Technical Appendix 8.6 Private Water Supply Risk Assessment

Breezy Hill Energy Project

Breezy Hill Energy Limited

Client Address

Prepared by:

SLR Consulting Limited

2 April 2025

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Revision Record

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Table of Contents

Annexes

1.0 Private Water Supply Risk Assessment

1.1 Introduction

1.1.1 SLR Consulting (Ltd) were commissioned by Brockwell Energy Ltd (the Applicant) to undertake a Private Water Supply Risk Assessment (PWSRA). This Appendix assesses the potential risk to Private Water Supply (PWS) from Breezy Hill Energy Project (the Proposed Development). The Proposed Development will consist of 20 turbines with associated infrastructure including new and upgraded access tracks, construction compounds, borrow pits, Battery Energy Storage System (BESS), a substation, and associated infrastructure.

1.2 Background

Scope of Report

1.2.1 The scope of the report is to identify PWS in the surrounding area and to determine whether they would be affected by the Proposed Development.

1.2.2 The desk study and assessment has comprised identification of PWS within the 2 km study area through consultation with East Ayrshire Council (EAC) and residents, followed by assessment, risk rating, and identification of any additional mitigation required.

Private Water Supplies

1.2.3 PWS are private supplies which are not regulated by Scottish Water or EAC, and are operated and maintained by the resident. PWS can vary in scale from supplying one property to supplying several. They consist of a source, any interconnecting tanks and pipework which is distributed to a supply, as defined below:

- Source – where the water is abstracted or collected;
- Supply – the properties which are supplied by the source;
- Tank – where the water is stored prior to being used at the supply; and
- Pipework – the connecting pipework used to distribute water collected from source to supply.

1.2.4 PWS can source their water from surface water, groundwater or a combination of both. Source types can include springs, stream abstractions, boreholes and wells.

Study Area

1.2.5 A PWS study area of 2 km from the Site boundary has been used to undertake council consultation, identify and assess PWS within the surrounding area. The study area of 2 km is based on professional judgement that there are unlikely to be effects to surface water or groundwater at distances greater than 2 km from infrastructure. This study area and methodology has been previously approved by Scottish Environment Protection Agency (SEPA) as suitable for similar wind farm developments.

1.2.6 Located within the Site boundary is the existing track through North Kyle Energy Project which will be used to access the Site. This existing track was initially included within the 2 km study area to allow for any required upgrades. It has since been confirmed that upgrades and construction work will not be required along the existing track and the study area has been revised to be a 2 km radius from the Site boundary, outwith North Kyle Energy Project. This PWSRA summarises all consultation undertaken, but assessment has only been undertaken for PWS that are within the current 2 km study area.

Baseline

1.2.7 The Proposed Development is located approximately 13 km south-east of Ayr, 8.5 km south-west of Cumnock and 4.5 km north of Dalmellington in the EAC area (the 'Site'). The approximate centre is at British National Grid (BNG) 247644 , 612920.

1.2.8 The Proposed Development is set within moorland and areas of commercial forestry. The elevation varies from 245 m Above Ordnance Datum (AOD) in the north-west of the Site to 410 m AOD in the south of the Site.

1.2.9 The Site primarily comprises commercial forestry across several hills, including Auchingee Hill (311 m, Above Ordnance Datum (AOD)) in the centre of the site, Brown Rig (342 m AOD) and Stannery Knowe (363 m AOD) to the east.

1.2.10 The Site is primarily underlain by superficial deposits of peat in the centre and east, with Devensian till in the west and along watercourses, as shown in **Figure 8.6.2**. Alluvium deposits onsite are mapped along the Water of Coyle, with an isolated area of glaciofluvial deposits in the north.

1.2.11 The Site is largely underlain by Scottish Lower Coal Measures Formation and Scottish Middle Coal Measures Formation, as shown in **Figure 8.6.4**. The south and centre of the Site is underlain by igneous intrusions of Western Midland Valley Westphalian to Early Permian Sills. Isolated igneous intrusions of Ayrshire Basanitic and Foiditic Plugs and Vents are also present.

1.2.12 The bedrock aquifers underlying the Site comprise moderately productive Scottish Coal Measures Group and low productivity Unnamed Igneous Intrusion Carboniferous to Permian. Within the Scottish Coal Measures Group there can be low yields present from the multi-layered aquifer, with higher yields associated with mining activity and poor water quality. Within the Igneous Intrusion bedrock there are rare springs, with flow largely through fractures and groundwater present in the near surface weathered zone.

Legislation and Guidance

1.2.13 The following Scottish Government legislation has been reviewed to inform the assessment methodology of this PWSRA, to ensure comprehensive assessment and any protective measures required are implemented.

- Private Water Supplies (Scotland) Regulations 2006;
- The Water Intended for Human Consumption (Private Supplies) (Scotland) Regulations 2017; and
- The Water Environment (Controlled Activities) (Scotland) Regulations 2011.

1.2.14 To inform the assessment methodology of this PWSRA, the following guidance regarding PWS has been reviewed.

- Drinking Water Quality Regulator for Scotland (DWQR) Guidance for Local Authorities on The Water Intended for Human Consumption (Private Supplies) (Scotland) Regulations 2017;
- Scottish Environment Protection Agency (SEPA) A Practical Guide to The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended) (Version 9.2) 2022;
- SEPA Land Use Planning System Guidance Note 31 (SEPA LUPS GU31) Guidance on Assessing the Impacts of Development Proposals on Groundwater Abstractions and Groundwater Dependent Terrestrial Ecosystems (Version 3) 2017; and
- SEPA Guidance on Assessing the Impacts of Developments on Groundwater Abstractions 2024.

Assessment Methodology

1.2.15 The assessment methodology for this PWSRA has been developed based on SEPA guidance, including previous SEPA-LUPS-GU31 and the updated Guidance on Assessing the Impacts of Developments on Groundwater Abstractions. These provide detailed guidance on assessing impacts to groundwater abstractions and therefore PWS which are fully or partly fed by groundwater.

1.2.16 In accordance with this guidance, this assessment identifies any existing groundwater abstractions present within the study area. This includes implementing the following detailed infrastructure buffers and identifying any PWS within them:

- 10 m for all activities;
- 100 m radius of all subsurface activities less than 1 m in depth; and
- 250 m radius of all subsurface activities deeper than 1 m.

1.2.17 Following identification of existing groundwater abstractions, these will inform the iterative design, and where practicable these infrastructure buffers will be implemented. Where buffers between the Proposed Development and groundwater abstractions cannot be maintained, a detailed risk assessment and site-specific Conceptual Site Model (CSM) will be required. This qualitative assessment will consider the importance of the source abstraction and the following potential effects:

- Extent;
- Magnitude;
- Duration, frequency and reversibility;
- Likelihood; and
- Cumulative effects.

1.2.18 Where potential impacts to groundwater abstractions are considered likely following the qualitative CSM, in some cases further quantitative monitoring to inform the CSM may be required.

1.2.19 These site-specific assessments would be accompanied by mitigation and best practice to prevent impacts to surface water and groundwater, likely to include monitoring of the PWS during pre-construction, construction and post-construction phases of the Proposed Development.

1.2.20 The assessment methodology for finding the Significant or Not Significant impacts to PWS is outlined in **Chapter 8** of the EIAR.

Approach to Scoping PWS for Further Assessment

1.2.21 Initial desk-based assessment identified registered PWS through consultation with EAC Environmental Health Office (EHO). A desk-based spatial assessment of the surrounding area using AddressBase and OS mapping was then undertaken to identify any additional properties within the 2 km study area.

1.2.22 Identified properties and registered PWS were then assessed and scoped out with consideration to the following aspects:

- bedrock and superficial geology;
- hydrogeology;
- surface water catchments;
- topography and drainage pathways; and

- distance from the Proposed Development (within 2 km study area).

1.2.23 The following resources were used to complete the desk-based assessment, to determine potential hydrological connectivity to the site.

- Ordnance Survey (OS) 1:25k and 1:50k Map (Digital);
- Scottish Government Scotland's Environment Map;
- British Geological Survey (BGS) GeoIndex Onshore Map Viewer;
- BGS Geological Survey of Scotland 14 Ayr 1974 Solid Map (1:63,360);
- BGS Geological Survey of Scotland 14 Ayr 1951 Drift Map (1:63,360);
- BGS Geological Survey of Scotland 14E Cumnock 1976 Solid Map (1:50,000); and
- BGS Geological Survey of Scotland 14E Cumnock 1980 Drift Map (1:50,000).

1.2.24 Identified properties with potential to be PWS and hydrologically connected were then scoped into further assessment. Consultation letters were initially issued to residents and landowners, to confirm the presence of a PWS supplying the property. The initial consultation comprised the following:

- A summary of the Proposed Development and what assessment would be undertaken as part of the PWSRA.
- A questionnaire to gather information on the source type, any pipework or treatment and supply points.
- A map of the property and the surrounding area for the resident to mark the location of the source any associated infrastructure.

1.2.25 Where residents confirmed their properties to be supplied by PWS, and the PWS source location to be within 2 km of the Proposed Development, these were scoped into further assessment. An additional desk-based assessment was undertaken to confirm whether the PWS source was likely hydrologically connected. Site visits were then undertaken to PWS considered to be potentially connected, to confirm and ground truth the resident's information and provide further understanding. Where no responses were received from a resident by letter or email, further attempts to make contact were undertaken by door knocking during the site visit. In the absence of residents, a final letter was delivered to the property during the site visit. This was not undertaken where there were considered to be potential health and safety risks.

1.2.26 Every PWS source was then assessed to provide a risk rating of potential impacts from the Proposed Development. Following implementation of embedded design and good practice mitigation measures, the residual effects to each PWS were assessed.

1.3 Baseline

Desk-based Assessment

Identification of PWS

1.3.1 Consultation was undertaken with EAC to gather information on registered PWS within the 2 km study area. A Freedom of Information (FOI) request was issued to EAC in August 2024. A response was received in August 2024, providing names and locations of registered PWS.

1.3.2 The full council register of PWS was assessed and scoped out if outwith the study area. Registered PWS were also scoped out if not considered to have potential hydrological or hydrogeological connectivity to the site. From this, three properties were scoped into assessment from the council EHO register.

1.3.3 To identify any unregistered PWS within the study area, a desk-based review of additional properties from AddressBase data, OS mapping and Royal Mail postcode records was undertaken. Properties which were considered to be remote, located away from main roads or in an area surrounded by other PWS were scoped in. From this search an additional 14 properties were identified and scoped into assessment.

Resident and Landowner Consultation

1.3.4 The first letter consultation to residents was issued in September 2024 to all 17 properties identified. The letters included an accompanying questionnaire and map for the residents to fill in and return. A summary of responses to the letters issued are outlined in Annex 3.

1.3.5 Where no further follow up consultation with residents was required, these PWS were scoped out of site visits.

Site Based Assessment

1.3.6 Site visits were arranged with residents where responses to letter consultation had been received or contact could be established through landowners prior to the site visit. Where contact could not be established prior to the visit, door knocking was undertaken where there were not considered to be potential health and safety risks.

1.3.7 Site visits were undertaken in December 2024 and a summary of visits is provided in **Table 1** in **Annex 3**. The location of sources were mapped during the site visit using ArcGIS Field Maps and are shown in **Figure 8.6.2**.

1.3.8 Following the results from the site visit and desk-based assessment, as outlined in **Annex 3**, **Table 2**, PWS were scoped out of further assessment, by being in separate sub-catchments or outwith 10 m, 100 m and 250 m infrastructure buffers. PWS scoped out of further assessment include:

- PWS01 Rankinston Farm;
- PWS03 Polquhairn Farm;
- PWS04 Seaview House;
- U1 Minnivey;
- U2 The Craigmark;
- U3 Hillside;
- U4 Minnivey Cottage;
- M1 Muirston Farm;
- M2 Waterton Farm;
- M3 Pennyvenie Farm; and
- M4 Clawfin Farm.

1.3.9 Supplies to properties were labelled as “PWS” where a private source was confirmed, “M” where supplied by mains, and “U” where the supply type was unconfirmed during consultation.

1.4 Primary Mitigation

1.4.1 Mitigation embedded into the design of the Proposed Development has been considered to prevent impacts to surface and groundwater across the site, including those which PWS are hydrologically connected to.

1.4.2 Embedded mitigation specific to PWS, included:

- Proposed Development infrastructure located outwith 50 m watercourse buffers, excepting where watercourse crossings are required.
- Proposed Development infrastructure located outwith defined PWS source catchments.
- Maintaining recommended buffers from SEPA guidance for the Proposed Development, including 10 m for all activities, 100 m for all subsurface activities less than 1 m depth, and 250 m for all subsurface activities greater than 1 m depth.

1.4.3 Mitigation will be included within the Construction Environmental Management Plan (CEMP) to be produced prior to the commencement of construction. The CEMP will include best practice guidance to be implemented across the site to prevent potential impacts to water quantity or quality. To prevent impacts to water quality, best practice mitigation may include:

- Implementation of silt management measures, including, but not limited to, silt traps, silt fencing and settlement lagoons to prevent and trap sedimentation within surface water run-off. This includes measures outlined within a Pollution Prevention Plan (PPP).
- Implementation of careful drainage design including, but not limited to, trackside ditches to direct flow of surface water and check dams will be used within the ditches to slow the flow of water, decreasing erosion and sedimentation. Regular cross drainage or culverting will be designed to ensure hydrological connectivity is maintained upslope and downslope of hardstanding. This may include upgrades to drainage present on existing tracks.
- Implementation of watercourse crossings as outlined in the Technical Appendix 8.1: Schedule of Watercourse Crossing of the EIAR, following further detailed design. Any construction will only take place following and in line with any relevant CAR authorisations.
- Implementation of geotextiles and track design materials to create an impermeable layer lining the foundation of the new construction track, and prevent leaching.
- No fuel, chemicals, vehicles, or plant will be stored within 10 m of watercourses. An emergency response plan will be implemented in the event of any fuel or chemical spills. This will be included within the CEMP and verified by the on-site Environmental Clerk of Works (EnvCoW). The emergency response plan will likely include confirmatory water quality or soil testing following clean-up of spills.
- Regular visual monitoring at watercourses downstream of the Proposed Development by the EnvCoW during construction. In addition to this, a Water Quality Monitoring Plan (WQMP) will be enacted throughout construction, as outlined in **Chapter 8** of the EIAR.

1.5 Risk Assessment

1.5.1 A summary of the identified PWS sources and whether these have been assessed to be at risk from the Proposed Development following embedded mitigation is outlined in **Annex 3**, **Table 2**.

1.5.2 PWS02 has potential risk of impact from the Proposed Development, therefore further assessment has been undertaken below.

PWS02

1.5.3 Following consultation with the landowner of Ravenscroft Farm prior during the site visit, it was confirmed that Ravenscroft Farm, The Castle and Drumbowie Farm are supplied by a spring. The spring is confirmed to be located at a source tank at NGR 246576, 613869. As shown in **Annex 3**, **Table 3**, the tank is lined with a steel top. The supply is then piped downhill, with a pipe to a holding tank approx. 490 m downslope which supplies Ravenscroft Farm and The Castle. The approximate route of the pipework was outlined by the landowner during the Site visit, as shown in **Figure 8.6.5.1** A separate pipe from the source tank supplies Drumbowie Farm.

1.5.4 Underlying bedrock consists of igneous gabbro of the Western Midland Valley Westphalian to Early Permian Sills. Mapped underlying superficial deposits consist of till deposits, with no mapped deposits present upslope. The spring source is underlain by low productivity bedrock aquifer of Unnamed Igneous Intrusion, Carboniferous to Permian. Groundwater within the bedrock aquifer is described to be limited with flow through fractures or present in near-surface weathered zone, with rare springs present. Due to its infrastructure and surrounding geology, it is likely to be supplied by near-surface groundwater that will largely follow topography, and a spring from deeper groundwater.

1.5.5 As shown in **Figure 8.6.5.2**, the spring is located outwith SEPA groundwater abstraction 10 m, 100 m and 250 m infrastructure buffers. Due to potential influence from near-surface groundwater, the surrounding catchments were also assessed. The PWS source is located downslope of Auchingee Hill, where Proposed Development infrastructure is situated. An assessment of the PWS source catchment has been undertaking using GIS modelling and professional judgement, with the area shown in **Drawing Figure 8.6.5.1**. There is no Proposed Development infrastructure located within the source catchment of PWS02.

1.5.6 Taking account of embedded and best practice mitigation measures, the magnitude of impact is assessed as negligible, on a high sensitivity receptor. There is therefore potential for an indirect, temporary, short-term effect of Minor significance, which is considered to be Not Significant in terms of the EIA Regulations.

Sensitivity of Receptors

Table 1: Sensitivity of Receptors

Source	Sensitivity	Justification
PWS02	High	Spring source supplied by near-surface groundwater and surface water runoff.

Magnitude of Impact

Table 2: Magnitude of Impact

Source	Magnitude	Justification
PWS02	Negligible	Source located outwith SEPA groundwater abstraction infrastructure buffers. PWS source catchment does not underlie Proposed Development infrastructure.

Significance of Impact

Table 3: PWS Significance of Impact

Source	Impact	Mitigation Proposed
PWS02	Minor – not significant	No additional mitigation required.

1.6 Residual Effects

1.6.1 As noted above, no significant potential environmental effects to surface water or groundwater quality or quantity were identified for PWS, taking account of embedded and good practice mitigation. Residual effects for PWS are considered to be Minor and Not Significant.

1.7 References

BGS (2025) Online GeoIndex Map Viewer. Available at: https://mapapps2.bgs.ac.uk/geoindex/home.html. Accessed on: 28 February 2025.

Scottish Government (2006). The Private Water Supplies (Scotland) Regulations 2006. Available at: https://www.legislation.gov.uk/ssi/2006/209/contents/made. Accessed on: 28 February 2025.

Scottish Government (2011). The Water Environment (Controlled Activities) (Scotland) Regulations 2011. Available at: https://www.legislation.gov.uk/ssi/2011/209/contents/made. Accessed on: 28 February 2025.

Scottish Government (2003). Water Environment and Water Services (Scotland) Act 2003. Available at: https://www.legislation.gov.uk/asp/2003/3/contents. Accessed on: 28 February 2025.

Scottish Government (2013). The Water Resources (Scotland) Act 2013. Available at: https://www.legislation.gov.uk/asp/2013/5/enacted. Accessed on: 28 February 2025.

Scottish Government (2017). The Water Intended for Human Consumption (Private Supplies) (Scotland) Regulations 2017. Available at: https://www.legislation.gov.uk/ssi/2017/282/contents/made. Accessed on: 28 February 2025.

SEPA (2017). Land Use Planning System SEPA Guidance Note 31, Version 3. Available at: https://www.sepa.org.uk/media/144266/lups-gu31-guidance-on-assessing-the-impacts-of-development-proposals-on-groundwater-abstractions-and-groundwater-dependent-terrestrial-ecosystems.pdf. Accessed on: 28 February 2025.

SEPA (2024). Guidance on Assessing the Impacts of Developments on Groundwater Abstractions. Available at: https://www.sepa.org.uk/media/ijwd3q0y/guidance-on-assessing-the-impacts-of-developments-on-groundwater-abstractions.docx Accessed on: 28 February 2025.

SEPA (2024). The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended) A Practical Guide, Version 9.4. Available at https://www.sepa.org.uk/regulations/water/. Accessed on: 28 February 2025.

SEPA (2025) Scotland's Environment Map. Available at: https://www.environment.gov.scot/maps/scotlands-environment-map/. Accessed on: 28 February 2025.

Annex1 Figures

Technical Appendix 8.6 Private Water Supply Risk Assessment

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2 April 2025

Annex 2 Example Consultation Questionnaire

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Annex 3 PWS Screening

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2 April 2025

Table 1 -PWS Consultation and Site Visit Summary

Supply Ref	Supply Name	Property Ref	Property Name	Source Type	Initial Consultation	Site Visit	Consultation Summary
PWS01	Rankinston Farm	1	Rankinston Farm	Spring	Response received October 2024, confirming property supplied by spring. Source used for drinking, domestic and livestock supply, with no treatment. Noted to be a good supply which previously supplied Rankinston Village.	Site visit was undertaken December 2024, which confirmed location of concrete header tank which is gravity fed to property. Overflow runs into nearby burn. Noted that previous council testing has recorded E.coli. Previous supply pipework to Rankinston Village ploughed up by forestry works.	Assessment based on resident consultation from letter response and site visit.
PWS02	Ravenscroft Farm	2	Ravenscroft Farm	Spring	Response received October 2024 from The Castle, confirming supplied by spring which is shared with Ravenscroft Farm. Source used for domestic and drinking supply. Consultation undertaken directly with landowner of Ravenscroft Farm to arrange site visit.	Site visit was undertaken December 2024, which confirmed location of lined shallow well with metal lid. Noted to be gravity fed to properties with no treatment. Also used for livestock supply. Noted to be two supply pipes from the source tank to Ravenscroft Farm and The Castle, and to Drumbowie Farm.	Assessment is based on resident consultation during site visit.
		3	The Castle, Ravenscroft				
		8	Drumbowie Farm				

Supply Ref	Supply Name	Property Ref	Property Name	Source Type	Initial Consultation	Site Visit	Consultation Summary
PWS03	Polquhairn Farm	4	Polquhairn Farm	Spring	Response received October 2024, confirming source is shared between properties at Polquhairn Farm. Source used for drinking, domestic and livestock supply, with no treatment. Supply is gravity-fed from source.	Site visit was undertaken December 2024, which confirmed location of two spring sources, one a lined tank, the other a shallow dug out area on hillside.	Assessment based on resident consultation from letter response and site visit.
		5	Trelaw				
		6	Tam's Place				
PWS04	Seaview House	10	Seaview House	Stream Abstraction and Mains	Response received September 2024, confirming property supplied by mains, and a stream abstraction for domestic and livestock purposes. No treatment of supply. Planning in future to source water from spring supply and borehole.	Not required.	Assessment based on resident consultation from letter response.
U1	Unconfirmed	11	Minnivey	Unconfirmed	No response received to letter consultation. Not present on council EHO PWS register. Property within Scottish Water Resource Supply Zone.	Not visited during site visit as not pre-arranged and possible health and safety concerns.	Property is not registered with council and whether PWS or mains has not been confirmed by residents. Considered likely to be supplied by mains as within Scottish Water Resource Supply Zone.

Supply Ref	Supply Name	Property Ref	Property Name	Source Type	Initial Consultation	Site Visit	Consultation Summary
U2	Unconfirmed	12	The Craigmark	Unconfirmed	No response received to letter consultation. Not present on council EHO PWS register. Property within Scottish Water Resource Supply Zone.	Site visit was undertaken December 2024, with no one present at time of visit. During visit appears to be owned by hotel with several standing caravans.	Property is not registered with council and whether PWS or mains has not been confirmed by residents. Considered likely to be supplied by mains as within Scottish Water Resource Supply Zone.
U3	Unconfirmed	16	Hillside	Unconfirmed	No response received to letter consultation. Not present on council EHO PWS register. Nearby Muirston Farm confirmed to be supplied by mains. Property within Scottish Water Resource Supply Zone.	Not visited during site visit as not pre-arranged and possible health and safety concerns.	Property is not registered with council and whether PWS or mains has not been confirmed by residents. Considered likely to be supplied by mains as within Scottish Water Resource Supply Zone.
U4	Unconfirmed	17	Minnivey Cottage	Unconfirmed	No response received to letter consultation. Not present on council EHO PWS register. Property within Scottish Water Resource Supply Zone.	Not visited during site visit as no pre-arranged visit and possible health and safety concerns.	Property is not registered with council and whether PWS or mains has not been confirmed by residents. Considered likely to be supplied by mains as within Scottish Water Resource Supply Zone.
M1	Mains	7	Muirston Farm	Mains	Response received October 2024, confirming property supplied by mains.	Not required.	Assessment based on resident consultation from letter response.

Supply Ref	Supply Name	Property Ref	Property Name	Source Type	Initial Consultation	Site Visit	Consultation Summary
M2	Mains	9	Waterton Farm	Mains	Response received September 2024, confirming property supplied by mains.	Not required.	Assessment based on resident consultation from letter response.
M3	Mains	13	Pennyvenie Farm	Mains	No response received to letter consultation. Not present on council EHO PWS register.	Site visit was undertaken December 2024. Owner confirmed during visit all farm buildings to be supplied by mains.	Assessment based on resident consultation from site visit.
M4	Mains	14	Clawfin Farm	Mains	No response received to letter consultation. Not present on council EHO PWS register.	Site visit was undertaken December 2024. Owner confirmed during visit property and surrounding properties to be supplied by mains.	Assessment based on resident consultation from site visit.
M5	Mains	15	Elymains	Mains	Response received September 2024, confirming property supplied by mains.	Not required.	Assessment based on resident consultation from letter response.

Table 2- PWS Assessment

Source Ref	Source Type	Approx Source Location (BNG)	Approx distance from Proposed Development	PWS Assessment	PWS Scoped In/Out of Further Assessment
PWS01	Spring	246190, 612694	750 m	The spring is fed to a source tank is considered to be supplied by groundwater from the moderately productive Scottish Coal Measures Group, with contributions from near-surface groundwater and surface water runoff from the surrounding hillside. The source tank is located to the west of the Site, with the source tank and supply pipework has been confirmed to be located outwith SEPA's groundwater abstraction 10 m, 100 m and 250 m buffers. The PWS source catchment for any near-surface groundwater or surface water runoff is hydrologically disconnected from the Proposed Development by the Hawford Burn.	Scoped out following site visit.
PWS02	Spring	246576, 613869	600 m	The spring is fed to source tank is considered to be largely supplied by near-surface groundwater and surface water runoff from the surrounding hillside. There are rare springs present in the underlying low productivity bedrock aquifer, Unnamed Igneous Intrusion Carboniferous to Permian. The source tank is located to the north of the Site, with source tank and supply pipework confirmed to be located outwith SEPA's groundwater abstraction 10 m, 100 m and 250 m buffers. The source tank is located within the same SEPA hydrological catchment, Water of Coyle, as the Proposed Development. Detailed catchment modelling has been undertaken to determine the PWS02 source catchment.	Scoped into further assessment following site visit, as source located within same catchment as Proposed Development.
PWS03A	Spring	248961, 614323	930 m	The springs are considered to be supplied by groundwater from the moderately productive Scottish Coal Measures Group, with contributions from near-surface groundwater and surface water runoff from the surrounding hillside. The springs are located to the north of	Scoped out following site visit.

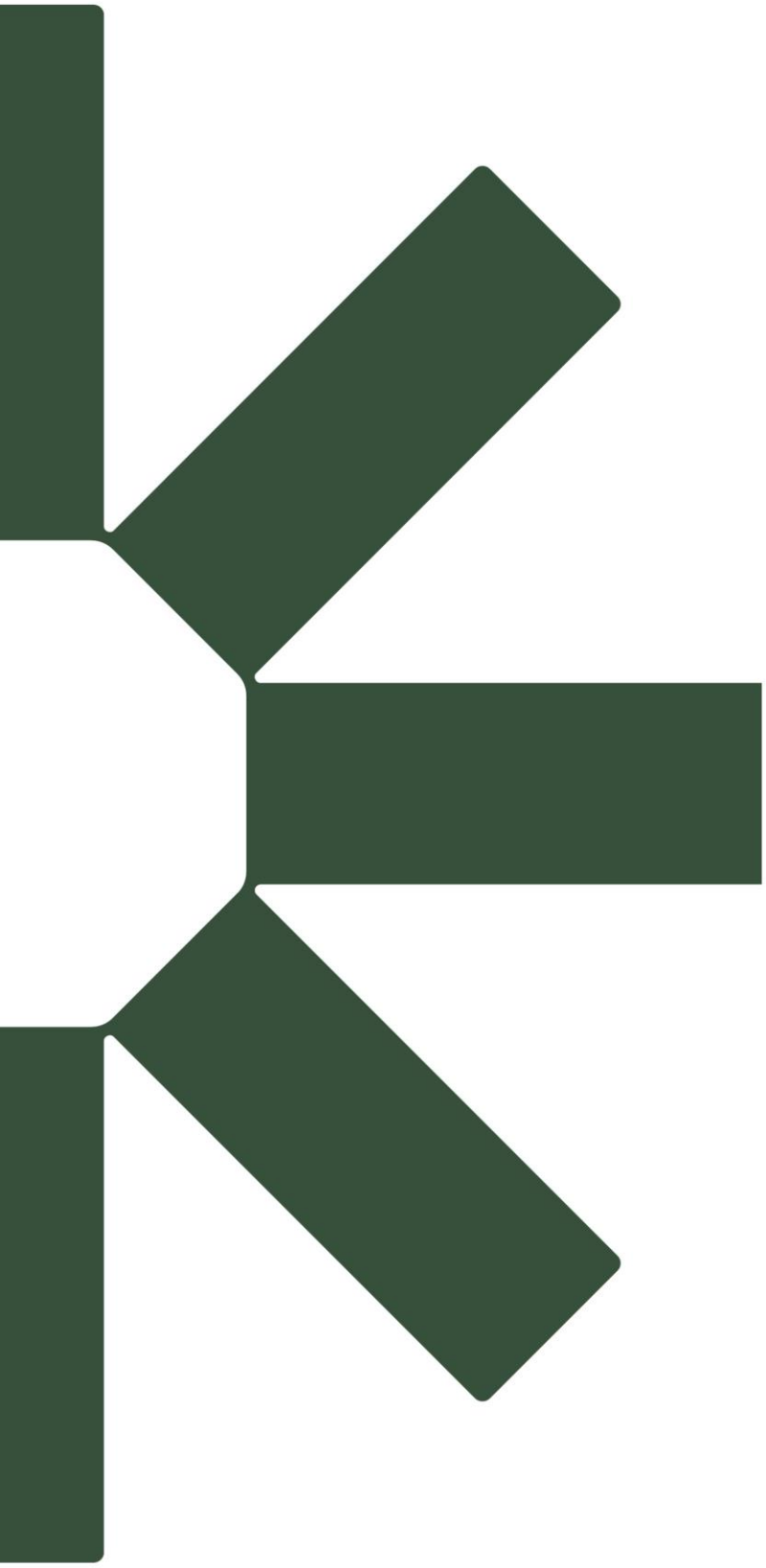
Source Ref	Source Type	Approx Source Location (BNG)	Approx distance from Proposed Development	PWS Assessment	PWS Scoped In/Out of Further Assessment
PWS03B	Spring	249015, 614306	950 m	the Site with the source tank and supply pipework has been confirmed to be located outwith SEPA's groundwater abstraction 10 m, 100 m and 250 m buffers. The PWS source catchment for any near-surface groundwater or surface water runoff is hydrologically disconnected from the Proposed Development by the Drumbowie Burn.	
PWS04	Stream abstractions, Mains	245245, 613323 245146, 613321	1.8 km 1.85 km	Consultation with the resident confirmed the property to be supplied by two stream abstractions and mains. The resident response confirmed plans to reinstate a spring supply, which may be shared with Rankinston Farm (PWS01), and to install a borehole at the property. The streams rise in the south on the slopes of Ewe Hill and then flow north, and are tributaries of the Water of Coyle. These watercourses are hydrologically disconnected from the Site by Hawford Burn. Any spring source reinstated is likely to be sited on Ewe Hill located approx. 700 m to the south of the property, similar to PWS01. This would be located outwith 250 m from the Proposed Development infrastructure and also disconnected by Hawford Burn. Any borehole installed would be sited in close proximity to the property to supply power to the pump. This would also be located outwith SEPA's groundwater abstraction 10 m, 100 m and 250 m buffers.	Scoped out following desk-based assessment.
U1	Unconfirmed	246251, 607354 (Property)	3.6 km	Property is not registered with council and whether PWS or mains has not been confirmed by residents. Considered likely to be supplied by mains as within Scottish Water Resource Supply Zone. The property is also located outwith 2 km study area from the Site.	Scoped out following desk-based assessment.
U2	Unconfirmed	247405, 607187 (Property)	3.6 km	Property is not registered with council and whether PWS or mains has not been confirmed by residents. Considered likely to be supplied by mains as within Scottish Water Resource Supply Zone. The property is also located outwith 2 km study area from the Site.	Scoped out following site visit.

Source Ref	Source Type	Approx Source Location (BNG)	Approx distance from Proposed Development	PWS Assessment	PWS Scoped In/Out of Further Assessment
U3	Unconfirmed	246898, 616473 (Property)	1.95 km	Property is not registered with council and whether PWS or mains has not been confirmed by residents. Nearby properties are supplied by mains or PWS03. Considered likely to be supplied by mains as within Scottish Water Resource Supply Zone. If supplied by PWS it would be hydrologically disconnected by Drumbowie Burn. The source would also be located outwith 250 m from the Site, and is therefore outwith SEPA's groundwater abstraction 10 m, 100 m and 250 m buffers.	Scoped out following desk-based assessment.
U4	Unconfirmed	246157, 607044 (Property)	3.9 km	Property is not registered with council and whether PWS or mains has not been confirmed by residents. Considered likely to be supplied by mains as within Scottish Water Resource Supply Zone. The property is also located outwith 2 km study area from the Site.	Scoped out following desk-based assessment.
M1	Mains	N/A	N/A	Property supplied by mains, therefore scoped out of further assessment.	Scoped out following desk-based assessment.
M2	Mains	N/A	N/A	Property supplied by mains, therefore scoped out of further assessment.	Scoped out following desk-based assessment.
M3	Mains	N/A	N/A	Property supplied by mains, therefore scoped out of further assessment.	Scoped out following site visit.
M4	Mains	N/A	N/A	Property supplied by mains, therefore scoped out of further assessment.	Scoped out following site visit.
M5	Mains	N/A	N/A	Property supplied by mains, therefore scoped out of further assessment.	Scoped out following desk-based assessment.

Table 3 PWS Photographs

Source Ref	Source Name	Photograph
PWS01	Rankinston	 
PWS02	Ravenscroft	 

Source Ref	Source Name	Photograph
PWS03A	Polquhairn	 
PWS03B	Polquhairn	 



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