

Patrick Haughey**PLANNING APPEALS COMMISSION AND WATER APPEALS COMMISSION****Conjoined Public Local Inquiry: Curraghinalt Project (Dalradian Gold Limited)****Water and Ecology Topic: Draft Conditions (Revision 2)**

29 September 2026

Item	Detail
Applications	LA10/2017/1249/F (PAC Ref C005); 2021/DR001; TrC 080/20_1 (Curraghinalt Burn) and TrC 081/20_1 (Pollanroe Burn)
Subject	Draft conditions for water and water ecology, submitted without prejudice to my position that permission and the discharge consents should be refused
Submitted by	Patrick Haughey, third-party objector

1. PLANNING CONDITIONS**W1 Replacement road: geotechnical design before commencement**

No development shall commence until the following have been submitted to and approved in writing by the Planning Authority, in consultation with DfI Roads, NIEA and the Loughs Agency: (a) ground investigation on the replacement road alignment, including the valley mire at Ch 520–660 and Ch 880–1000; (b) a geotechnical design and DMRB CD 622 certification for the road, including peat excavation, replacement material, ground treatment and temporary works; (c) the design of Culverts CU-1 and CU-2, including foundations; and (d) where any structure retains more than 1.0 m within 6 m of the road, Technical Approval in principle.

Reason: *The road must be built and adopted before any other development (DfI Roads condition 3), and it crosses deep peat at the head of the Pollanroe Burn. Its construction method determines the water effects on the burn.*

W2 Programme and in-stream works

No works in, over or within 10 m of any watercourse shall take place until (a) the relevant Section 46 consent from the Loughs Agency has been obtained and a copy lodged with the Planning Authority, and (b) a programme showing all in-stream works within the Loughs Agency's May to September window has been approved. No works shall take place in the south-east corridor (the replacement road, east diversion ditch and Upper and Lower East Ponds) until construction-phase treatment for that corridor, approved under W3, is operational.

Reason: *To protect salmonids in the Pollanroe Burn and reconcile the construction programme with the requirements of the fisheries authority.*

W3 Construction Water Management Plan

No development shall commence until a Construction Water Management Plan has been approved in writing by the Planning Authority in consultation with NIEA and the Loughs Agency. It shall include:

- (a) the location, design and capacity of every construction discharge, including treatment suitable for peat-derived water;
- (b) discharge limits at the point of discharge protective of juvenile Atlantic salmon, in accordance with NIEA's position (rebuttal of 19 November 2024, §1.7), in place of the 50 mg/l suspended solids assumed in the ES;
- (c) continuous turbidity monitoring at each discharge, and daily laboratory sampling for suspended solids, pH, dissolved organic carbon, ammonium, nitrate, iron, aluminium and sulphate;
- (d) trigger levels at which discharge stops automatically, and notification to NIEA and the Loughs Agency within 24 hours of any exceedance; and
- (e) dewatering volumes and treatment for excavations in peat, including the replacement road and the ponds.

Reason: *The ES accepts a risk of uncontrolled sediment before the permanent treatment system is on line, and the Outline CEMP monitors only suspended solids and pH.*

W4 Stage 2 Peat Management Plan

No excavation of peat shall take place until a Stage 2 Peat Management Plan has been approved in writing by the Planning Authority in consultation with NIEA and the Loughs Agency. It shall include: excavation volumes and depths for each element, including the road and the valley mire; storage locations that avoid double handling on future Dry Stack Facility cells, or a handling plan where they cannot; certified design of the storage retention berms; method statements for excavation deeper than 1.5 m, including temporary works; piezometric monitoring of the valley mire outside the excavation footprint, with trigger levels for drawdown; and treatment of water draining from stored peat.

Reason: *To prevent peat slide, protect the valley mire and prevent peat-derived pollutants reaching the burn, as raised by the Loughs Agency.*

W5 Fill material, acid rock and explosive residue

No mine-derived rock shall be placed in the replacement road, any berm, or any fill outside the lined and treated system unless each batch has been shown, before placement, to meet the inert extractive waste criteria of Commission Decision 2009/359/EC and the non-acid forming criteria in the applicant's Geochemistry Addendum (NPR > 3, NNP > 20, NAG pH > 4.5). Testing shall follow the protocol at Section 11C of my Water and Ecology report, including BS EN 15875 and BS EN 12457-2, UKAS-accredited analysis, hold points, split samples available to NIEA, and an as-built register. Imported aggregate for the public road shall meet the sulphur limits of the Specification for Highway Works Series 600 (TRL 447). Before any fill is placed, its source, volume and haul route shall be approved.

Reason: *The applicant's own data show individual acid-forming and uncertain samples; its only commitment is twice-yearly composite sampling; and fill in the public road drains untreated to the Pollanroe.*

W6 Explosives and nitrate management

No blasting shall take place until an Explosives Residue Management Plan has been approved in writing by the Planning Authority in consultation with NIEA. It shall include: the explosive products and loading practice used to minimise residue, including the emulsion products now proposed; a nitrate and ammonium mass balance from the stope to every discharge point, treated and untreated; monitoring of nitrate and ammonium at every outfall with trigger and action levels; a prediction of the nitrate to be flushed from the workings through the adit after closure, and for how long; and an assessment of non-nitrate alternatives, as raised by DAERA's counsel (Landmark Chambers Advice, §54).

Reason: *Explosive residue reaches surface water in the applicant's own tests (Surface Water Impact Assessment, §6.2.2). The applicant accepts that mine water will carry nitrate from blasting (sHRA 2025, para. 5.153), including after closure (para. 5.199), but quantifies neither.*

W7 Outfall monitoring and flow control

Before any outfall to the Pollanroe Burn is commissioned, details of the following shall be approved in writing by the Planning Authority in consultation with NIEA and the Loughs Agency, and thereafter implemented: the flow-control device that achieves each rate tabulated on 2016021-I-CIV-610; a sampling chamber and continuous flow measurement at each outfall; and the parameters, frequencies and trigger levels for each outfall, set at the point of discharge. Results shall be published quarterly.

Reason: *Only Outfall 4 falls under a discharge consent. No flow-control device is shown, and in-river monitoring at FL011 and SWN5 on the B46 cannot attribute any change to a source.*

W8 Dry Stack underdrain and pond underdrainage

The Dry Stack underdrain shall discharge through a dedicated chamber, separate from road drainage, with continuous flow, conductivity and pH monitoring and an automatically actuated diversion (penstock and duty and standby pumps) to the water management ponds on reaching approved trigger levels. Laboratory sampling for nitrate, ammonium, sulphate, arsenic, antimony, the metals in the discharge consents, and the elements listed in W15 shall be weekly during the first two years of operation and monthly thereafter. The same arrangements shall apply to pond underdrainage.

Reason: *The underdrain carries water from beneath the liner directly to the head of the burn, with no pump, trigger or response time identified. The wastes above it carry elevated arsenic, tellurium, bismuth and tungsten (2019 Waste Management Plan, section 3.5).*

W9 Culverts and fish passage

Culverts CU-1 and CU-2 shall not be constructed until designs providing fish passage and a natural bed, approved by the Loughs Agency, have been approved in writing by the Planning Authority, together with a blockage and exceedance assessment and an inspection and maintenance regime.

Reason: *The applicant's own evidence describes the existing pipe culvert at the Crockanboy Road as a barrier to fish, and the Outline CEMP committed to a bottomless culvert.*

W10 East diversion ditch

The east diversion ditch shall not be constructed until its design, including lining or stabilisation in peat, sediment control, flow measurement at Outfall 2, and any compensatory habitat required by the Loughs Agency, has been approved in writing by the Planning Authority.

Reason: *The ditch carries the Pollanroe headwaters at up to 700 l/s through the valley-mire band with no stated restriction or monitoring.*

W11 Road drainage

Before the replacement road is opened, an assessment of storage in the road drainage when the non-return valves at Outfalls 1A, 1B, 3, 5A and 5B are closed, and of its effect on the peat beneath and beside the road, shall be approved. No site water shall enter the road drainage.

Reason: *When the burn is high the non-return valves close and intercepted water is held on the road's upslope side.*

W12 Fisheries and hydrology baseline

No development shall commence until: (a) fisheries surveys of the Pollanroe Burn, Curraghinalt Burn, Unnamed Watercourse, Attagh Burn and Glenealy Burn, using methods agreed with the Loughs Agency, have been completed and submitted; (b) a gauging station at the head of the Pollanroe Burn and an on-site rainfall station have been installed and have recorded for at least 12 months; and (c) a programme of annual electrofishing and biological monitoring has been approved.

Reason: *To address the information gap identified by NIEA (WMU §§25–28) and the Loughs Agency's requests for site-specific flow and rainfall data.*

W13 Independent oversight and reporting

An independent Environmental Clerk of Works with water quality expertise, approved by NIEA, shall be appointed before commencement and retained through construction, operation and the aftercare period under W17. Monitoring results, exceedances and actions under these conditions and under the discharge consents shall be reported monthly to NIEA, the Loughs Agency and the Planning Authority and published.

Reason: *To give confidence that the conditions are complied with. NIEA issued the applicant with a warning letter on 16 March 2017 and an Article 12(1) enforcement notice on 30 March 2017, for total zinc of 45, 57 and 91 µg/l in the existing discharge against a consent limit of 33.8 µg/l (AE1 17 193871; AE1 17 230466).*

W14 Groundwater

No development shall commence until the clarifications identified by the NIEA Land and Groundwater Team (Section 5 of its input to the DfI Statement of Case) have been resolved to NIEA's satisfaction and a final Surface Water and Groundwater Environmental Monitoring and Action Plan has been approved. Pumping from the mine shall not cease at closure until a

groundwater discharge consent is in place and the Closure Water Quality Plan under W17 has been implemented.

Reason: NIEA's Land and Groundwater Team cannot yet make a recommendation, expects a groundwater discharge consent before decommissioning (§5.2), and treats arsenic as a hazardous substance predicted above baseline (§5.1.1). The 2025 sHRA does not reassess groundwater (paras. 5.214–5.216).

W15 Tellurium and associated elements: water protection scheme

No development shall commence until a Tellurium and Associated Elements Water Protection Scheme, covering tellurium, bismuth, tungsten, selenium and silver, has been submitted to and approved in writing by the Planning Authority in consultation with NIEA and the Loughs Agency, and thereafter implemented. It shall include:

- (a) at least 12 months of baseline monitoring in the Pollanroe Burn, Curraghinalt Burn, Owenreagh River and Owenkillew River before any discharge;
- (b) analytical methods with limits of detection below any applicable standard or, where none exists, sufficient to detect a change from baseline;
- (c) monthly monitoring during operation at every discharge point, in Dry Stack Facility seepage and underdrainage, and in paste backfill leachate, with quarterly determination of the chemical form of tellurium;
- (d) limits for each element for which no environmental quality standard exists, set by NIEA to meet the Conservation Objectives target for freshwater pearl mussel, derived from the JNCC Common Standards Monitoring guidance, that water quality "should not be injurious to any life stage", using the results of (a) and (e); and, until those limits are set, a requirement that the annual mean at in-burn compliance points agreed with NIEA shall not rise above baseline;
- (e) chronic toxicity testing of the treated discharge on a salmonid early life stage and a freshwater bivalve, before any discharge begins and annually thereafter;
- (f) inclusion of these elements in the biological monitoring under W21 and in the closure monitoring under W17; and
- (g) publication of results under W13.

No recovery or refining of tellurium or of any other by-product shall take place on site without a further grant of planning permission.

Reason: The applicant counts tellurium as a benefit (Statement of Case, paras. 4.18–4.20 and 4.142), and its waste plan records all five elements as elevated in the tailings (2019 Waste Management Plan, section 3.5). None is assessed or limited, and the Department holds no assessment (DFI/2025-0241; DFI/2025-0424).

W16 Arsenic and metals: waste characterisation and mass balance

No development shall commence until the following have been submitted to and approved in writing by the Planning Authority in consultation with NIEA:

- (a) a mass balance for the current flowsheet for arsenic, antimony and each metal in the discharge consents, covering ore, concentrate, rougher tailings, scavenger tailings, ore-sorter rejects, waste rock, paste backfill and water;
- (b) the concentration of each in every solid waste stream and in all leach tests;
- (c) predicted concentrations in Dry Stack Facility seepage, in operational mine water and in the post-closure adit discharge; and
- (d) downstream predictions for both burns at the proposed consent limits, not at predicted treated-water quality.

Reason: Flotation concentrates arsenic into the scavenger tailings, which go underground into voids that will flood, and arsenic exceeded 10 µg/l in the applicant's own leach tests (2019 Waste Management Plan, section 3.5). No downstream arsenic prediction has been made for the Curraghinalt Burn (Kaya, October 2024, Tables 9 and 12; Annex 13, para. 3.7).

W17 Closure Water Quality Plan: the adit discharge

No development shall commence until a Closure Water Quality Plan has been submitted to and approved in writing by the Planning Authority in consultation with NIEA and the Loughs Agency. It shall include:

- (a) the predicted flow and quality of the adit discharge to the Curraghinalt Burn during groundwater rebound and for not less than 25 years after mining ceases, including arsenic, the metals in the discharge consents, nitrate from blasting residue, and the elements in W15;
- (b) the treatment to be provided so that the discharge meets the limits in D1 to D3 and D6 until monitoring shows, for five consecutive years, that it does so without treatment;
- (c) monitoring of the adit discharge and the Curraghinalt Burn throughout rebound and aftercare; and
- (d) review of the plan every five years during operation.

Water treatment shall not cease, and the discharge consent for the Curraghinalt Burn shall not be surrendered, until NIEA has confirmed in writing that the criterion in (b) is met.

Reason: After closure the adit becomes the primary discharge to the Curraghinalt Burn, whose lower reaches lie within the SAC (sHRA 2025, paras. 5.199 and 5.239). The applicant makes no prediction of its quality and defers its regulation to a future consent (paras. 5.198 and 5.201).

W18 Financial guarantee for closure and aftercare

No development shall commence until a financial guarantee, in a form and amount approved in writing by the Planning Authority in consultation with NIEA and based on an independent estimate, is in place to secure the closure and aftercare works under W17, including water treatment and monitoring for the full aftercare period. The amount shall be reviewed independently every five years and adjusted accordingly.

Reason: The adit discharge is permanent and the applicant contemplates a later change in its regulation (sHRA 2025, para. 5.201). The cost of treating it must not fall on the public.

W19 Treatment before discharge

No mine water, process water or collected Dry Stack Facility seepage shall be discharged to any watercourse except after treatment in the reverse osmosis plant described in the report of ASDR (November 2025, sHRA Annex 17). Before the plant is commissioned, its design, performance specification and guarantees, and the chemicals and doses to be used for any remineralisation, shall be approved in writing by the Planning Authority in consultation with NIEA. Remineralised water shall be monitored under D5.

Reason: *The applicant's case relies on this plant discharging below the consent limits (Annex 13, para. 2.10; Table 3-4), but its predictions exclude remineralisation (para. 3.13). If the plant is relied on in the appropriate assessment, it must be secured.*

W20 Curraghinalt Burn: contingency use only

During the operational phase no mine water shall be discharged to the Curraghinalt Burn except in an emergency. Each such discharge shall be notified to NIEA and the Loughs Agency within 24 hours, with its cause, duration, volume and quality, and shall comply with D1 to D3.

Reason: *The applicant describes the Curraghinalt Burn as "used only as a contingency discharge point during the operational phase" (sHRA 2025, para. 5.206). Its lower reaches lie within the SAC (para. 5.239).*

W21 Biological monitoring: pearl mussel and fish tissue

No discharge shall begin until a Biological Monitoring Programme has been approved in writing by the Planning Authority in consultation with NIEA and the Loughs Agency. It shall include: annual freshwater pearl mussel surveys, including juvenile recruitment, at the NIEA survey reaches of the Owenkillew and Owenreagh downstream of the discharges; annual analysis of arsenic, the metals in the discharge consents and the elements in W15 in salmonid tissue; and trigger levels at which discharges shall be reduced or stopped pending review. Results shall be published under W13.

Reason: *The Conservation Objectives require that water quality "should not be injurious to any life stage" (quoted at sHRA 2025, para. 5.125). NIEA recorded pearl mussel at the Curraghinalt Burn confluence falling from 35 in 2015 to two in 2022 (NIEA Statement of Case input, NED, p. 27).*

W22 Betterment Plan: secured and implemented before discharge

No discharge of mine water shall begin until: (a) the final Betterment Plan has been approved in writing by the Planning Authority in consultation with NIEA; (b) the cessation of livestock farming and the other measures relied on in the 2025 sHRA (paras. 5.157–5.160) have been implemented on the lands identified; (c) those measures have been secured for the life of the mine and the aftercare period by an agreement under section 76 of the Planning Act (Northern Ireland) 2011; and (d) a programme to verify the nitrogen reductions assumed in sHRA Annex 15 has been approved.

Reason: *The applicant relies on the Betterment Plan to justify a nitrate mean of 0.42 mg/l N against a target of 0.125 (sHRA 2025, para. 5.160), with no Northern Ireland model to*

quantify the benefit (para. 5.159). Mitigation relied on in an appropriate assessment must be certain, as the applicant's own citation of the Dutch Nitrogen cases confirms (para. 5.166).

2. DISCHARGE CONSENT CONDITIONS

- 2.1 The following are proposed for any consent granted under the Water (Northern Ireland) Order 1999 on TrC 080/20_1 (Curraghinalt Burn) or TrC 081/20_1 (Pollanroe Burn). In these conditions, **annual mean** means the mean of all results for a parameter in the preceding 12 months, recalculated on receipt of each new result, and compliance with an annual mean limit is assessed each time it is recalculated. A **maximum** applies to every individual result.

D1 The most stringent standard applies

For each parameter in each consent, the maximum and the annual mean shall each be no less stringent than the most stringent of: (a) the environmental quality standard applied by NIEA under the Water Framework Directive (Classification, Priority Substances and Shellfish Waters) Regulations (Northern Ireland) 2015, the annual average standard for the mean and the maximum allowable concentration for the maximum; (b) the applicant's own site-specific standards (Kaya, December 2025, Table 4-9); (c) the Conservation Objectives targets for freshwater pearl mussel and Atlantic salmon, derived from the JNCC Common Standards Monitoring guidance; (d) the value proposed by the applicant (Kaya, December 2025, Annexes 4 and 5); and (e) any limit for the same discharge in an existing consent, to the extent that consent remains in force. Each limit shall apply at the point of discharge.

Reason: NIEA stated at the Inquiry on 28 September 2026 that it applies the standards of the 2015 Regulations, and internal standards consistent with the Water Framework Directive, rather than Consent 068/12/02. The applicant disputed this at the Inquiry, contending that the 2014 consent "remains the current (extant) consent" (Statement of Case: Water Discharge, October 2024, para. 1.12). Whichever is right, the most protective standard should govern discharges to a burn whose lower reaches lie within the SAC (sHRA 2025, para. 5.239).

D2 Arsenic: both burns

In addition to D1, arsenic shall have in each consent an annual mean limit (as defined in paragraph 2.1) no higher than the mean baseline concentration of the receiving burn upstream of the discharge, as determined by NIEA.

Reason: The applicant proposes 10 µg/l with no annual mean (Annex 13, Annex 5, p. 44), although arsenic exceeded 10 µg/l in its own leach tests (2019 Waste Management Plan, section 3.5). It predicts 0.01 µg/l in the treated discharge (Table 3-4), so a limit at baseline is within its own stated capability. The Conservation Objectives require that water quality "should not be injurious to any life stage" (quoted at sHRA 2025, para. 5.125).

D3 Annual means for every metal; no reliance on dilution in the SAC

In each consent, every metal shall have an annual mean limit (as defined in paragraph 2.1) as well as a maximum. No limit shall be derived from, or rely on, dilution in the Owenkillew River SAC or in any watercourse the applicant accepts is functionally linked to it (sHRA

2025, para. 5.26). No limit, including that for iron, shall be set above the applicable standard on the ground that baseline exceeds it.

Reason: *A calendar-year mean would reveal a breach only at the year end. The Curraghinalt Burn copper and zinc maxima rely on dilution in the SAC (Annex 13, Annex 5, pp. 46 and 51), contrary to the sHRA's reliance on compliance at end of pipe (para. 5.195); the copper maximum is 16.5 times the applicant's own site-specific standard (Table 4-9). The iron maximum of 2.38 mg/l is set at a baseline that the applicant records "is above Drinking Water Standard and EQS (1mg/L)" (Annex 5, pp. 46–47), although the sHRA calls the use of baseline in NIEA's approach "entirely inappropriate" (para. 5.147).*

D4 Parameters retained and added

Selenium, silver, aluminium, chromium, cobalt and barium shall not be removed from either consent. Tellurium, bismuth and tungsten shall be added, with limits set under W15(d) to meet the Conservation Objectives target for freshwater pearl mussel.

Reason: *Selenium and silver, and tellurium, bismuth and tungsten, are elevated in the tailings (2019 Waste Management Plan, section 3.5). The applicant's own tables are inconsistent on barium and cobalt (Annex 13, Table 3-4 and Annex 5). No environmental quality standard exists for tellurium, bismuth or tungsten; the Conservation Objectives require that water quality "should not be injurious to any life stage" (quoted at sHRA 2025, para. 5.125).*

D5 Analysis and limits of quantification

All compliance analysis shall be by UKAS-accredited methods with a limit of quantification no greater than 30% of the relevant limit, consistent with the approach of Commission Directive 2009/90/EC. Where that cannot be achieved for a parameter, the consent shall specify the method with the lowest practicable limit of quantification, and any quantified result shall be reported to NIEA within 24 hours. Remineralised water under W19 shall be monitored on the same basis.

Reason: *78% of baseline arsenic samples were below the detection limit (Annex 13, Table 4-8). NIEA's own sample of the existing discharge on 17 February 2017 reported copper as "<20" against a limit of 16.2 µg/l and cadmium as "<10" against 0.7 µg/l (NIEA warning letter, 16 March 2017). A limit that cannot be measured cannot be enforced.*

D6 Nitrate

No annual mean nitrate limit above 0.125 mg/l N, the Conservation Objectives target, shall apply until the Betterment Plan measures have been implemented and verified under W22. The maximum shall be derived from aquatic protection criteria, not from the drinking water standard of 11.3 mg/l N.

Reason: *The proposed maximum of 11.3 mg/l N is a drinking water standard, some 90 times the Conservation Objectives target, and the proposed means are set at a baseline that the applicant's own data show is rising (Annex 13, para. 4.11; Annex 4, p. 41).*

D7 Closure: the consent continues

The consent for the Curraghinalt Burn shall apply to the adit discharge after mining ceases, with the limits in D1 to D3 and D6, and shall not be surrendered or varied to less stringent limits until the criterion in W17(b) is met.

Reason: *The applicant contemplates a new consent at closure, with "changes to consent requirements" (sHRA 2025, para. 5.201).*

D8 Sampling frequency and action levels

In each consent:

- (a) each discharge shall be sampled for arsenic, the metals in the consent, the elements in W15, nitrate, ammonium and suspended solids at least weekly for the first two years of discharge and at least fortnightly thereafter, with flow, pH, conductivity and turbidity measured continuously;
- (b) any result above an annual mean limit shall be notified to NIEA and the Loughs Agency within 24 hours, and shall require daily sampling of that parameter until three consecutive results are below the annual mean limit, and an investigation of the treatment plant reported to NIEA within seven days;
- (c) any result above a maximum limit, or two consecutive results above an annual mean limit, shall require the discharge to be stopped or diverted to the water management ponds until NIEA has confirmed in writing that the cause has been identified and corrected; and
- (d) any result for arsenic or a metal above an action level set by NIEA by reference to the applicant's predicted treated-water concentration for that parameter (Kaya, December 2025, Table 3-4) shall require an investigation of the treatment plant under (b), whether or not a limit has been exceeded.

Reason: *Limits alone do not detect a failing treatment plant quickly. The applicant predicts arsenic at 0.01 µg/l in the treated discharge (Annex 13, Table 3-4); a result many times that shows the plant is not performing, well before any limit is reached.*

Patrick Haughey
Third-party objector