ELECTRICITY ACT 1989

TOWN AND COUNTRY PLANNING (SCOTLAND) ACT 1997

Code of Practice for s. 36 Inquiries

LEGAL AND EVIDENTIAL SUBMISSION

for the

PROTECT OUR WATER GROUP (POW)

Third Party Objectors

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1 INTRODUCTION

This submission follows a pre examination meeting held at Fenwick on Friday 23 January 2015. It is made on behalf of the Water Working Group, a Third Party Objector Group composed of residents of the locality within which the Whitelee Third Extension is proposed. Their objection to the proposal centres on the likely significant effect on both public and private water supplies.

2 MOTION

- To find that the ES for the Whitelee Wind Farm Third Extension (WL3) does not contain sufficient Environmental Information (EI) on the Private and Public Water Supplies (Water Supplies) of the locality to clearly identify the significant impacts which, on the available evidence, will probably be caused by the proposed development at WL3;
- To require the Applicants to respond to this submission within 28 days or such other period as may be deemed reasonable; and
- To determine thereafter whether the Environmental Statement (ES) contains sufficient EI to allow the application to be considered at a Public Examination into the application.

3 APPLICABLE LAW

- The Electricity Works (Environmental Impact Assessment) (Scotland) Regulations 2000 apply.
- Regulation 3 provides that

The Scottish Ministers shall not grant a section 36 consent … which relates to EIA development unless the requirements of regulation 4 have been satisfied.

- Regulation 4 provides that

An applicant shall submit in relation to any application for a section 36 consent …which relates to EIA development an environmental statement which includes–

the information referred to in Part II of Schedule 4; … …

- Part II of Schedule 4 provides that an ES shall contain

1. *A description of the development comprising information on the site, design and size of the development.*
2. ***A description of the measures envisaged in order to avoid, reduce and, if possible, remedy significant adverse effects.***
3. ***The data required to identify and assess the main effects which the development is likely to have on the environment.***

… …

(emphasis added)

4 FACTUAL BASIS

The original Whitelee Development (WL) and Whitelee Extensions 1 and 2 (WL1 and WL2)

The original Whitelee windfarm development of 140 x 110m turbines, was constructed between October 2006 and May 2009, with 120,000 tons of concrete used for turbine foundations[1].

It produced significant hydrological and environmental impact on

- Surface water
- Ground water, and
- Public and Private water supplies

900 Hectares of forest were felled for WL commencing in 2005. 65 Hectares were felled in the water catchment for Amlaird Water Treatment Works WTW in 2005-6 (1). Discrete contamination events occurred as well as diffuse water pollution across and beyond the site despite “best practice mitigation” employed by SPR.

[1] http://www.eastrenfrewshire.gov.uk/whitelee-development

5 EVIDENCE

5.1 Discrete contamination events:

Jacobs Post Construction report 2009 (2):

> **8.2** Nevertheless, the post construction samples did show continuation of increasing trends of iron and total organic carbon at both WP01 and WP04 and a decreasing trend of pH values across all boreholes. An increasing trend for 3/4-methylphenol was also recorded at WP01. An increase in TPH concentrations was also observed, with higher levels of TPH being recorded at each borehole in this round compared to the previous round.

Figure 1- Jacobs Post Construction Report extract – Iron, Carbon & 3/4-methylphenol levels

In section 8.2, Figure 1, 3/4 dimethyl phenol was noted to be 30 times allowable environmental limits (borehole WP01). In addition, laboratory analysis identified other synthetic chemicals, such as toluene and significant quantities of Bis 2-ethyl hexyl Phthalate (DEHP); see p 40 SVOC test data sheets (2).

DEHP is designated a possible carcinogen by World Health Organisation (WHO) (2003), and Environmental Protection Agency (USA) - as a *probable* carcinogen. DEHP was identified in groundwater across the WL site from 2007. This is regarded as a toxic chemical with documented adverse impacts on human health:

The UK Government 01/07/14, as Public Health England Incident Management: (3) gives a classification that stipulates for the ***Environment***

- Avoid release into the environment.
- Inform Environment Agency of substantial incidents

Chemical Hazard Information and Packaging for Supply Classification[(a)]

Di(2-ethylhexyl)phthalate (DEHP)

Classification	**Repr. Cat 2**	Category 2 reproductive toxin	
Risk phrases	**R60**	May impair fertility	
	R61	May cause harm to the unborn child	
Safety phrases	**S53**	Avoid exposure - obtain special instructions before use.	
	S45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).	

Figure 2 - Public Health England Di(2-ethylhexyl)phthalate (DEHP)

Figure 3 shows an extract of the bore hole groundwater test samples from WL which show levels of DEHP in 2007 and 2008 up to 3200/ µg/L (3.2mg/l). WHO safe guideline limits for drinking water are 8 µg/L .The borehole WP01 is sited between Craigendunton and Lochgoin public reservoirs; test results for this particular bore hole are highlighted in yellow, showing levels up to 2400 µg/L. That is 300 times in excess of the safe guideline.

Exposure to DEHP in humans is particularly associated with male reproductive problems, particularly low sperm counts and in foetal exposure, undescended testicles.

05/12/2007	R	470 Bis (2-ethylhexyl)-Phthalate	590 Bis (2-ethylhexyl)-Phthalate	1000 Bis (2-ethylhexyl)-Phthalate	120 Bis (2-ethylhexyl)-Phthalate	440 Bis (2-ethylhexyl)-Phthalate	I	320 Bis (2-ethylhexyl)-Phthalate	N/V
08/01/2008	R	67 Bis (2-ethylhexyl)-Phthalate	83 Bis (2-ethylhexyl)-Phthalate	89 Bis (2-ethylhexyl)-Phthalate	2400 Bis (2-ethylhexyl)-Phthalate	200 Bis (2-ethylhexyl)-Phthalate	2300 Bis (2-ethylhexyl)-Phthalate	3200 Bis (2-ethylhexyl)-Phthalate	N/V

Figure 3 - Groundwater Test Samples

Evidence of Discrete Recorded Contamination Events: Obtained from SEPA: From FOI Contamination events logged at Whitelee Windfarm 2004-2014 (4) and (5) shown in Figure 4.

ENV/0839797	31/03/2010	Whitelees Wind Farm, Renfrewshire, Bridging Culvert (10)@ U/T of Greenfield Burn	Complaint re - oil drums deposited on land adjacent to whitelee farm and close to watercourse	31/3/10 John Casells of ERC called in to advise that 4 oil drums have been deposited on land next to Whitlee wind farm. Scottish Power had contacted them to advise of this as they say it was outwith their land. The council don't own the land either, JC has begun a land search to find out who owns it. 1/4/04 10:30 SJP attended site and took photos. 2 drums full of oil or other substances and 2 empty. Need to trace land owner and have it moved. - Not keen on leaving drums in position any longer as one starting to leak. They were deposited before 7 thursday morning. Scottish Water confirmed as owner of that area. Scottish power agreed to lift drums on their beahlf as they lease a lot of land from SW. Martin letham - joe mitchell contacts at whitelee control centre. Should be getting lifted this afternoon, will call back with further details. 2 /4/04 Drums removed by Scottish Power, follow up check undertaken, NFA

Figure 4 - Whitelee Contamination Event Log

5.2 Diffuse Pollution Events:

5.2.1 Groundwater

See Jacobs report (2): 8.2 and supporting graphs in the appendix of fluctuating, but increasing total petrohydrocarbons (TPH) iron and decreasing pH across the site in groundwater testing to 2009, shown in Figure 1 on page 6

5.2.2 Surface water

Evidence of increased carbon and phosphates over 5 years (2006-2011) within surface waters arising from Whitelee windfarm site were considered to be related to construction activity, concluded in a PhD thesis entitled *Assessing the impact of windfarm-related disturbance on streamwater carbon, phosphorus and nitrogen dynamics: A case study of the Whitelee catchments* (6) and poster presentation.

Surface water contamination has a more immediate influence on ecology, particularly on rivers and static water such as reservoirs. Comparison of Dr Murray's findings in her PhD thesis is affirmed by similar base line values from Scottish Water (SW) of 2001 phosphate levels from Craigendunton raw water (7) .Comparin baseline Amlaird raw water carbon and phosphates (2001) with Dr Murray's Ph.D. research shows a seven fold increase in soluble phosphate levels in surface water during WL construction, particularly in the water catchment area (14) serving the two public reservoirs. This is of significance because high phosphates contribute to eutrophication (high nutrient content) of surface water with subsequent algal bloom and loss of aquatic life.

Dr Murray's work also describes increase in carbon content of 'off site' surface water run off related to WL WF construction. This is of particular importance in the impact on public water (see below in section 0.)

5.3 Mitigation

WL ES describes the best practice mitigation to be employed and the influence on the designated high sensitivity of the Whitelee site to pollution events:

WL ES 18.5.10*.* *Describes mitigation measures to reduce pollution and following implementation of such measures*

***WL ES* 18.5.3.13**: *Given the mitigation measures detailed above the risk of a surface water or groundwater pollution incident occurring will be very low. Given the sensitivity of the site and the potential magnitude of any incident during construction, it is considered that*

the effects are of medium significance with, subject to the adoption of appropriate mitigation, a low probability of occurrence.

***WL ES 18.11.*1** Tables the risk related to forestry activity following appropriate mitigation with most risk reduced to minor or insignificant.

5.4 Principles of mitigation

The mitigation undertaken within the development of the proposals for this windfarm is the result both of Scottish Power's statutory commitment under the Electricity Act 1989, s.38 and also as part of its continuing policy to **adopt best practice** in all its undertakings in relation to the environment.

[Note - section 38 adopts Schedule 9, which deals with Preservation of Amenity and Fisheries, throughout the entire Act]

See also WL ES Chapter 19. Final Table 73 of overall pollution risk designated as 'medium'

6 ADDITIONAL EVIDENCE

WL, WL1 and WL2

6.1 WL Mitigation Measures Ineffective preventing diffuse pollution

Evidence to show that mitigation measures employed in WL, and in WL1 and WL2 were not effective in preventing diffuse pollution affecting public reservoir quality, which then resulted in serious adverse change affecting potable water quality over the three years of WL Extensions' deforestation and construction 2010-2013.

A complete data set of public water quality results spanning the WL original WF development (2006-2010) has been requested, but is not yet available to the author.

For WL1 and 2, turbines extended close to Craigendunton Reservoir.
For WL original, turbines were sited close to Lochgoin. Likely changes in raw water quality for the Amlaird Water Treatment Works (WTW) for WL original, were probably mitigated by the unique arrangement of a 'feeder surface stream/conduit' from Lochgoin to a small water catchment feeding secondarily into Craigendunton. This effectively allows both Lochgoin and the feeder collection water to act as sediment traps for surrounding soil disturbance. This effect was lost with soil disturbance affecting direct feed in steams to Craigendunton, hence the change in Amlaird raw water quality was likely to be more pronounced with WL Extension construction in 2010-2012 than for original WL 2006-2009.

Increase in water colour correlates strongly with increased carbon and organic matter such as peat. Soil disturbance in the presence of peat/organic matter allows better mobilisation of iron and manganese from disturbed subsoil. This site has a high proportion of peat, up to 8m depth in places.

High levels of raw water organic matter challenge water treatment works to effectively remove associated increased levels of bacteria and produce wholesome water that meets regulatory standards. Increased raw water iron and manganese also produce difficulties in removing bacterial contamination and together with high organic content, increase the demands on the amount of chlorine required for disinfection. This is important because of

the subsequent increase in the amount of potentially toxic disinfection by-products which will reach the public water supply.

Graphs illustrate the normal seasonal variation of Amlaird WTW raw water iron, Figure 5, manganese and colour, Figure 6, from 2003 but excessive mineral peaks, with 75% higher iron levels, coinciding with peak construction of WL Extension in 2010/11, and additional spikes occurring outwith normal expected seasonal variation are evident:

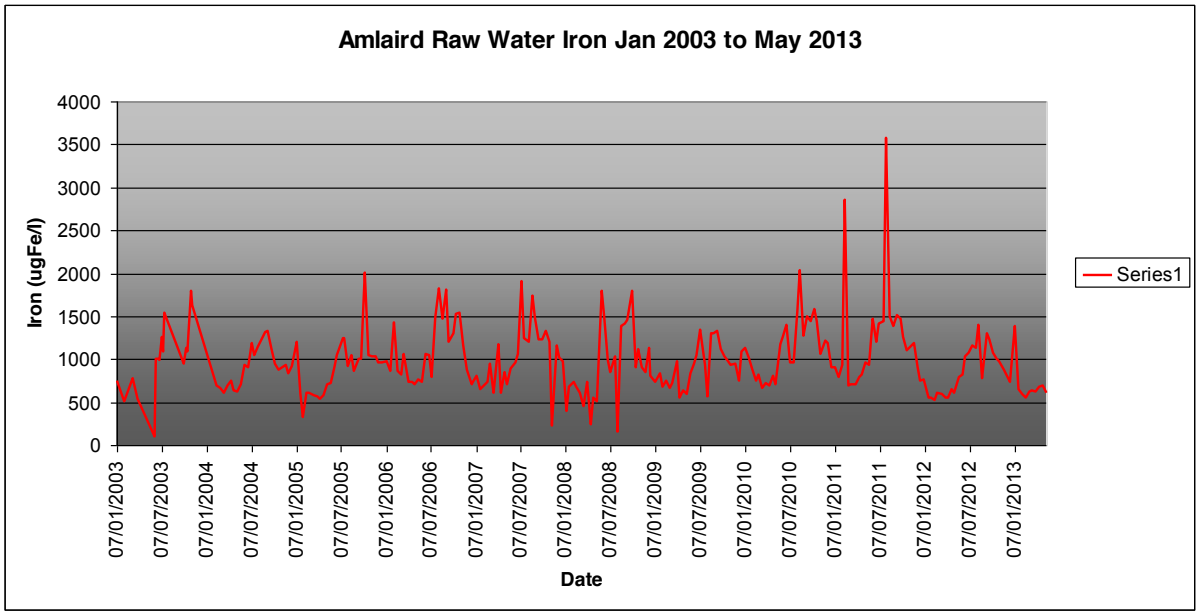


Figure 5 - Amlaird WTW Raw Water Iron

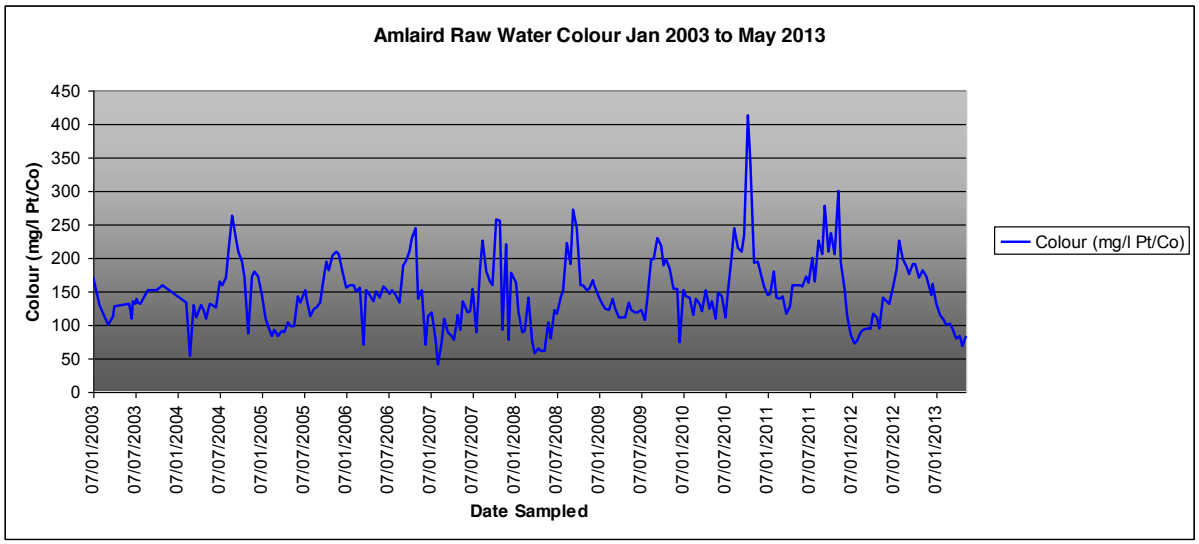


Figure 6 - Amlaird WTW Raw Water Colour

Amlaird Raw water quality graphs 2010- 2013 + (Baseline 2001-2006) - iron, manganese, colour (carbon) (8), bacteria (9).

The fact that the recognised deterioration in raw water quality coming into Amlaird WTW during 2010-2012 was causing sustained failure of public water to meet regulatory standards for wholesome water was also of concern to regulatory authorities:

EIR response from Consultant in Public Health Medicine (CPHM) p2 para 3
30/11/2010: Ayrshire & Arran Water Liaison Group meeting, chaired by CPHM: (10)

- *There has been a series of iron exceedances. These events stem from difficulties with raw water quality, chiefly high colour. The WTW was initially designed for .....*
- *08/02/11 However, while health risks have not been considered significant, suboptimal treatment and filtration difficulties have represented potential health risks. Sample results indicate that the water supplied to a population of some 34,000 has failed to meet required quality parameters for significant periods. Additional monitoring, management and communications needs have placed some demand on partner agencies as well as on Scottish Water staff.*
- *24/02/2011: DWQR response to CPHM regarding comments to the Scottish Water Amlaird WTW Water Quality Incident Report (August 2010 to January 2011 / Event Numbers indicate that the wa*
- *DWQR said that their interpretation is that the treatment process is no longer able to robustly deal with a change in raw water quality.*
- *10/08/2011: Ayrshire & Arran Water Liaison Group meeting, chaired by North Ayrshire Council manager:*
- *Environmental Health officer from East Ayrshire Council reported on discolouration and taste problems with the water from Amlaird Service Reservoir and asked for a timescale for the improvement at the treatment works.*

- *Scottish Water reported that the works are almost complete; the problem is in the incoming raw water. They reported that the plant is incapable of coping with the colour of the incoming water*

Elevated carbon and organic matter in raw water, required input of chlorine from the Amlaird WTW which at times, was double the allowable regulatory standard. Chlorine reacts with organic matter to produce water disinfection by products (DBPs), in particular compounds called trihalomethanes (THM).

The largest component of THMs is chloroform, but the multiple compounds comprising collectively THMs are measured in combination for EU, UK and Scottish Regulatory Standards set at 100µg/l. THMs are regarded by WHO as possible carcinogens with health guideline values set at 200 µg/l and by the USA's Environmental Protection Agency (EPA) at 80 µg/l (referred to in UK regulatory documents).

The carcinogenic, reproductive effects and toxicology of THMs with specific reference to public water sources and supplies in Scotland, is presented in research commissioned in 2008/9 by the Scottish Government (DWQR) by Prof. S. Parsons, who is now a senior executive within Scottish Water/ (11).

Graphs demonstrate the failure of potable public water to meet regulatory standards of iron and manganese: Treated water Amlaird WTW 2010 -2013 to show elevated iron, manganese (12) and the relationship of increased chlorine and THMs in the public water supply from Amlaird WTW 2010-2013 (13). Iron levels in treated public water reached almost six times regulatory standards in November 2010.

THMs increase in concentration with increase in distance from the treatment works to the consumer, due to the increased time for chlorine to react with residual organic matter within the water distribution network. Thus consumer levels of THMs (eg at Galston, some 5 miles from Amlaird WTW) would be expected to be higher than levels at the treatment works.

No base line comparison THM levels are available to these objectors for the period after a major 2005 Amlaird WTW refurbishment. Prior to 2005, public water THM levels were frequently non-compliant, up to 200ug/l in 2001/02, for example, as a result of raw water naturally high in dissolved organic carbon due to the peat based surface reservoirs

Note, however, comment from SW of 10/08/11 on p5 (10) that even with the new filtration and treatment methods, that Amlaird plant is unable to cope with the deterioration of raw water. This was at a period of peak construction activity for WL Extension.

Treated water THM levels at consumer taps at Galston (13) show in SW resample test values, an average of 28% higher than allowable EU and UK regulatory limits over three years, with peak values almost 70% higher than regulatory limits. Levels affecting consumers in North Kilmarnock may well have been higher, due to the increased distance from the WTW.

6.2 Serious Adverse change in Water Quality for PWS

Evidence to show serious adverse change in water quality for PWS and that other 'at risk' supplies were not monitored at all.

AAEnviron, WL PWS ERA Appendix A. (14):

Cauldstanes initial risk assessment was **HIGH** (highest score of 9, based on proximity to site felling, roads, and construction compound in catchment area).

The water supply to Cauldstanes was stated in 2006 by SPR (AAEnviron, WL PWS ERA) to be the same as for Veyatie and Kingswell. Therefore, it would be logical to assume the same risk status for Veyatie and Kingswell, yet their scores were both 2. For the risk assessment, AAEnviron say that they made a site visit to the assumed source northwest of B764. That assumed water source was never mapped.

SPR had commissioned an ERA by RPS Consultants in 2003 and this was used as a basis for, and is referred to in, the AAEnviron ERA of 2006. In the RPS ERA all three properties were rated as 'high risk'. Despite the absence of a mapped source or supply survey, the "high risk"

assessment for all the three properties was downgraded in the AAEnviron ERA to "low risk" and no further monitoring is known to have been undertaken during construction of WL, or WL1 and WL2. That change is unexplained. No supporting evidence base is documented to explain the downgrading of risk status.

In the table in Appendix A, Kingswell and Cauldstanes are shown as "spring supplies" yet Veyatie's in shown as "unknown".

In 2007, during WL peak construction earth works, water to Cauldstanes,Veyatie and Kingswell properties simultaneously ceased completely, requiring new bore holes (at owner's expense) to be installed at Cauldstanes and Veyatie.

Water supply spontaneously recommenced after 12 weeks at Kingswell, but water quality remained severely impaired, with Local Authority conducting test samples showing in 2013, iron content of 1600µg/l (normal value up to 200 µg/l) compared to normal mineral content of numerous historic pre Whitelee WF test samples:

Historic and Current EAC water test values for Kingswell 1984-2014: These demonstrate complete absence of testing during the WL construction period 2006-2012, but also the normal mineral levels prior to 2004 and the gross elevation of iron and manganese post WL construction, shown in Table 1. All test samples are from the kitchen tap and they are therefore not valid test of the source.

Table 1- Kingswell Water Sample Test Results

Date	Sample status
06.02.1984	Chemistry - pass, Bacteriology - fail
14.07.87	Chemistry –pass Bacteriology - fail
Ultraviolet and filtration system installed	
22.09.1992	Chemistry - pass, apart from colour 2.3 (upper limit 2.0) Bacteriology - pass
09.04.1997	Chemistry - pass, Bacteriology - pass
01.03.2000	Chemistry - pass, Bacteriology - pass
11.03.2004	Chemistry - pass (iron 169µg/L, normal upper limit 200µg/L) Manganese 40ug/l Bacteriology - pass
03.12.2013	Chemistry - **iron 1630 µg/L (normal 200µg/L , manganese 160µg/L (normal 50µg/L)**, Bacteriology - pass
13.11.2014	Chemistry - **iron 880 µg/L** Manganese 215 µg/L
13.11.2014	Bacteria - 0 total count, but 410/ml at 22C culture.

No pre-construction water samples were taken by SPR at either Veyatie or Kingswell ,as despite being considered as being on the same supply as Cauldstanes, these properties (and ultimately Cauldstanes as well) were designated as being at 'low risk', and therefore not requiring base line monitoring.

WL ES 18.5.3.8 *It is recommended that as part of the windfarm design process pollution risk assessment studies are carried out for private ground water supplies in close proximity (within 1 km) to the windfarm and both private surface water supplies. The hydrological/hydrogeological nature of* ***each*** *water supply that may be affected by the windfarm should be investigated in more detail, exposed in detail in an EIA, and in due course any necessary pollution prevention measures or plans should be implemented.*

WL ES 18.9.5.1 Water quality problems may occur following deforestation. Colour, Iron and Manganese may be released as soils are disturbed during harvesting and these can cause problems for water supplies.

The effect of the proposed forestry works on each private water supply for which a pollution risk assessment is recommended in Part A should be assessed in more detail and contingency plans made as part of the design process. In addition, the water supplies for properties 33, 34, 38, 39, 46, 50-53 and 55 are within 1 km of the short rotation areas and the Forests and Water Guidelines should be strictly observed in the vicinity.

Kingswell is noted as property 33. As clearly stated, its water supply is within 1 km of WL, and even closer to the promoted WL3 yet no monitoring of water quantity or quality occurred during WL construction.

At risk supplies – with no monitoring:

For WL original WF, (from OS Maps) accurate distances to the affected properties, are as follows

- Cauldstanes 375m
- Kingswell 933m and
- Veyatie 745m.

The site boundary for WL3 will be even closer to these properties, with forest felling, construction roads and site compounds within the designated water catchment area, placing all three properties at high risk for water contamination.

Drumtee – Deemed high risk at initial and final risk assessment (AAEnviron, 2006 WL PWS ERA Appendix A), Despite this, Drumtee is located even further from the development boundary than Cauldstanes, which had no water quality or quantity monitoring during previous WL construction.

For WL and WL Extension 1 and 2

Airtnoch tank supplying water to 10 households was monitored, as this was deemed to be 'at risk' as this was incorrectly categorized as a surface water supply. (18.4.5.3 *Of the 63 private water supplies identified by the Local Authorities only 2 have been identified as having surface water sources: Airtnoch Farm (46) and Craigends Farm (47).* Water supplying Airtnoch holding tank arises from an unmapped spring source.

Airtnoch PWS experienced a marked increase in bacterial content 2006 -2013 (15) and a spike in sedimentation in 2011, which would correlate with the nearby construction of WL1 and 2 turbines, with the nearest 140m turbine sited approximately 300m from the water holding tank.

Although there was some historic evidence of intermittent bacterial contamination from consumers' taps on this supply, examination of water samples collected on the same day by AAEnviron as part of the 2006 WL original PWS ERA Stage 2, (14), indicates that the varied contamination levels at 'consumer level' were possibly coming from household contamination, rather than from the common source/holding tank contamination, as bacterial contamination for individual properties on this supply on the same day, extend over the range from 0,to 6 total coliforms/l.

This is important, given the peak of bacterial contamination of 170,000 coliforms in 2010. Testing of spring water coming into the collection tank by EAC in 2013 ,demonstrated bacterial contamination of the unknown source water -140 coliforms/100ml.

03.12.13: Colour 19mg/l (20mg/l is the prescribed maximum) ; Turbidity 14.6NTU Turbidity level is above the prescribed maximum value of 4NTU

13.11.14 Turbidity 9.1NTU. Turbidity level is above the prescribed maximum value of 4NTU; Colour 3mg/l. Due to the nature of the sample the water was filtered prior to determination of the colour.

is equivalent to measurements expressed in Hazen units (°H). The removal of colour from water is necessary not only for aesthetic reasons but also because chlorination of highly coloured waters can give rise to high concentrations of trihalomethanes (see Section 2.4.6). High colour also reduces the efficiency of disinfection by UV irradiation, chlorination and ozonation. Colour will also cause fouling of reverse osmosis membranes.

High turbidity can impair the efficiency of disinfection.

6.3 PWS ERA for WL Inadequate

Evidence that the PWS ERA for WL was inadequate, based on unvalidated assumptions, and therefore a valid risk assessment was not possible;

AAEnviron, WL PWS ERA 1.2 para 4 (14)

- details of visits made to identified properties to establish supply source details and validate risk rating, photographs of supply sources and confirmation of treatment details, if present;

Figure 7 - Section 1.2, Paragraph 4 of WL WS ERA

Stage 2 of the AAEnviron risk assessment required site visits to identify the water source, as described in the objectives of the AAEnviron PWS risk assessment report for WL. (AAEnviron, WL PWS ERA 1.2)

As a result of the visits, a number of PWS previously identified as high risk were downgraded to low risk, although the water sources were not identified and holding tanks were used as a proxy for the source of water.

In the case of Kingswell, the Group believes that it was assumed by AAEnviron in the 2006 PWS ERA, that the holding tank located on the North of the B764 is the source of the water also supplied to Cauldstanes and Veyatie. Within the risk assessment , it is said that this holding tank/assumed source was visited by AAEnviron, yet its position was only mapped to a 6 figure National Grid Reference, or 100 m square, rather than a point source. Nevertheless the risk to all three properties was downgraded to **low**, such that no monitoring of water quantity or quality occurred during WL construction.

In general, the flawed assumption that a holding tank equates to a water source, has led to inadequate risk assessments for numerous private water supplies across the WL WF site.

WL PWS ERA. 2.2.2 page 17 (14)

> Where the water supply source was not known, the location of the property was used as the proxy location for the water supply source.

Figure 8 - Section 2.2.2 of WL WS ERA

This inadequate assumption has affected at the least the following properties across the WL WF site:

- Cauldstanes
- Kingswell
- Veyatie (known elsewhere as Kingswell Bridge or Best Friends Kennels)
- Airtnoch
- Beechknowe
- Hareshawmuir
- Hareshawmuir Cottage
- Hareshawmuir Bungalow
- Hareshawmuir lodge
- East Collarie
- West Collarie
- Meadowhead
- Low Overmuir

Thus, eighteen properties previously rated as HIGH Risk have been downgraded to LOW risk by AAEnviron

Two properties previously assessed to be HIGH Risk by RPS were downgraded to MEDIUM risk by AAEnviron

One other property has been graded LOW Risk by Environ in their ERA – It is not known what how RPS had previously graded it.

6.4 SPR Failure to make known Jacobs Post Construction Report of 2009

Evidence to show that SPR failed to bring the content of their monitoring programme and Jacobs Post Construction Report of 2009 (demonstrating groundwater contamination) to the attention of the consenting authorities (Scottish Government) prior to awarding consent and constructing pertinent and relevant (i.e. relevant to the known circumstances) planning conditions for WL1 and WL2.

WL 1 and 2 Extension ES 9.8.5

137. The monitoring of groundwater quality currently undertaken within the consented site has confirmed no significant effects during construction illustrating that the mitigation measures in place are providing adequate protection to groundwater. It can therefore be inferred these measures are likely to be equally effective during construction of the proposed Development.

Figure 9 - Section 9.8.5 of WL 1 & 2 Extension Environmental Statement

The 2009 Jacobs Post Construction Report was published on 3 November 2009 and WL Extension 1 and 2 gained S. 36 consent from Scottish Ministers on 12 December 2009.

There are clear recommendations made within the conclusions of this report, which to our knowledge, were not implemented :

8.5 It is understood that a second phase of the Whitelee Windfarm is planned for construction and groundwater monitoring will again be undertaken to establish baseline conditions and monitor any construction impacts. ***It is recommended*** *that during any such Phase 2 groundwater monitoring, bi-annual monitoring of the boreholes within the Phase 1 area is also undertaken and the data reassessed on a yearly basis. During this monitoring it is recommended that phenols at WP01 are specifically targeted and subjected to further assessment and review*. (2) (emphasis added)

Results of groundwater monitoring either post 2009 at the original WL site, or at the WL Extension site are not yet known to these objectors although they have been requested.

6.5 SPR Failed to consider Jacobs Post Construction Report for WL1, 2 or 3

Evidence to show that SPR failed to consider the implications of this report for the ES of WL1 and WL2, or for WL3 and failed to bring this report to attention of its own hydrological consultant (AAEnviron) tasked with investigating the cause of severe deterioration of water quality at Kingswell related to the construction of WL and its Extensions. (See water quality test results for Kingswell above 6.2)

A Letter from SPR with report of AAEnviron's desk top investigation into complaints of adverse water quality at Kingswell, 2014 (16) is presented.

The methodology from AAEnviron's report fails to list within the considered documents the WL Jacobs Post Construction Report of 2009 (2). There is only mention and consideration of a 2006 interim Groundwater Monitoring Report – which was virtually a baseline report, as construction earthworks for WL only started in 2006. There is therefore no mention of the acknowledged change in ground water quality and the pollution event which was recorded within the 2009 Jacob's report. Figure 10 shows the documents reviewed by Environs in the response to water quality complaints made by the owner of Kingswell in 2014:

2.1 Document Review

The following documents or document extracts were provided by SPR for the review:

1. Chapters 18 to 20 inclusive, Appendix 7 and Figure 79 of the Whitelee Windfarm Environmental Statement (2002);
2. Environmental Risk Assessment, Private Water Supplies, Whitelee Windfarm (2006);
3. Chapter 9 and Appendix 9.2 of the Whitelee Phase 1 Extension Environmental Statement (2008);
4. Chapter 9 and Appendix 9.2 of the Whitelee Phase 2 Extension Environmental Statement (2009);
5. Whitelee Windfarm Extension Phases 1 and 2, Private Water Supplies Risk Assessment (2010);
6. Chapter 9 and Appendix 9.2 of the East Kingswell Environmental Statement (2010);
7. Chapter 9, Appendix 9.2 and Chapter 10 of the Whitelee Phase 3 Extension Environmental Statement (2012);
8. Private Water Supply Sample Results for Cauldstanes Farm and Moor Farm (provided via East Ayrshire Council to SPR);
9. Whitelee Windfarm water monitoring programme; summary surface water analytical results; and
10. Whitelee Windfarm Groundwater Quality Monitoring, Interim Report (2006).

Figure 10 - SPR provided document for Jacob's Post Construction Report

It would seem to follow, therefore, that AAEnviron Ltd would have been unable to construct an informed, evidence based rebuttal that SPR had not contributed to water contamination on this site.

6.6 SPR Failed to inform Statutory Authorities

Evidence to show that SPR failed in its obligations to inform statutory authorities, Scottish Water and SEPA of either discrete or diffuse contamination events on the whole Whitelee windfarm site, but also to inform the 'competent authorities' of failures identified in water quality for PWS or of any known contamination on the WL site.

EIR Scottish Water (17), confirms that SW had no knowledge of any contamination events on Whitelee site, but also confirms that arrangements were in place such that SPR were obliged to notify SW of any such events.

EIR to SEPA (4) requested logs of all contamination events at Whitelee windfarm site 2004 - 2014. This failed to record the results of the Jacobs Post Construction Survey 2009.

Letter from Mr M. Mathers, SPR On Shore Renewables Manager to Dr R.Connor (18):
Planning Conditions
First, I should clarify the planning condition that we were asked to comply with.
We were required to collect and analyse water samples monthly from prior to construction through project completion and into the operational phase of the windfarm.
We were also required to provide the data from this analysis to the relevant Local Authority, which we complied with.
It would be the job of the Authority to monitor these data and alert us to any issues so that we could take timely and effective remedial measures should there be a problem. At no point did the Authority alert us to any issues.

Journalist Marcello Mega enquiry to EAC: EAC response (19): *Scottish Power have today confirmed in writing that they did not advise us of any sampling or testing data in relation to private water supplies in connection with Whitelee wind farm extension Phase 1 or Phase 2.*

Journalist M.Mega (20); reply from SPR in regard to Planning Conditions attached to WL Extn 1 and 2 in relation to PWS:

Objectives of which were to:

- *the update of a database of private water supplies in the area including ownership/contact details, description/national grid reference of private water supplies and other relevant baseline information;*
- *construction of a risk assessment table;*

- *visit and survey specific properties to establish supply source details and validate risk rating,obtain photographs of supply sources and confirmation of treatment details and alternative supplies, if present;*
- *mapping of private water supplies identified, categorized into type of supply; and*
- *identification of potential mitigation measures to protect private water supplies considered to be at significant risk from the development.*

We executed in line with the plan provided and throughout project construction had no reported incidence of contamination." (emphasis added)

It is evident from Airtnoch PWS Bacteria and Turbidity results (15) that SPR were aware of gross bacterial contamination of this PWS over seven years, affecting 10 households from 2006, with contamination most marked during WL1 and 2 construction and yet **no** competent authority was informed at any time.

6.7 Failure Caused Actual Harm

Evidence to show that these failures have caused actual harm to individuals and to potable public water supplies. (12) (13) potable water supplies. **In addition, complaints from the public about poor public water were acknowledged by the Consultant in Public Health Medicine (CPHM) for Ayrshire and Arran in an EIR response**.

EIR information from CPHM P4 (10):

Communications: The incident report contains a press report issued on 12/12/2010, entitled "Discoloured water in parts of Kilmarnock". It would have been helpful had NHS Ayrshire & Arran Health Protection Team, and NHS Communications Department, been advised, particularly as the contents made reference to liaison with Public Health and included a statement on public health risks.

During August 2010, there were process issues mainly due to these changes in raw water quality which resulted in increased turbidity throughout the works.

During October 2010, increasingly poor water quality resulted in the option of reducing throughput from the works at times which resulted in lower levels in the clear water tanks (CWT). To augment the reduced flows through the works a contingency plan was put in

place to use alternative supplies from Corsehouse WTW and Bradan WTW to supply 1400 customers which proved successful in reducing demand on Amlaird WTW.

Numerous process adjustments, manning hours, manual filter washing, and process tank cleanings were undertaken by operations and process staff to alleviate the situation, however, while being successful in reducing the effect on both iron and THM levels, the water quality at the works breached the PCV for both parameters for long periods.

6.8 Medical Records support Evidence of Direct Harm

Evidence of direct harm is in medical records – but more easily demonstrated is a mobile phone message from Dr R Connor cancelling a meeting with the Standing Scottish Committee for the Royal College of Radiologists. (SSC for RCR)

Phone text to Dr P. Niblock , Chair SSC for RCR from Dr R.Connor, West of Scotland Regional Representative: 26th January 2012 *'Hi paddy, out of the blue, very unwell last night with D and V. Really sorry, but still in bed and won't be able to make it to today's meeting. Shame, as it would have been my last!'* (21)

Further enquiry at Dr Connor's workplace two days later (Victoria Infirmary Glasgow), revealed no known hospital cases at that time of norovirus (winter vomiting bug). This was just one of repeated GI upsets over approximately 5-6 years affecting several Hareshawmuir residents on the Airtnoch tank supply, or their guests.

6.9 SPR Failed to adequately assess risk PWS from Original WL development

Evidence to show that SPR failed to adequately risk assess PWS at risk from WL original development, to the detriment of those supplies, including the need to install alternative bore hole abstraction when source 'dried up' during the course of WL original construction.

WL PWS ERA original (14).
Page 11. 'The majority of properties were identified by National grid reference s(NGRs) but most of their associated water sources did not have any NGR listed. Consequently, the location of the property was taken as a proxy for the location of the water source. This was

considered to be an acceptable approximation ***until source NGRs could be verified****.'* (emphasis added)

The NGRs for water sources were never identified for Cauldstanes, Kingswell or Veyatie.

Page 16 'The assumption was made that the mitigation measures proposed for each activity would be applied and that no major pollution incidents would occur'.

There is no evidence base presented to show how mitigation would work, or how effective these measures would be in practice on this site.

WL PWS ERA (14).
4.1 SITE VISITS AND UPDATE OF ERA.
Following the "site visit" undertaken as part of stage 2 of the project, the ERA spreadsheet was updated and amended to reflect the findings and validations arising from the visits
Appendix A to AAEnviron Report of 2006: notes high risk in Catchment A (Cauldstanes - Score 9, Kingswell -2, Veyatie -2) due to the main site compound in the water catchment, as well as roads and forestry felling, Cauldstanes was originally identified as **high risk**, with consolidated hazard score of 9.

Cauldstanes **No photographs of 'source' taken**, yet final rating is shown as **low.**

Veyatie originally high risk (RPS ERA 2003), but unknown, unidentified source or supply type; at various times it is claimed Veyatie is on the same supply as Kingswell and Cauldstanes; however in AAEnviron 2006 ERA it lists the source for Veyatie as being both on the same source as Kingswell AND unidentified) **AAEnviron claim they visited the 'source'-** see below. **No visit or photographs of 'source' were taken**, and yet final risk rating was assigned as **low,** with no further quantitative or qualitative assessment.

From the AAEnviron 2006 report

Catchment A – Drumtee Water, Kingswell Burn & Greenfield Burn

The actual source of the supply to **Cauldstanes Farm** was not indicated in the RPS report. Drumtee Water passes close to the property and an area of felling and road construction is proposed close to the upstream watercourse. The catchment includes the main site compound. Accordingly, this property was assigned a High initial rating. A site visit by ENVIRON established that the source is on the north western side of B764 in an area which has no direct pathway from windfarm activities. **Kingswell Farm** and **Veyatie Cottage** are served by the same supply. All three properties were subsequently rated as Low risk. Final risk rating: LOW.

Figure 11 - Section on Catchment A, AAEnviron PWS ERA

Kingswell ; high risk (RPS ERA 2003) (Ref Appendix A), the source was not identified; the **supply tank not visited**, but it was assumed, with no evidence base, to be the source also supplying Veyatie and Cauldstanes.

Despite the fact that the Kingswell 'source'was assumed to be supplying three properties (although wide variation of historic water test quality results from EAC would suggest differently), this holding tank was not photographed and the 'source' was not therefore confirmed by AAEnviron. A holding tank is not a source. Nevertheless, without further evidence, these three properties were re-assigned from high to low risk and consequently no water monitoring or specific mitigation occurred at these three properties during WL construction.

The confusion abounds. In this table in the WL3 ES (Figure 12), this table seems to conflate Kingswell, Kingswell Bridge and Cauldstanes, suggesting that they are on the same supply

EK2	Kingswell	Spring	2008 ERA OS Map (Explorer 334)	The previous ERA indicates that Kingswell is supplied by the same source as Cauldstanes ((ref. number: source A1) which is a spring situated in the forest on the north side of the B764. Information from the previous ERA indicates that this supply originally served all of the properties in the Kingswell Burn area. No evidence of any spring or well evident on the OS map.	J
EK3	Cauldstanes, Kingswell and Kingswell Bridge	Spring	2008 ERA OS Map (Explorer 334)	The previous ERA identified this PWS as a source (ref. number: source A1) of the water supply to a number of nearby properties (Cauldstanes, Kingswell and Kingswell Bridge. During the consultation it was indicated that this spring is the source of the properties identified. In addition it was noted that this spring originally served all of the properties in the Kingswell burn area. The supply pipe for Cauldstanes connects to the main pipe at NS 49853 46900. No evidence of any spring or well evident on the OS map.	J

Figure 12 - WL 3 ES: Extract from Table showing PWS

yet, Figure 13 shows it further it states

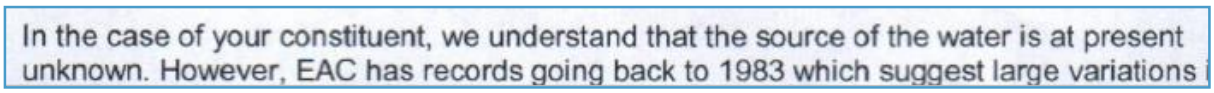
EK10	Kingswell Bridge	Borehole	Consultation (ScottishPower Renewables)	During consultation the landowner at Kingswell Bridge noted that the property has a borehole water supply within their land boundary.

Figure 13 - WL 3 ES: Extract from Table showing PWS: duplicate entry for Kingswell Bridge

Why is Kingswell Bridge (an assumed synonym for Veyatie) listed twice"?

These objectors conclude that the AAEnviron Report has not correctly identified locations of the actual sources of PWS for these three residences, and that the examination of the assumed sources has either been map based or so cursory as to be meaningless. . If there was a site visit, it did not produce NG coordinates or distinguish between a water collection tank and a water source and it did not clearly identify which properties were reliant on that holding tank. It is clear that accurate data is absent; it is clear that there are no referenced standard criteria which would sanction the assumptions made with regard to using a property location as a proxy for a water source. The inaccuracies of this WL original PWS risk assessment were then perpetuated into the Environmental Statements for WL Extensions and for WL Extension 3.

Fergus Ewing, Minister for Energy stated in his letter to Cathy Jamieson MP of 5th Nov 2014 who had written to him after a request by the owner of Kingswell, Figure 14.



In the case of your constituent, we understand that the source of the water is at present unknown. However, EAC has records going back to 1983 which suggest large variations i

Figure 14 - Extract from Fergus Ewing letter of 5th Nov, 2014

The Whitelee Windfarm Extension dated 09/10/09 ERA under "Consolations and Issues Raised' says, Figure 15

4.2 East Ayrshire Environmental Health Division states that the scope of the Environmental Assessment appears to be satisfactory, with the proviso that the applicant will require to identify and where necessary protect any private water supplies within the development site.

The Planning Authority can indicate to the Scottish Ministers that conditions should be attached to any consent granted for the development to address the point made by the Environmental Health Division.

Figure 15 – Whitelee Windfarm Extension ERA 09/10/09

6.10 Evidence of Harm resulting from failure of water quantity

In 2007 (Forestry felling for WL commenced in 2005 and construction commenced in 2006), Kingswell, Veyatie and Cauldstanes ALL lost their supply simultaneously. After 12 weeks, Cauldstane and Veyatie installed new borehole and filtration systems. The evening before Kingswell was due to have a borehole drilled, the supply of water resumed.

6.11 Evidence of Failure of specific Mitigation

Ardochrig Mor had installed a new borehole @ 8 years prior to WL original construction. It was deemed a high risk before and after AAEnviron 2006 PWS ERA. In 2007, the same year that water supplies failed to Cauldstanes, Veyatie and Kingswell, Ardochrig Mor experienced severe 'silting up' of their water supply. Specific mitigation measures are described for this supply in Section 5 of the ERA: Figure 16

Ardochrig (serving Ardochrig Farm and Ardochrig Mor)

The supply source serving these two properties attracted a High risk rating in view of being located immediately downhill of a proposed sub-station and access road. However, the substation is located on a watershed and it would be possible to eliminate the risk to the Ardochrig supply by ensuring that the storage and handling of potentially polluting materials and the discharge of septic tank effluent occurs outwith the supply source catchment. Discharging outwith the supply source catchment would

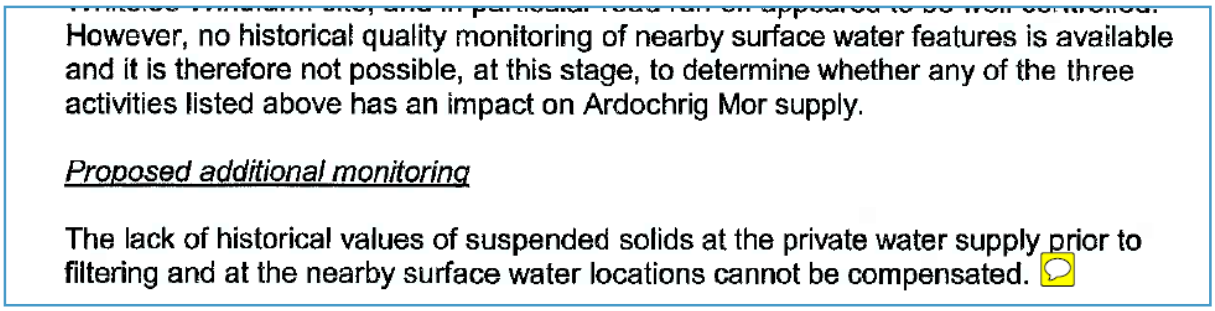
Figure 16 - AAEnviron PWS ERA: Section 5 Extract

Despite outlined specific mitigation measures which were to 'eliminate' the risk, these failed to protect the borehole supply which silted up. Jacobs UK Ltd was commissioned to investigate in early 2008, after complaints from the owner; (22).

Jacobs concluded – despite water sampling taken **post carbon filters**, '*that there was no evidence of chemical or bacteriological contamination'.*
(Note that this property had UV treatment, as well as other filters. Water sampling was taken from the kitchen tap post UV filter- therefore bacteria would have been destroyed as a result of treatment.)

Increased sediment, which is known to correlate with construction activity, would be reduced by the domestic filters and the main stated complaint from the property owner was indeed of the need for frequent filter change.

There is particular comment by Jacobs Ltd in this 2008 report, of the on-site deficiencies by SPR in surface water monitoring – as well as of the lack of sampling of PWS taken from supply water prior to improvement by filters. P.4, para 1-3:


However, no historical quality monitoring of nearby surface water features is available and it is therefore not possible, at this stage, to determine whether any of the three activities listed above has an impact on Ardochrig Mor supply.

Proposed additional monitoring

The lack of historical values of suspended solids at the private water supply prior to filtering and at the nearby surface water locations cannot be compensated.

Figure 17 - Jacobs Report Borehole Ardochrig Mor, extract,

Specific recommendations were made in that report with respect to further surface water monitoring sites and frequency of water testing for Ardochrig and the need for a further report after three months. These objectors do not have that report, nor its conclusions.

6.12 Same "Best Practice" to be used for Whitlee Extension 3

Examination of current WL3 ES to show that SPR intends to use the same 'best practice' mitigation that was apparently successful and effective for WL Extn 1 and 2.

Non Technical Summary Whitelee Extension Phase 3 2012

Page 9. 69. *Mitigation measures, based on best practice, have been proposed to control the effects on the receiving environment. The measures have been informed by experience gained on Whitelee Windfarm and Whitelee Extension with regard to potential site-specific issues and the most appropriate measures to avoid or reduce these. The activities on the Whitelee Windfarm construction site were managed in close liaison with Scottish Water and SEPA. These arrangements are being continued during construction of Whitelee Extension and would be applied* ***during the proposed Development****.* (emphasis added)

P 10. 71. *With the proposed mitigation measures in place, it is concluded that the proposed Development would not result in any residual effects on geology, soils or groundwater that are considered to be significant in the context of the EIA Regulations.*

WL3 ES Appendix 9.2 Private Water Supplies

This Appendix 9.2 listing PWS on the WL site is so inaccurate as to be meaningless. For example, East Collary (East Collarie) Farm is listed three times with three, possibly four different supplies. For Cauldstanes, Kingswell and Veyatie there is only reference to the (unsubstantiated) supply with non specific NGR described in the 2006 PWS ERA. No OS map NGR is listed for the source.

Conclusions from 'The history of SPR's activity at Whitelee'

The evidence of damage to Public and Private Water Supplies flowing directly from the construction methods used, and the ineffective preventive measures employed, for WL, and WL 1 and WL2 is plain to see, and fully vouched by SPR's own material and that produced by its consultants.

- Jacobs Whitelee Post Construction Report November 2009 (2)

  Jacobs report on Borehole Ardochrig Mor 18.2.08 (22)

- 2012 H. Murray PhD (6)
- Amlaird WTW Raw water plots, colour, iron and manganese (8)
- Amlaird Raw water Values for TOC,SRP and SN (7)
- SEPA Pollution Incidents 2004-2014_Redacted (5)

6.13 Mitigation will not prevent Groundwater changes

Why surface and ground water changes cannot be prevented at WL3 by mitigation measures proposed?

Within WL3 ES, there is acknowledgement of the potential for pollution (such as was described in the 2009 Jacobs Whitelee post construction report) to affect both public and private water supplies through contamination of groundwater. Despite this, it is considered that there is only a residual slight risk to groundwaters (126,127) Craigendunton reservoir is noted as 80m and Lochgoin as 350m from this development. (9.8.4.1. 132).

> *WL Extn 3 ES Ch 9 71. The presence of a number of materials used during construction and operation (e.g. fuels, oils, and lime) creates a potential source of pollution. Without pollution avoidance and control measures, incidents could occur and have an adverse effect on both shallow and deep groundwater sourcing private or public water supplies*

For Cauldstanes, Veyatie, and Kingswell, despite closer proximity to the WL Ext 3 construction site and having already suffered alleged adverse effect from WL, the significance of residual pollution effect is still regarded as **low** (Table 9.13)

There is acknowledgement in the WL Ext. 3 ES of the high sensitivity of the receiving environment and of the high risk of construction activity on the water catchments, but a failure to acknowledge the limitations of current mitigation practices to provide adequate protection of water quality.

There are particular risks for this development to impinge on ground water, due to the site specific geology which has not been taken into consideration in the WL3 ES with respect to particular vulnerability of the groundwater to surface pollution.

The WL3 ES Fig 9.2a details the solid geology of the area.
It is noted that there is an igneous dyke extending to within 150 m of the WF site boundary and very close to the borehole abstraction point for Cauldstanes. This fault line, which has a different rock structure compared to most of the impermeable rock underlying the Whitelee plateau has the potential to readily allow surface water to contaminate underlying aquifers and groundwater reserves.

This same fault line and its potential for enhancing groundwater contamination was considered to be an important consideration by SEPA in 2012, as a statutory consultee for the consented, adjacent Sneddon Law windfarm. (para 5.2) (23).

Despite detailed geology included in the original WL ES, there is no mention or consideration of this site specific geology with regard to a hydroloical risk that may prove impossible to mitigate against, described in the either the original private water supply risk assessment, or the WL extn 3 ES.

No detailed geology was considered in the PWS risk analysis of the original WL PWS ERA and relevant British Geological survey maps were not included in the 2006 PWS ERA.

Water sources, which were not identified in the previous ES or ERA for WL, WL1 and WL2, have still not been identified or mapped for WL3, and therefore it is not possible to either provide an adequate risk assessment or specific mitigation.
Holding and collection tanks are not water sources. SEPA require the NGR coordinates of private water **sources**.

Contamination of ground water is likely to affect properties at some distance from the construction site and is likely to affect, or in any event to have the potential to affect, public water supplies. See: Dept of the Environment 20. Small water treatment systems DWI70_2_137_manual (24)

The imposition of planning conditions and clear instructions and legislation for SPR to inform competent and statutory authorities of any failures of mitigation or of any contamination events likely to impact on private or public water supplies has failed in the past, (17) SW, (5) SEPA and (19) EAC and in practical terms, has no guarantee in practice. This is evidenced by information laid before the Reporter in 2014, in the successful appeal by Eversheds LLP for developers CWP Ltd of Sneddon Law windfarm, adjacent to Whitelee windfarm (25)

As stated by Eversheds in the Sneddon Law windfarm Appeal PPA 190-2040 (25), it is the responsibility of the competent authority to enforce planning conditions, not necessarily that the developer should be compliant with them. This is of course an incorrect statement of the law, but nevertheless what was said. The expectation of the decision making authority is that planning or s. 36 consent conditions will be complied with. But nevertheless it remains only an expectation, not a guarantee.

Para 3.6:

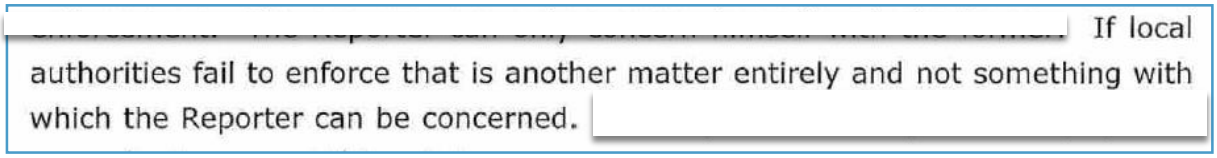

If local authorities fail to enforce that is another matter entirely and not something with which the Reporter can be concerned.

Figure 18 - Eversheds Report Sneddon Law Windfarm Appeal: paragraph 3.6

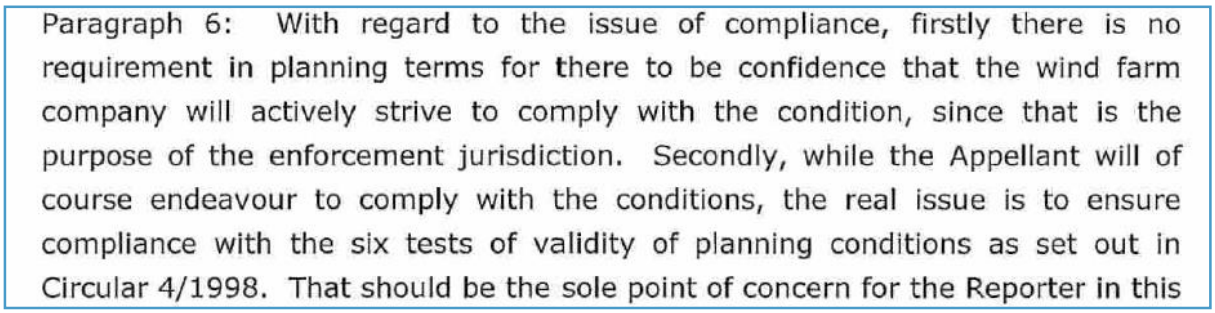

Paragraph 6: With regard to the issue of compliance, firstly there is no requirement in planning terms for there to be confidence that the wind farm company will actively strive to comply with the condition, since that is the purpose of the enforcement jurisdiction. Secondly, while the Appellant will of course endeavour to comply with the conditions, the real issue is to ensure compliance with the six tests of validity of planning conditions as set out in Circular 4/1998. That should be the sole point of concern for the Reporter in this

Figure 19 - Eversheds Report Sneddon Law Windfarm Appeal; paragraph 6

6.14 In Summary

- There are particular risks to ground water from surface water pollution due to the site specific geology and igneous dykes which have not been adequately considered in the ES for WL 3.

- Water sources, which were not identified in the previous ES or ERA for WL, WL1 and WL2, have still not been identified or mapped for WL3, and therefore it is not possible to either provide an adequate risk assessment or specific mitigation. **Holding and collection tanks are not water sources.**

- Contamination of ground water, which occurred with previous WL development, despite best practice mitigation, is likely to affect properties distant from the construction site and is likely to affect, or in any event to have the potential to affect, public water supplies.

- Risk ratings for PWS likely to be affected by this development have been simply adopted from previous WL risk assessments, perpetuating potential errors in previous ERA's.

- The imposition of planning conditions and instructions for SPR to inform competent and statutory authorities of any failures of mitigation or of any contamination events likely to impact on private or public water supplies has failed in the past, (Ref SW, SEPA and EAC as above) and in practical terms has no guarantee in practice.

- This is evidenced by information laid before the Reporter in the successful appeal by Eversheds LLP for developers CWP Ltd of Sneddon Law windfarm, adjacent to Whitelee windfarm.

7 OVERALL CONCLUSIONS

- This application for s. 36 consent is unusual because it has such a large and directly relevant antecedent in the shape of WL, WL1 and WL2. This makes accurate prediction much easier.

- It may therefore be confidently expected by the receiving community (the public) that significant environmental information about the proposed development can be the more easily identified, collated, and disclosed in the EIA process, leading to the publication of a comprehensive Environmental Statement.

- That has not happened.

- The question at present is whether the ES for WL3 contains sufficient Environmental Information to allow a decision to be made. It is submitted that it does not. Almost all of the evidence referred to in this submission comes from SPR's own sources, either being already in the public domain, or recovered using Freedom of Information legislation.

- This information should not be held back.

- The objectors are of the view and now submit that disclosure of relevant Environmental Information by themselves and by SPR at this stage is essential, without prejudice to parties' rights to use the information later at the Examination of the proposal.

- These objectors have made their own "environmental impact assessment", using only the material in the public domain or recovered from SPR/SEPA/Scottish Water/EAC sources, and they have found directly relevant and directly related dangerous pollution ,inadequate mitigation and inadequate communication from SPR to statutory authorities. The effects have been, and will be significant and will directly affect them.

- Whether there are answers to the questions now raised by this information remains to be seen.

- What is clear is that the full Environmental Information relevant to the specific issue of the likely effects on the public and private water supplies has not been brought into the formal ES, and that it should be before this application can be determined.

JOHN CAMPBELL QC

5 February 2015

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