee comments	Reply
			underground welfare stations as required. This will be brought to surface via tanker.
20	3.10	Construction and Environmental Management Plans, Pollution Prevention and Contingency Plan and associated documents should include the NI Water Waterline Number 03457 440088 and the local NI Water contact details	DGL understand this is a recommended condition for NIEA to consider. DGL is happy to include the relevant contact details.

For and on behalf of SRK Consulting (UK) Limited

This signature has been given permission to its use for this particular purpose and is held on file.

John Merry
Principal Consultant (Environment and Social),
Project Manager
SRK Consulting (UK) Limited

This signature has been given permission to its use for this particular purpose and is held on file.

Jane Joughin,
Corporate Consultant (Environment),
Project Director
SRK Consulting (UK) Limited

APPENDIX

A NI WATER CORRESPONDANCE – POTABLE WATER SUPPLY

Northern Ireland Water
Development Services Coordination Team
Ballykeel Office
188 Larne Road Link
Ballykeel
Ballymena



BT42 3HA

Tel: 03457 440088

www.niwater.com

Shane Feehan
Dalradian Gold Ltd
67 Main Street,
Gortin,
Co. Tyrone
BT79 8NH

Email Paul.honeyman@niwater.com
Your Ref
Our Ref B026341
Date 10 February 2017

Dear Sir

DECISION ON REQUISITION FOR A WATERMAIN – Dalradian Gold Ltd, Mullydoo Road, Greencastle

I refer to your application under Article 76/77 of The Water and Sewerage Services (NI) Order 2006, which was received on 24th August 2016 and makes a requisition for a watermain to serve proposed Gold Mine at Mullydoo Road, Greencastle for Dalradian Gold Ltd.

Decision

The application has been considered by Northern Ireland Water and its decision is that, provided those benefiting from the extension are prepared to contribute to the cost of the extension as detailed below the application is approved.

Reason for Conditional Approval

The cost of providing the watermain extension based on laying approximately 1500m of 125mm HPPE watermain and New Water Pumping Station has been estimated in the region of £293,000.00. It should be noted that this cost has been derived by means of a preliminary study and should be treated as indicative at this stage.

Northern Ireland Water's cost limit for watermain extensions is £12,000.00 for each existing unit, constructed prior to 1 May 2000, and £1,800.00 for each new unit equivalent to a domestic property, to be served. The watermain extension requested in your application would serve Dalradian Gold Mine which equates to 16 new units (based on water loading units and subject to detailed confirmation to NI Water) and this generates an allowable unit cost expenditure of £28,800.00.

The estimated cost of providing the watermain therefore exceeds the cost limit by £264,200.00.

NI Water would advise that Dalradian consider on-site storage if the mine operations involve water usage in excess of that requested/detailed in the Watermain Requisition Application (35m³/day (0.405 l/sec).

NI Water have experienced outages in this general area in the past.

Payment of Developer's Contribution by Applicant

Northern Ireland Water would be prepared to provide the watermain extension requested, provided the developer agrees to fund the excess cost in advance of the work being commenced on site. As previously stated, the estimated shortfall of £264,200.00, quoted above, is indicative and the actual cost to those benefiting will be determined at detailed design stage.

If those benefiting from the scheme wish to proceed please confirm in writing, enclosing a non-returnable deposit of £20,000.00 including a copy of this letter along with the payment. On receipt, of this confirmation, a scheme will be placed in the NIW Capital Works Programme and upon completion of detailed design the full cost of the required contribution will be forwarded for your attention. On receipt of payment of this requisition charge the extension scheme will be progressed to the construction stage.

It should be noted that the above quotation remains valid for a period of 13 weeks (3 Months) from the date issued. If not accepted by written confirmation within this time frame, the quotation may be subject to revision, to meet changes in the Scheme of Charges, or other financial influences within the company.

Additionally Infrastructure Charges are levied for the initial connection of individual premises to the public watermain, irrespective if connected directly or indirectly. Infrastructure Charges will be payable for each individual unit connected to the proposed watermain extension. Details of the Infrastructure Charges and how they are applied can be obtained in the NI Water Scheme of Charges, which is available from www.niwater.com/waterandtradeeffluentcharges.asp

Right of Appeal Against the Decision of Northern Ireland Water

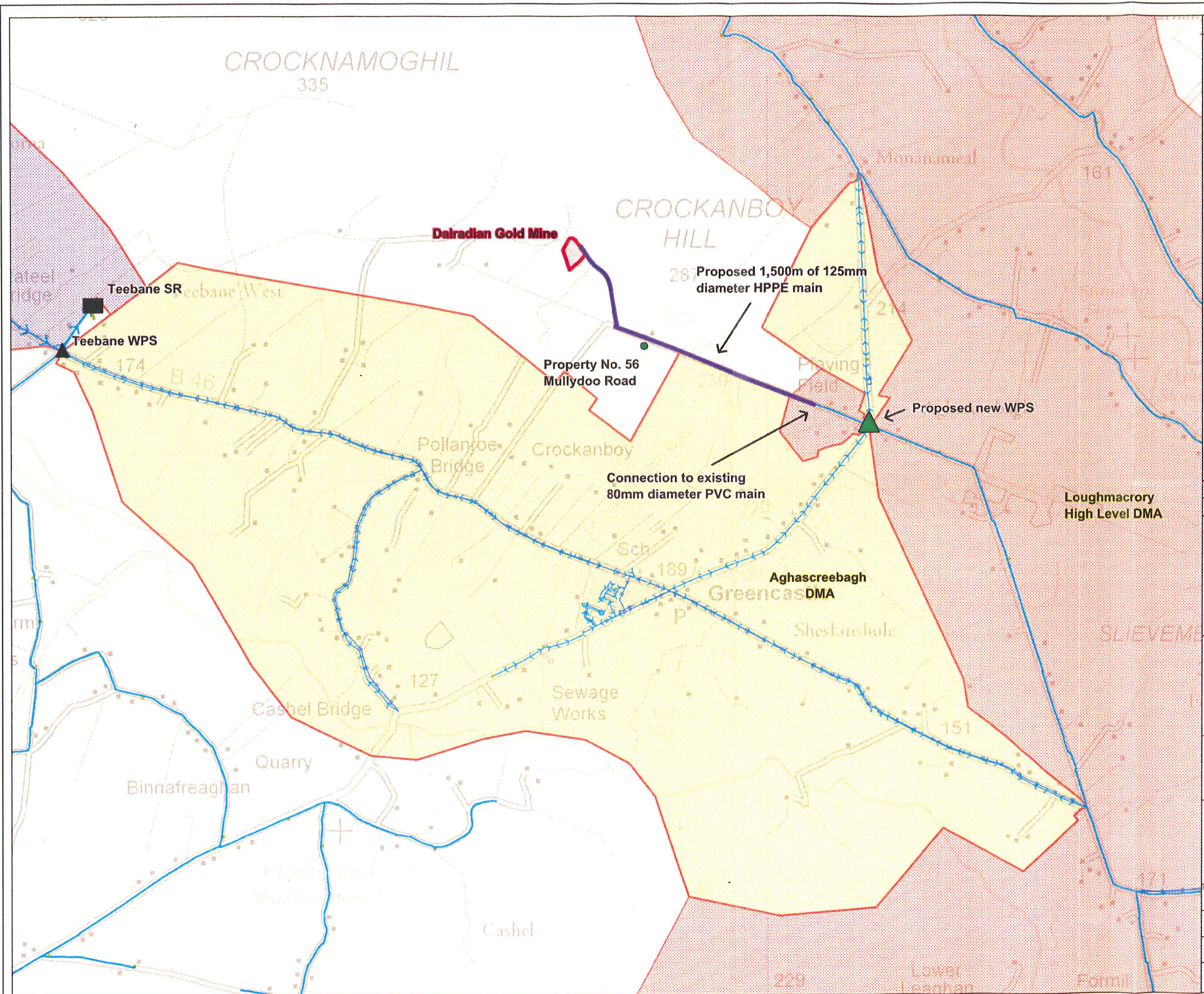
Any person who disputes this decision, except in respect of conditions relating to costs and charges, may within 28 days refer this decision to the Consumer Council, Northern Ireland. If you wish to dispute this decision you should contact the Consumer Council for Northern Ireland at Floor 3 Seatem House, 28-32 Alfred Street, Belfast, BT2 8EN

If you have any questions about this letter or if there are any matters which you feel that Northern Ireland Water has not taken into consideration in reaching its decision (for example, if there are additional properties which could be included in the extension scheme) please contact myself through above address or telephone number.

Yours faithfully



Roy Mooney
Acting Developer Services Manager



Legend

- DMA Boundary (DMA Name)
- Service Reservoir
- Water Pumping Station
- Pumped Distribution Main
- Distribution Main
- Proposed Mains Scheme
- Proposed WPS Scheme
- Gold Mine Boundary

A	DRAFT ISSUE	GL	JH	SM	01/17
REV	AMENDMENTS	BY	CHKD	APRD	DATE

mouchel

building great relationships

Holywood Office Tel: 0044 2890 424117

CLIENT: **northern ireland water**

Northern Ireland Water

Project: **IF010 Professional Services Support Framework Network Modelling Support**

TITLE: **Dalradian Gold Network Capacity Check**

Option B: Connection to Loughmacrory Beragh WSZ

DRAWN	GL	CHECKED	JH	APPROVED	SM	
DATE	01/17	DATE	01/17	DATE	01/17	
SCALE	Not to Scale					
DRAWING No.	1058247/01/D/95/06/A				REV	A

APPENDIX

B NI WATER – INFRASTRUCTURE PLANNING EIA SCOPING RESPONSE

Infrastructure Planning
Westland House
Old Westland Road
Belfast
BT41 6TE

Tel: 028 90354813 Ext 20646
www.niwater.com



DOE Strategic Planning Division
Causeway Exchange
1 - 7 Bedford Street
Belfast
BT2 7EG

Your Ref:
LA10/2016/0030/PAD

Our Ref:

Date: 4 February 2016

Dear Sir / Madam.

PLANNING CONSULTATION REFERENCE – LA10/2016/0030/PAD

NI Water would advise as follows –

This proposed development will not have a significant impact on existing NI Water infrastructure.

Yours faithfully

Alan Moore
Infrastructure Planning