

The Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017

Scoping Opinion of South Ayrshire Council for a proposed development at Tarbolton Moss, Near Tarbolton

DATE OF ISSUE 20 December 2017

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1. Introduction

South Ayrshire Council has received a request under Regulation 17 of The Town and Country Planning (Environmental Impacts Assessment) (Scotland) Regulations 2017 ('The Regulations') for a scoping opinion in respect of a proposed development at Tarbolton Moss, near Tarbolton. The purpose of this scoping opinion is to provide the applicant with details of what the planning authority considers to be the main issues and therefore the issues upon which the environmental impact assessment report should focus.

As part of the process of preparing this scoping opinion the planning authority has consulted with a range of agencies (both statutory and non-statutory). Each of the consultees has provided a response relating to their own particular remit. The responses of each of the consultation authorities are set out within Appendix 1. Please note that the responses submitted by the consultation authorities form part of the scoping opinion and should therefore be read in full.

As is evidenced by the range of consultees, there are a number of issues associated with this proposal which require to be addressed within the EIA Report. This cover note summarises what the Council considers to be the issues upon which there will be likely significant effects, and therefore those upon which the environmental impact assessment should focus.

2. Description of the development

The subject of this scoping opinion is a proposed energy from waste facility on land adjacent to an existing Waste Recycling and Treatment Facility (WRTF) and landfill site near to Tarbolton.

Ayrshire Environmental Park is located approximately 1.6km north of the centre of the village of Tarbolton and accessed indirectly from the A719 via an unclassified road (U78). The WRTF (planning permission reference 09/00846/FUL) is housed in a purpose built industrial style shed located immediately adjacent to the unclassified public road. The shed measures 106m (L) X 30m (W) X 14.5m (H). Non-hazardous commercial and industrial waste and mixed and residual municipal/household wastes are sorted into recyclates and non-recyclable residues. The extant planning permission includes autoclave and anaerobic digestion technologies and permits generation of electricity.

The existing landfill site at Tarbolton Moss has been in existence for a number of decades now and has been the subject of a number of planning applications dating back to the 1970s. Planning permission is in place up to 14 January 2030. The landfill is used for the disposal of municipal, non-hazardous and inert wastes. The landfill is divided into two areas, one of which has been operational since the 1970s and the other of which is the current operational site. The annual capacity of the operational site is 65,000m³.

The proposed energy from waste plant is intended to treat 150,000 tonnes of waste per annum by means of thermal treatment (incineration) and an electrical energy generating capacity of 10 MW (steam turbogenerator). The plant will be sited between the WRTF and the landfill operation. The site extends to 4.3ha. Part of the site is located within the WRTF and is levelled and surfaced whilst part is an agricultural field. There is an approximate fall of 9m across the site. The proposed waste to energy facility would be housed in a building with approximate footprint of 40-60m width and 100-180m length and approximate 35-40m height. A chimney stack would be required, the height of which would be determined through flue gasses dispersion modelling. The proposed building would be a portal frame, steel clad structure of the same or similar nature as the existing.

3. Requirement for EIA

The proposed development, being a development involving a waste disposal installation for the incineration of non-hazardous waste with a capacity exceeding 100 tonnes per day falls within Class 10 of Schedule 1 of the Town and Country Planning (EIA) (Scotland) Regulations 2017. The proposed development is therefore EIA Development.

4. Planning policy context

National Policy Context

Scottish Planning Policy sets out the Scottish Government's statement on how nationally important land use planning matters should be addressed across the country. Paragraphs 175 to 192 (*Planning for Zero Waste*) provides the national planning policy context for waste management related development. The EIA Report should include an assessment of the proposal against this and other aspects of SPP. In this regard, the EIA report should demonstrate that the project will be capable of delivering sustainable waste management, eg through identifying potential heat networks. The establishment of a heat and power network is fundamental to the EfW plant meeting energy efficiency requirements and therefore the principle of building and operating a plant at this location must be established from the outset. A Heat and Power Plan should be submitted with the planning application (separate to the EIA Report). The EIA Report will also require to demonstrate that other aspects of national planning policy can be satisfied including the need for adequate buffer zones between dwellings or other sensitive receptors and the requirement for decommissioning and restoration.

Regard should also be had to other aspects of Scottish Planning Policy including valuing the natural environment and managing flood risk.

The Zero Waste Plan, SEPA Thermal Treatment of Waste Guidelines 2013 and the online Waste Capacity Tables also form the national policy context and should be taken into consideration in the EIA Report.

Local Development Plan

The local development plan consists of the South Ayrshire Local Development Plan 2014. The policies relevant to the subject proposal include:-

- LDP Policy: spatial strategy
- LDP Policy: sustainable development criteria
- LDP Policy: waste management
- LDP Policy: business and industry
- LDP Policy: delivering infrastructure
- LDP Policy: landscape quality
- LDP Policy: water environment
- LDP Policy: flooding and development
- LDP Policy: air, noise and light pollution
- LDP Policy: renewable energy
- LDP Policy: historic environment
- LDP Policy: archaeology
- LDP Policy: natural heritage
- LDP Policy: land use and transport

Other Relevant Policy Considerations

Ayrshire and Dumfries & Galloway Area Waste Plan remains a material consideration. For the avoidance of doubt, however, the online Waste Capacity Figures supersede the capacity figures identified within the Area Waste Plan.

5. Consideration of alternatives

Schedule 4, paragraph 2 of the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations 2017 requires that all environmental impact assessments should include information on the main alternatives studied and an indication of the main reasons for choosing the selected option, with reference to the environmental effects. The EIA Report should therefore contain details of considered alternative approaches and why the selected course of action is the

most appropriate, with reference to the environmental effects of the preferred scheme compared to the alternative schemes. As a minimum, this aspect of the EIA Report should set out the alternative technologies, the alternative geographic locations, the alternative positions and configurations of the plant on the site considered.

6. Landscape and Visual Impact

The indicative details of the proposed building and stack are of a very significant scale in the rural context of the application site. The landscape and visual impact will be significant considerations in the assessment of the application. A "Landscape and Visual Impact Assessment" as described at Section 5.2 of the EIA Scoping Report, dated October 2017, prepared by SLR Consulting Ltd is required. The assessment should be prepared in accordance with the Guidelines for Landscape and Visual Impact Assessment in order to identify effects of the proposals on the landscape and outline mitigation measures that could be implemented.

The Planning Authority would welcome the opportunity to engage further with the applicant prior to completion of the EIA Report and submission of a formal planning application in order to provide input into the selection of key viewpoints and to discuss the design of the process building and flue stack.

7. Aviation

The potential for attraction of birds and the height of the flue stack have implications for aviation safety, given the proximity of the site to Glasgow Prestwick Airport and the EIA should give consideration to these issues. Early engagement with Glasgow Prestwick Airport Safeguarding Team is recommended prior to finalisation of the EIA Report.

8. Ecology

The site is close to the Fail Loch Provisional Wildlife Site (NS 425293) and the Fail Moss Wetlands Provisional Wildlife Site (NS 428280). Fail Loch is the site of a wildfowl wetland ornithological survey count and is a Scottish Wildlife Trust designated site, important for bird life and as a wetland site with over 125 plant species identified. The potential for adverse effects on these two wildlife sites should be fully investigated and measures to prevent, reduce or offset potential adverse effects should be included within the EIA Report.

The assessment should include an extended Phase 1 Habitat Survey (including birds) carried out in accordance with standard survey methods and target notes to describe potential features of value including rare or localised species and/or particularly important habitats where relevant, including Ground Water Dependent Terrestrial Ecosystems. Plants protected under the Schedule 8 of the Wildlife and Countryside Act 1981 (as amended in Scotland) and/or plant species of nature conservation interest in a British context should be identified. The potential for adverse effects on any species or habitats of significance identified through the survey work should be fully investigated and measures to prevent, reduce or offset potential adverse effects should be included within the EIA Report.

9. Built and cultural heritage resources

There are no recorded heritage assets within the proposed development boundary. Within 2km there is a scheduled Monument (Tarbolton Motte) and eight listed buildings. It is noted that archaeological evaluation has been undertaken north western quarter of the site which indicates limited potential for direct impacts on unrecorded heritage assets within the site. A record of this archaeological evaluation should be included within the EIA Report.

A walkover survey of the site not subject to previous archaeological evaluation should be undertaken by a suitably qualified archaeologist in order to identify potential unrecorded heritage assets. The potential impact on the settings of cultural heritage assets located within 2km of the

site should be assessed in accordance with the methodology set out in section 5.3.2 of SLR Consulting's EIA scoping report.

10. Tourism/ Recreation and Public Access Resources

The EIA Report should consider the impact on the amenity of the trout fishery located to the south of the proposed development in the assessments of landscape and visual impact, air quality, noise, odour, vermin, light nuisance and traffic and transportation.

11. Traffic and transportation

The development site is served by the U78 unclassified road which is narrow with informal passing places. The EIA Report should assess the impact of vehicular activity and should include information on the following to allow a full appraisal of any forthcoming development proposals:

- Vehicle routing;
- Vehicle type and average payload;
- Hours of operation of the WtE facility;
- Anticipated days/ hours of delivery;
- Anticipated numbers of daily deliveries (existing and proposed);
- Anticipated maximum no. of staff on site at any one time;
- Parking facilities for existing and new staff

An impact assessment based on the Guidelines for the Environmental Impact of Road Traffic should be included in the EIA Report. A Transport Statement (not as part of the EIA Report but rather as a standalone report) should be submitted along with the planning application.

12. Noise, odour and insect, vermin and bird nuisance

The rural area surrounding the application site contains a number of individual dwellings, small clusters of houses and Tarbolton village. Due to the proximity of dwelling houses to the proposed landfill extension an assessment should be carried out by a competent person to determine the likelihood of noise complaints from residents. This must include all relevant noise sources that may impact on the proposed development using method B.S.4142 method for rating industrial noise affecting mixed residential and industrial areas. The EIA report should include any necessary mitigation measures and any residual impacts remaining following mitigation should be identified.

A report should be carried out by a competent person to determine the likelihood of nuisance odours, as well as insect, vermin, bird nuisance. The EIA report should include any necessary mitigation measures and any residual impacts remaining following mitigation should be identified.

13. Landfill Gas Migration

The EIA should consider the potential for gas migration from the adjacent active and historic landfill operations to the proposed waste incineration process. The choice of location for the EfW plant should take full cognisance of the potential risk of accident due to migration of methane gas.

14. Flood Risk

The site of the proposed EfW building is outwith but close to the medium likelihood (0.5% annual probability or 1 in 200 year) flood extent of the SEPA Flood Map and may therefore be at medium risk of flooding. Furthermore it is noted that a small watercourse/drain exists along the southern boundary of the site. It is also noted that the application site (or parts thereof) lie within the medium risk probability extent of the surface water hazard map published as part of the flood maps for Scotland. The presence of surface water flooding on the minor watercourse can be seen as an indication that the channels may be at risk of fluvial flooding. It should be noted that the

surface water hazard map combines pluvial and sewer model outputs. The map shows their interaction as a composite and information should be sought from the flood prevention officer and if necessary Scottish Water to determine the potential flooding sources.

Additional information will be required to determine whether flood risk is an issue that will require to be addressed through the EIA. Clarification is required on the following points:-

- Confirmation of the existing use of the building identified on the aerial photography image (WE04)
- Finished floor level of proposed building (shown as indicative building on drawing WE03)
- Detailed site layout to show where proposed land raising or void creation would take place
- Appropriate photographs and/or any nearby historical flood levels
- Topographical level information such as cross sections across the river including the channel bed levels and bank levels of the opposite bank

If the abovenoted information is insufficient to provide a robust assessment of the risk of flooding then a detailed flood risk assessment may need to be carried out by a suitably qualified professional. The assessment should include the potential impact on downstream receptors.

15. Air Quality

The development is a potential source of air pollution resulting from traffic generation and emissions from the Energy from Waste Plant. The EIA should assess all significant potential impacts on local air quality with reference to background pollutant concentrations and cumulative impact of development within the area. The proposed use of the DMRB model for road traffic and AERMOD as a point source dispersion model, as set out in SLR Consulting Ltd report, are acceptable. The EIA should assess the impact on annual mean and short-term National Air Quality Objective levels for PM10, PM2.5, SO2 and NO2. The proximity of nearby receptors and the existing traffic routes will need to be considered to ensure that no air quality objective is likely to be breached as a result of emissions from the development. It should be noted that further air quality impact assessment and a Human Health Impact Assessment will be required at the PPC permitting stage.

16. Water Environment

The EIA Report should include a site survey of all existing water features and a map of the locations of all proposed engineering activities within the water environment together with a table detailing the justification for the activity and how any adverse impact will be mitigated.

The impacts to the Water Environment must be adequately assessed in the EIA to prove permitting consentability, and should be assessed fully through detailed risk assessment, including quantitative modelling, under the PPC Licensing Substantial Variation Application. The superficial (shallow) aquifer at this locality constitutes a 'moderate to high productivity' aquifer, and the bedrock (deep) aquifer constitutes a 'very high productivity' aquifer. Routine monitoring undertaken to comply with the PPC Permit shows that historical waste deposition is currently impacting on the water quality in the shallower quifer.

17. Carbon Capture Readiness

Depending upon the type and power output of the plant, the project may require to be Carbon Capture Ready. This should be discussed further with SEPA to determine whether the EIA will require to cover this topic.

18. Cumulative Effects

The proposed development should be assessed in terms of the cumulative impact of any other industrial or waste management proposals in the vicinity and should include impact of any anticipated increases in traffic within the area where the emissions plume will land.

19. Consultation responses

A consultation exercise has been conducted with all of the relevant consultees. All of the responses received are included as an appendix to this document. The issues raised within each of these responses should be carefully considered and addressed within the EIA Report. Responses from the following organisations and services were received:

- Scottish Environmental Protection Agency
- Scottish Natural Heritage
- Scottish Water
- Historic Scotland
- South Ayrshire Council Environmental Health
- South Ayrshire Council Sustainable Development

20. Conclusions

The content of this scoping opinion details the likely environmental effects that the EIA Report should address. The issues of aviation, flood risk and carbon capture may be able to be scoped out, however, the EIA Report should provide justification for the exclusion of these matters.

Appendix 1 – Comments received by consultation authorities



Scottish Natural Heritage
Dualchas Nàdair na h-Alba

All of nature for all of Scotland
Nàdar air fad airson Alba air fad

By email only to: planning.development@south-ayrshire.gov.uk

Date: 7 November 2017
Our ref: CNS/DC/SA/148061

For the Attention of: Allan Edgar

Dear Sir,

Ayrshire Waste Management, Moss Landfill Site, Tarbolton, South Ayrshire
Request for Scoping Opinion under EIA Regulations 2017 In Relation To Proposed Energy From Waste Facility

Thank you for consulting Scottish Natural Heritage (SNH) on the scoping report for the above proposal.

SNH Assessment of the Scoping Report

We welcome the proposed walker over survey as outlined in section 5.5.1 of the scoping report. If protected species are identified then further surveys should be undertaken as required. Should any impacts on protected species be identified then we advise Species Protection Plans are produced accordingly.

This advice is given without prejudice to any views that we may wish to express at a later date and is based upon our understanding of the project at this time.

Further guidance on the Environmental Impact Assessment process can be found in SNH's publication '*A Handbook for Environmental Impact Assessment*' (2011). This publication can be downloaded from our website at: <https://www.snh.scot/sites/default/files/2017-06/A1198363.pdf>

I hope this is helpful. If I can be of any further assistance then please do not hesitate to contact me.

Yours Sincerely,

Debbie Skinner
Operations Officer
Strathclyde and Ayrshire



Our ref: PCS/155739

Your ref:

Alan Edgar
South Ayrshire Council
Planning and Building Control
Burns House
Burns Statue Square
Ayr
KA7 1UT

By email only to: planning.development@south-ayrshire.gov.uk

If telephoning ask for:

Julie Gerc

07 December 2017

Dear Sir

Town and Country Planning (Scotland) Acts
Scoping opinion for the proposed Section 36 Application
Request for Scoping Opinion under EIA Regulations 2017 In Relation To Proposed Energy from
Waste (EfW) Facility
Ayrshire Waste Management, Moss Landfill Site, Tarbolton, South Ayrshire

Thank you for consulting SEPA on the scoping opinion for the above development proposal by way of your letter which we received on 25 October 2017. We would welcome engagement with the applicant at an early stage to discuss any of the issues raised in this letter.

SEPA provided pre application advice 11 July 2017 PCS/153503, and our letter set out our requirements in relation to the issues associated with a proposal of this nature. I would refer you to that letter which I have included for your information.

The general issues to be addressed in the Environmental Statement (ES) are set out in Appendix 1.

While there may be opportunities for several of these to be scoped out of detailed consideration, the justification for this approach in relation to specific issues should be set out within the ES. We would welcome the opportunity to comment on the draft ES. Please note that we can process files only of a maximum size of 25MB and therefore, when the ES is submitted, it should be divided into appropriately sized and named sections.

It should be noted that upon receipt of additional information, there is the potential for SEPA to register an “objection in principle” to this proposal.

More specific comments are provided below.

Advice for the Planning Authority

1 Authorisation

1.1 The scoping report fails to consider fundamental issues, such as a heat & power plan, and the potential for landfill gas migration from the adjacent landfill site. Issues, such as these, require consideration at the EIA stage. Details on these and other issues will be required for an assessment of the potential consentability of the EfW plant and its associated activities.

2 Heat and Power Plan

2.1 A robust heat and power plan is required to demonstrate consentability and the EIA should consider the potential for delivering sustainable waste management e.g. through identifying potential heat network opportunities.

2.2 The establishment of a heat and power network is fundamental to the EfW plant meeting its' energy efficiency requirements and therefore the principle of building and operating a plant at this location must be established at the outset.

3 Landfill Gas

3.1 The EIA should consider the potential for gas migration from the adjacent active and historic landfill operations to the proposed waste incineration process. Authorisation of activities under a PPC Part A permit will consider the risk of accidents. Again, the choice of location of an EfW plant and potential risk of accident due to the migration of methane gas must be assessed in the EIA.

4 Flood Risk

4.1 Upon receipt of additional flood risk information, it is possible that SEPA may lodge an “objection in principle” to this proposal. We would wish to receive clarification on the following points before being able to provide an informed view:

- confirmation of the existing use of the building identified on the aerial photography image (WE04)
- finished floor level of proposed building (shown as indicative building on drawing WE03)
- detailed site layout to show where proposed land raising or void creation would take place
- appropriate photographs and/or any nearby historical flood levels
- topographic level information could include cross sections across the river including the channel bed levels and bank levels of the opposite bank
- if this information is insufficient to provide a robust assessment of the risk of flooding to the development then a detailed flood risk assessment may need to be carried out by a suitably qualified professional

4.2 We have reviewed the information provided in this consultation and it is noted that, the application site (or parts thereof) lies adjacent to the medium likelihood (0.5% annual probability or 1

in 200 year) flood extent of the SEPA Flood Map, and may therefore be at medium to high risk of flooding.

4.3 We have reviewed the information provided in this consultation and it is noted that a small watercourse/drain exists along the southern boundary of the site. It is also noted that the application site (or parts thereof) lie within the medium risk probability extent of the surface water hazard map published as part of the flood maps for Scotland. The presence of surface water flooding on the minor watercourses can be seen as an indication that the channels may be at risk of fluvial flooding. Consequently the site may be at risk of flooding and we would therefore object to this proposal until other appropriate information is provided.

4.4 It is noted that the application site (or parts thereof) lie within medium risk probability extent of the surface water hazard map published as part of the flood maps for Scotland. The surface water hazard map combines pluvial and sewer model outputs. The map shows their interaction as a composite surface water extent. We therefore recommend that you contact your flood prevention officer to discuss the issue as its resolution may have a bearing on the overall design of the proposal. There may also be a need to contact Scottish Water as the risk might be associated with the sewerage system.

4.5 A minor watercourses (land drain) has been identified on the southern boundary of the proposed site extension. Due to its small catchment size (<3km²), it has not been captured in the SEPA flood maps – however this minor watercourse/drain should be considered through a flood risk assessment in addition to any other potential flooding sources.

4.6 Paragraph 255 of Scottish Planning Policy set out the principles that the planning system should promote. One of these is flood avoidance: “by safeguarding flood storage and conveyance capacity, and locating development away from functional floodplains and medium to high risk areas”. Paragraph 256 goes on to state that “the planning system should prevent development which would have a significant probability of being flooded or would increase the probability of flooding elsewhere”.

4.7 We note that the proposals are in relation to a proposed energy from waste facility building. Energy Generating Technologies fall under the ‘Essential Infrastructure’ land use under SEPA’s Land Use Vulnerability Guidance. We note from the aerial photography image (WE04) that there is an existing building located here and we seek confirmation as to the current use of this building. We would accept redevelopment of a previously developed site where it involves the demolition of existing buildings and/or erection of additional buildings within a development site, and the proposed land use is equal or less vulnerable than the existing land use, although we may object if it leads to an unacceptable increase in the number of people exposed to the hazard.

4.8 Should any of the proposed site be deemed to contain functional floodplain from the minor watercourse/drain then we would require land raising activities to be avoided in this area as a first principle. If land levels are raised in the functional floodplain of a watercourse, it could result in the loss of flood plain storage. This could have a detrimental impact to receptors downstream, including properties in Tarbolton, and we note an existing record of the fluvial flooding here in December 1994 due to river overspill. We are not supportive of landraising within the functional floodplain in undeveloped areas.

4.9 Sufficient information is currently unavailable for us to assess flood risk at this site. We would therefore object to this development until a Flood Risk Assessment or other appropriate information is provided in support of the application. A Flood Risk Assessment (or other information) must demonstrate that the development accords with the principles of Scottish Planning Policy.

4.10 We acknowledge that in Section 5.1 – Water Environment (Proposed Landfill Extension EIA Screening and Scoping Report) the site has been identified as being at medium to high risk of fluvial flooding. Consequently, a conceptual site model has been proposed to assess the potential impacts associated with the extension of the landfill. As mentioned in our previous point, a Flood Risk Assessment (FRA) may be required and this has been put forward in the Screening and Scoping Report. The FRA should consider all sources of flooding and assess flood risk to the site as well as the potential for the site to increase flood risk to third parties.

4.11 In Section 5.1 – Water Environment (Proposed Landfill Extension EIA Screening and Scoping Report) there has only been recognition of fluvial flooding from the Water of Fall as indicated from our SEPA Flood Maps, but we would require assessment to be made of all minor watercourses/land drains within or adjacent to the site when assessing flood risk.

4.12 There has been no recognition of downstream receptors resulting from any topography changes to the site which may influence flood water flow routes. As mentioned, we have an existing record of flooding to properties downstream of the site in Tarbolton and would require appropriate assessment to ensure there is no increase in flood risk as a result of the proposal.

4.13 Other appropriate information might include proposed development site and finished floor levels related to nearby watercourses, appropriate photographs and/or any nearby historical flood levels and detailed site layout to show where proposed land raising or void creation would take place. Topographic level information could include cross sections across the river (including the channel bed levels and bank levels of the opposite bank), upstream, downstream and adjacent to the site. However if this information is insufficient to provide a robust assessment of the risk of flooding to the development then a detailed flood risk assessment may need to be carried out by a suitably qualified professional.

4.14 The site in question has a risk of flooding and it follows that to allow development to proceed may place property or persons at serious risk contrary to Scottish Planning Policy.

5 Air Quality

5.1 It is noted that the EIA scoping document proposes a 'desktop only' study to provide representative baseline air quality (AQ) data.

5.2 The development would highlight significant sources of emissions from transport and from the waste to energy facility. The local authority should be satisfied that the proposed air quality assessment highlights all significant potential impacts on local air quality, effectively assesses background pollutant concentrations and considers the cumulative impact of development in this area. The Scoping Opinion suggests the use of DMRB model for road traffic assessment and AERMOD as a point source dispersion model. This method is presently satisfactory. The process will be subject to a PPC permit and further modelling may be required at a later date. However, at this stage SEPA would expect that the local authority request that the developer assess impact on annual mean and short-term National Air Quality Objective levels for PM10, PM2.5, SO2 and NO2. The proximity of nearby receptors and the existing traffic routes will need to be considered to ensure that no air quality objective is likely to be breached as a result of emissions from the development.

6 Water Environment

6.1 The impacts to the Water Environment must be adequately assessed in the EIA to prove permitting consentability, and should be assessed fully through a detailed risk assessment, including quantitative modelling, under the PPC Licensing Substantial Variation Application.

The superficial (shallow) aquifer at this locality constitutes a 'moderate to high productivity' aquifer, and the bedrock (deep) aquifer constitutes a 'very high productivity aquifer'. Routine monitoring undertaken to comply with the PPC Permit shows that historical waste deposition at the site is currently impacting on the water quality in the shallow aquifer.

7 Ecology

7.1 The EIA should interpret the results from the extended phase 1 habitat survey in relation to the environmental impacts of the proposal. Mitigation potential/requirements for habitats such as Ground Water Development Terrestrial Ecosystems (GWDTE) should be identified.

Advice for the applicant

8 Flood Risk Caveats & Additional Information

8.1 The SEPA Flood Maps have been produced following a consistent, nationally-applied methodology for catchment areas equal to or greater than 3km² using a Digital Terrain Model (DTM) to define river cross-sections and low-lying coastal land. The maps are indicative and designed to be used as a strategic tool to assess flood risk at the community level and to support planning policy and flood risk management in Scotland.. For further information please visit <http://www.sepa.org.uk/environment/water/flooding/flood-maps/>.

8.2 We refer the applicant to the document entitled: "Technical Flood Risk Guidance for Stakeholders". This document provides generic requirements for undertaking Flood Risk Assessments and can be downloaded from <http://www.sepa.org.uk/media/162602/ss-nfr-p-002-technical-flood-risk-guidance-for-stakeholders.pdf> Please note that this document should be read in conjunction Policy 41 (Part2).

8.3 Our Flood Risk Assessment checklist should be completed and attached within the front cover of any flood risk assessments issued in support of a development proposal which may be at risk of flooding. The document will take only a few minutes to complete and will assist our review process. It can be downloaded from <http://www.sepa.org.uk/media/159170/flood-risk-assessment-checklist.xls>.

8.4 Please note that we are reliant on the accuracy and completeness of any information supplied by the applicant in undertaking our review, and can take no responsibility for incorrect data or interpretation made by the authors.

9 Regulatory requirements

9.1 Details of regulatory requirements and good practice advice for the applicant can be found on the Regulations section of our website. If you are unable to find the advice you need for a specific regulatory matter, please contact a member of the operations team in your local SEPA office at:

Ayr Office
31 Miller Road
Ayr
KA7 2AX

Tel: 01292 294000

If you have any queries relating to this letter, please contact me by telephone on 01698 839337 or e-mail at planning.sw@sepa.org.uk .

Yours faithfully

Julie Gerc
Senior Planning Officer
Planning Service

Disclaimer

This advice is given without prejudice to any decision made on elements of the proposal regulated by us, as such a decision may take into account factors not considered at the planning stage. We prefer all the technical information required for any SEPA consents to be submitted at the same time as the planning application. However, we consider it to be at the applicant's commercial risk if any significant changes required during the regulatory stage necessitate a further planning application and/or neighbour notification or advertising. We have relied on the accuracy and completeness of the information supplied to us in providing the above advice and can take no responsibility for incorrect data or interpretation, or omissions, in such information. If we have not referred to a particular issue in our response, it should not be assumed that there is no impact associated with that issue. If you did not specifically request advice on flood risk, then advice will not have been provided on this issue. Further information on our consultation arrangements generally can be found in How and when to consult SEPA, and on flood risk specifically in the SEPA-Planning Authority Protocol.

Appendix 1

Issues to be Addressed

Sustainable waste management

1.1 Where the proposal will require authorisation from us under the Pollution Prevention and Control Regulations 2012 (PPC), it should be noted that we can grant a PPC permit for such an installation only where the applicant has demonstrated compliance with these Regulations and that the installation will operate in accordance with Best Available Technique (BAT). The application should therefore include information demonstrating that BAT is proposed for aspects of the installation's operation and management.

1.2 In addition to provision of the information required below and submission of a planning application, the proposal may require authorisation from us under the Waste Management Licensing (Scotland) Regulations 2011. As part of the Waste Management Licence (WML) the applicant should be aware that SEPA is likely to impose a number of stringent conditions to control aspects of the site, such as:

- . The types and quantities of waste that may be handled;
- . Litter control;
- . Control of vermin and odour at the site;
- . The specification of yard conditions, drainage and layout (via the "working plan").

1.3 Where a WML is required, the ES or planning submission should provide baseline information on the existing waste management network in the area, along with details of how the proposal fits within the waste hierarchy. The objective of the EU Waste Framework Directive (Directive

2008/98/EC) is to ensure that waste is treated/managed as high up the waste hierarchy as possible. The waste hierarchy promotes waste management that enables waste reduction, and re-use and recovery of energy from waste with only residual waste to reach landfill.

1.4 The ES or planning submission should provide detail on the waste to be treated as well as the proposed process to be undertaken at the proposed facility. This should include:

- . Tonnage to be treated each year (i.e. size and capacity of plant);
- . Type of waste to be treated;
- . Means of pre-sortment;
- . Product to be produced;
- . Location of end product.

1.5 Where an installation burns waste, or waste in combination with another fuel, the facility may be classified as an incineration plant rather than a combustion or large combustion plant. The classification of the proposed (waste) biomass plant will depend on site specific details. The plant will be required to meet the Industrial Emission Directive (IED). It is essential that it is made clear early in the planning process if the proposed facility will burn any waste materials such as treated timber. This will enable the proposed facility to be designed to meet the correct environmental standards and legislative requirements. Where the intention is to burn any previously used materials, the applicant may want to ensure that the plant design meets IED standards, as it may be very difficult to prevent materials categorised as waste from entering the fuel streams.

1.6 Detail should be included on the technique or process of the proposed development, including the proposed method of pre-sorting the waste (on or off site), and the methods used to minimise the likely significant environmental impacts that may arise from the proposed development. The number and size of buildings to be constructed on site to undertake this process should be provided on a plan. Developers should refer to the emissions section below to identify how efficiency of the plant is maximised and how heat and power will be captured.

1.7 The ES or planning submission should address how the developer will ensure that only "residual" waste (i.e. waste where all efforts have been made to extract recyclable and compostable materials) will be treated. Details of any facilities (such as Materials Recovery Facilities) that will be required should be provided and shown on the submitted plans. Details of how residual wastes from the biomass treatment process will be dealt with should also be provided. For example:

- . Bottom ash - details of any recycling facilities should be provided or details of where the ash will be recycled for re-use as aggregates or similar;
- . Fly ash - details of treatment and end disposal;
- . Details of the volumes of material (ideally as a percentage of the total waste being treated) which will require to be finally disposed of to landfill, and the location of this landfill;
- . Details of excavation material, how it will be reused on the site and in the case of contaminated material, how it will be treated and ultimately disposed of.

Waste minimisation

1.8 We recommend that the ES or planning submission details the measures that will be undertaken to ensure waste will be minimised at construction and operational phases. We require the applicant to demonstrate that the development includes construction practices to minimise the use of raw materials and maximise the use of secondary aggregates and recycled or renewable materials, that waste generated by the proposal is reduced and re-used or recycled where appropriate on site. Any recovery or reuse of controlled waste should be in accordance with the Waste Management Licensing (Scotland) Regulations 2011 or where part of an installation the PPC Regulations.

Alternatives and site selection

1.9 A description of the main alternatives considered such as alternative sites, alternative technologies and alternatives for the proposed development within site should be included in the ES or planning submission. The description must include the main reasons for the choice made, taking

into account the environmental effects of the decision. The site selection assessment should show the consideration given to locating the proposed development adjacent to potential users of heat and power.

Carbon Capture Readiness (CCR) 300MWe and Above

1.10 Scottish Government has determined that Carbon Capture Readiness (CCR) should be assessed during the consenting process for the construction and operation of new power stations under Section 36 of the Electricity Act 1969. Furthermore, Scottish Government has determined that no power station at or over 300 MWe, and of a type covered by the Large Combustion Plant Directive (LCPD), will be consented unless it demonstrates that it would be Carbon Capture Ready.

1.11 A plant that is CCR will have demonstrated to the consenting authority (at the time the consent is granted) that it will be technically and economically feasible to retrofit Carbon Capture and Storage (CCS) to that power station in the future. Sufficient information should be included in the ES or planning submission to demonstrate:

- . that sufficient space is available on or near the site to accommodate carbon capture equipment in the future;
- . the technical feasibility of retrofitting their chosen carbon capture technology;
- . that a suitable area of deep geological storage offshore exists for the storage of captured CO₂ from the proposed power station;
- . the technical feasibility of transporting the captured CO₂ to the proposed storage area; and
- . the likelihood that it will be economically feasible within the power station's lifetime, to link it to a full CCS chain, covering retrofitting of capture equipment, transport and storage.

1.12 We will advise Scottish Government on two aspects of the CCR feasibility assessment: space, and the feasibility of retrofit. Applicant's feasibility assessments should be in line with the Guidance on thermal power stations in Scotland published by the Scottish Government in March 2010. Further advice on CCS can be found in the document Carbon Capture and Storage - A Roadmap for Scotland.

Energy recovery

1.13 As outlined in the Energy Efficiency Action Plan for Scotland and the Scottish Planning Policy (Paragraphs 152-160), maximising energy efficiency is a top priority in tackling climate change. The Energy Efficiency Directive 2012/27/EU (EED) was transposed in to Scottish law by amending the PPC Regulations on 30 October 2014. This requires that all new or substantially refurbished energy producing installations with an aggregated size greater than 20MWth input to have a permit. The principal requirement will be the need for applicants to provide a Cost Benefit Analysis to assess the costs and benefits of operating the installation in such a manner as to use any waste heat generated.

1.14 The applicant will also be required to develop a heat and power plan which follows the requirements as specified in Annex 2 of our Thermal Treatment of Waste Guidelines 2014. Although these Guidelines have been developed for energy from waste installations the methodology specified is relevant for use in Combined Heat and Power feasibility studies for other fuels including biomass. These guidelines are in line with the Quality Assurance for Combined Heat and Power standards as published by the Department for the Environment, Food and Rural Affairs and represent the appropriate approach to establishing the required energy efficiency for facilities.

Emissions

1.15 Depending on the types of fuel burned and the final design of the facility, any PPC permit granted by us will include the appropriate requirements of the Council Directive 2010/75/EC on industrial emissions (integrated pollution prevention and control) recast. This includes limitations of emissions of certain pollutants into the air from large combustion plant (Chapter 3) or on the

incineration of waste (Chapter 4) . We can grant a PPC permit for such an installation only where the applicant has demonstrated a) compliance with these regulations and b) that the installation will operate in accordance with Best Available Techniques (BAT). The ES or planning submission should therefore include information demonstrating that BAT is proposed. We do not expect a full and complete BAT justification at the planning stage. However, sufficient information should be provided to allow us to take a view on potential consentability of the proposed development under our pollution control regimes.

Noise and vibration

1.16 For proposals which will require a PPC permit, information on noise and vibration from the operation of the plant should also be included within the ES or planning submission to inform the PPC application process. As with other aspects of the permit, the requirement will be for the applicant to demonstrate that working methods proposed represent the Best Available Techniques (BAT) for control of noise and vibration from the installation. Impact on local sensitive receptors will be a key factor in assessing the BAT justification with the overall aim being to prevent, minimise and render harmless noise and vibration emissions. Information is available in the document Guidance on the control of noise at PPC Installations.

Air quality

1.17 The ES or planning submission should include an assessment of baseline air quality in the area of concern, focusing particularly on the air quality objectives outlined in the Air Quality Strategy for England, Scotland, Wales and Northern Ireland and the limit values in the Air Quality Standards (Scotland) Regulations 2010. Consideration should also be given to the potential effects of the proposed development on air quality, during both the construction and operating phases, focusing particularly on whether the development will result in any of the air quality objectives being exceeded or will contribute to exceedences already taking place. This should include any effects directly related to energy production from biomass and also any indirect effects such as transport of materials. Assessment can involve monitoring or modelling, or a combination of these. If any potentially negative effects on air quality are identified, the ES or planning submission should also propose appropriate mitigation measures to deal with this. We recommend that the developer speak to the local authority environmental protection team, as it will be able to advise on air quality.

1.18 Where a PPC permit is required, the likely impact on local air quality will be considered by Scottish Ministers within the context of the Section 36 application in accordance with Scottish Executive Technical and Policy Guidance on Local Air Quality Management (LAQM). It will be necessary to consider the cumulative effect of point source emissions, fugitive emissions and existing background levels to ensure that no air quality objective is likely to be breached as a result of emissions from the development. Further information is available from the LAQM pages on the Defra Air Quality Archive website and the Scottish Government Scottish Air Quality website.

1.19 The contribution of the installation to ambient levels of Air Quality Strategy pollutants will also be assessed as part of the determination on any application for a PPC permit.. Therefore it is important that, as far as possible, the information used in the ES should be as accurate and as complete as possible. We understand that not all design issues will have been resolved at the ES stage, but to avoid unnecessary duplication of work it is advantageous to ensure that, as a minimum, the emission data used is as robust as possible. This may also avoid delay in consenting if for example a substantially revised or updated air quality impact assessment is required for PPC permitting purposes.

1.20 The ES or planning submission should include an assessment of the impact from emissions including (but not restricted to) particulate matter (including the PM10 and PM2.5 fractions as a minimum), oxides of nitrogen, carbon monoxide, water (plume visibility), plus acid and nutrient nitrogen deposition. The assessment should also be clear about how uncertainty is dealt with (for example with future emissions data). Where there is no statutory threshold (standard or guideline) available with which to compare concentrations the chosen comparator must be justified.

1.21 The ES or planning submission must also address potential impacts on ecosystems.

1.22 In accordance with our Human Health Position Statement, and in line with Scottish Planning Policy (paragraph 188) which states "Planning authorities should determine whether proposed developments would constitute appropriate uses of the land, leaving the regulation of permitted installations to SEPA", Human Health Impact Assessment is not required for planning purposes, although a PPC permit application will require such an assessment to be included. We generally advise twin-tracking of planning and regulatory applications, and where this is done such an assessment could be included within the ES. Further information and advice on undertaking a Human Health Impact Assessment can be obtained directly from SEPA. The Sniffer report UKCC02 on Environmental Legislation and Human Health: Guidance for Assessing Risk may also be of use. Sensitive receptors used in assessing the impact of emissions must be clearly identified. This should include:

- . Consideration of the impact of humans living or working in any nearby tall buildings;
- . The cumulative impact on local air quality in the area taking into account other significant emissions nearby;
- . Emissions from traffic in the area both during the construction and operational phases of the project;
- . Proposals for any new developments such as housing, industrial developments, wind turbines and agricultural developments;
- . Consideration of impacts on sensitive ecological sites.

1.23 The guidance contained in the H1 methodology for PPC BAT and impact assessment indicates that an initial assessment of impacts in an area within a 15km radius of the site may be appropriate. However, assessment of impacts on ecological sites may need to extend significantly beyond this.

Cumulative impact

1.24 We recommend that the proposed development is assessed in terms of the cumulative impact of any other industrial or waste management proposals in the vicinity, and should include impact of any anticipated increases in traffic in locations where the plume would land. Traffic is the main source of NO_x therefore it should be included, particularly if the plant will be sited in an urban location. The ES or planning submission should detail what measures will be taken to mitigate any cumulative impacts. Local Authority Environmental Officers should be contacted at the earliest opportunity to obtain the most recent data relating to air quality.

Appropriate assessment

1.25 We recommend that any screening assessment, and if required, an Appropriate Assessment be undertaken in a coordinated fashion as allowed under Regulation 52 of the Conservation (Natural Habitats, etc) Regulations 1994 (as amended). A coordinated approach would allow the conclusions of any screening or assessment or both to be used in all relevant consents that may be required for this development as well as avoiding duplication of effort. This could lead to significant resource savings for the applicant and the regulatory authorities as well as avoiding delay in determining applications for consent. It should be noted that screening or Appropriate Assessment may require consideration of long range impacts as well as localised effects.

The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended)

1.26 The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended) (CAR) require operators of activities likely to have an impact on the water environment to be authorised. Such activities include discharges, disposal to land, abstractions, impoundments and engineering works. Guidance on CAR can be found on our website. Developers are strongly advised to consult us at an early stage as the regulatory body responsible for the implementation of CAR to identify 1) if a CAR licence is necessary and 2) clarify the extent of the information required by SEPA to fully assess any licence application. The following aspects will need to be addressed in the ES or planning submission:

- . The use of biocides in cooling water to restrict algal growth;
- . The nature and potential impact of any onsite effluent treatment system;
- . Temperature of water discharged;
- . Effects of surface water abstraction (e.g. fish being transported along with the flow).

1.27 Where water abstraction is proposed we request that the ES or planning submission details if a public or private source will be used. If a private source is to be used the information listed below should be included. Whilst we regulate water abstractions under CAR, this information is required to determine if the abstraction is feasible in this location:

- . Source e.g. ground water or surface water;
- . Location e.g. grid ref and description of site;
- . Volume e.g. quantity of water to be extracted;
- . Timing of abstraction e.g. will there be a continuous abstraction;
- . Nature of abstraction e.g. sump or impoundment;
- . Proposed operating regime e.g. details of abstraction limits and hands off flow;
- . Survey of existing water environment including any existing water features;
- . Impacts of the proposed abstraction upon the surrounding water environment.

1.28 If other development projects are present or proposed within the same water catchment then we advise that the applicant considers whether the cumulative impact upon the water environment needs to be assessed. The ES or planning submission should also contain a justification for the approach taken.

Engineering activities in the water environment

1.29 In order to meet the objectives of the Water Framework Directive of preventing any deterioration and improving the water environment, developments should be designed to avoid engineering activities in the water environment wherever possible. The water environment includes burns, rivers, lochs, wetlands, groundwater and reservoirs. We require it to be demonstrated that every effort has been made to leave the water environment in its natural state. Engineering activities such as culverts, bridges, watercourse diversions, bank modifications or dams should be avoided unless there is no practicable alternative. Paragraph 255 of Scottish Planning Policy deters unnecessary culverting. Where a watercourse crossing cannot be avoided, bridging solutions or bottomless or arched culverts which do not affect the bed and banks of the watercourse should be used. Further guidance on the design and implementation of crossings can be found in our Construction of River Crossings Good Practice Guide. Other best practice guidance is also available within the water engineering section of our website.

1.30 If the engineering works proposed are likely to result in increased flood risk to people or property then a Flood Risk Assessment should be submitted in support of the planning application.

1.31 A site survey of existing water features and a map of the location of all proposed engineering activities in the water environment should be included in the ES or planning submission. A systematic table detailing the justification for the activity and how any adverse impact will be mitigated should also be included. The table should be accompanied by a photograph of each affected water body along with its dimensions. Justification for the location of any proposed activity is a key issue for us to assess at the planning stage.

1.32 Where developments cover a large area, there will usually be opportunities to incorporate improvements in the water environment required by the Water Framework Directive within and/or immediately adjacent to the site either as part of mitigation measures for proposed works or as compensation for environmental impact. We encourage applicants to seek such opportunities to avoid or offset environmental impacts. Improvements which might be considered could include the removal of redundant weirs, the creation of buffer strips and provision of fencing along watercourses. Fencing

off watercourses and creating buffer strips both helps reduce the risk of diffuse water pollution and affords protection to the riparian habitat.

Pollution prevention and environmental management

1.33 One of our key interests in relation to major developments is pollution prevention measures during the periods of construction, operation, maintenance, demolition and restoration. The construction phase includes construction of access roads, borrow pits and any other site infrastructure.

1.34 We advise that the applicant should, through the EIA process or planning submission, systematically identify all aspects of site work that might impact upon the environment, potential pollution risks associated with the proposals and identify the principles of preventative measures and mitigation. This will establish a robust environmental management process for the development. A draft Schedule of Mitigation should be produced as part of this process. This should cover all the environmental sensitivities, pollution prevention and mitigation measures identified to avoid or minimise environmental effects. Please refer to the Pollution prevention guidelines.

1.35 A Construction Environmental Management Document is a key management tool to implement the Schedule of Mitigation. We recommend that the principles of this document are set out in the ES outlining how the draft Schedule of Mitigation will be implemented. This document should form the basis of more detailed site specific Construction Environmental Management Plans which, along with detailed method statements, may be required by planning condition or, in certain cases, through environmental regulation. This approach provides a useful link between the principles of development which need to be outlined at the early stages of the project and the method statements which are usually produced following award of contract (just before development commences).

1.36 Best practice advice developed by The Highland Council (in conjunction with industry and other key agencies) on the Construction Environmental Management Process is available in the guidance note Construction Environmental Management Process for Large Scale Projects.

Disruption to wetlands including peatlands

1.37 If there are wetlands or peatland systems present, the ES or planning submission should demonstrate how the layout and design of the proposal, including any associated borrow pits, hard standing and roads, avoid impact on such areas.

1.38 A Phase 1 habitat survey should be carried out for the whole site and the guidance A Functional Wetland Typology for Scotland, should be used to help identify all wetland areas. National Vegetation Classification should be completed for any wetlands identified. Results of these findings should be submitted, including a map with all the proposed infrastructure overlain on the vegetation maps to clearly show which areas will be impacted and avoided.

1.39 Groundwater dependent terrestrial ecosystems, which are types of wetland, are specifically protected under the Water Framework Directive. The results of the National Vegetation Classification survey and Appendix 2 (which is also applicable to other types of developments) of our Planning guidance on windfarm developments should be used to identify if wetlands are groundwater dependent terrestrial ecosystems.

1.40 The route of roads, tracks or trenches within 100 m of groundwater dependent terrestrial ecosystems (identified in Appendix 2) should be reconsidered. Similarly, the locations of borrow pits or foundations within 250 m of such ecosystems should be reconsidered. If infrastructure cannot be relocated outwith the buffer zones of these ecosystems then the likely impact on them will require further assessment. This assessment should be carried out if these ecosystems occur within or outwith the site boundary so that the full impacts on the proposals are assessed. The results of this assessment and necessary mitigation measures should be included in the ES.

1.41 For areas where avoidance is impossible, details of how impacts upon wetlands including peatlands are minimised and mitigated should be provided within the ES or planning submission. In particular impacts that should be considered include those from drainage, pollution and waste management. This should include preventative/mitigation measures to avoid significant drying or oxidation of peat through, for example, the construction of access tracks, dewatering, excavations,

drainage channels, cable trenches, or the storage and re-use of excavated peat. Detailed information on waste management is required as detailed below. Any mitigation proposals should also be detailed within the Construction Environmental Management Document as detailed below.

Carbon balance

1.42 Scottish Planning Policy (SPP) states (Paragraph 205) that "Where peat and other carbon rich soils are present, applicants should assess the likely effects of development on carbon dioxide (CO₂) emissions. Where peatland is drained or otherwise disturbed, there is liable to be a release of CO₂ to the atmosphere. Developments should aim to minimise this release." The ES or planning submission should include a) a summary demonstrating how the development has been designed with regards to layout and mitigation to minimise release of CO₂ and b) preventative/mitigation measures to avoid significant drying or oxidation of peat through, for example, the construction of access tracks, drainage channels, cable trenches, or the storage and re-use of excavated peat.

Disturbance and re-use of excavated peat

1.43 Where the proposed infrastructure will impact upon peatlands, a detailed map of peat depths (this must be to full depth) should be submitted. The peat depth survey should include details of the basic peatland characteristics.

1.44 By adopting an approach of minimising disruption to peatland, the volume of excavated peat can be minimised, reducing CO₂ emissions and the commonly experienced difficulties in dealing with surplus peat. The generation of surplus peat is a difficult area which needs to be addressed from the outset given the limited scope for re-use.

1.45 The ES or planning submission should detail the likely volumes of surplus peat that will be generated, including quantification of catotelmic and acrotelmic peat, and the principles of how the surplus peat will be reused or disposed of.

1.46 There are important waste management implications of measures to deal with surplus peat as set out within our Regulatory Position Statement - Developments on Peat. Landscaping with surplus peat (or soil) may not be of ecological benefit and consequently a waste management exemption may not apply. In addition we consider disposal of significant depth of peat as being landfilled waste, and this again may not be consentable under our regulatory regimes. Experience has shown that peat used as cover can suffer from significant drying and oxidation, and that peat redeposited at depth can lose structure and create a hazard when the stability of the material deteriorates. This creates a risk to people who may enter such areas or through the possibility of peat slide and we are aware that barbed-wire fencing has been erected around some sites in response to such risks.

1.47 It is therefore essential that the scope for minimising the extraction of peat is explored and alternative options identified that minimise risk in terms of carbon release, human health and environmental impact. Early discussion of proposals with us is essential, and an overall approach of minimisation of peatland disruption should be adopted. If it is proposed to use some excavated peat within borrow pits or bunding then details of the proposals, including depth of peat and how the hydrology of the peat will be maintained, should be outlined in the ES or planning submission.

1.48 Our Energy/Renewable webpage provides links to current best practice guidance on peat survey, excavation and management.

Flood risk

1.49 The site should be assessed for flood risk from all sources in line with Scottish Planning Policy (Paragraphs 254-268). The Flood Maps for Scotland are available to view online and further information and advice can be sought from your local authority technical or engineering services department and from our website.

1.50 If a flood risk is identified then a Flood Risk Assessment should be carried out following the guidance set out in the document Technical flood risk guidance for stakeholders.



13 November 2017

Mr Alan Edgar
South Ayrshire Council
Burns Statue Square
Ayr
KA7 1UT

SCOTTISH WATER
The Bridge
Buchanan Gate Business Park
Cumbernauld Road
Stepps
G33 6FB

By email to: Alan.Edgar@south-ayrshire.gov.uk

EIA@scottishwater.co.uk

Dear Mr Edgar,

EIA Scoping Opinion Consultation for a Possible Energy from Waste Plant, Tarbolton

Thank you for consulting with Scottish Water regarding the above proposed development.

Drinking Water Protected Areas

A review of our records indicates that there are no Scottish Water drinking water catchments or water abstraction sources, which are designated as Drinking Water Protected Areas under the Water Framework Directive, in the area that may be affected by the proposed development.

Scottish Water Assets

The location of Scottish Water assets (including water supply and sewer pipes, water and waste treatment works etc.) should be confirmed through obtaining detailed plans from our Asset Plan Providers. Details of our Asset Plan Providers are included in Annex 1.

All Scottish Water assets potentially affected by the development should be identified, with particular consideration being given to access roads and pipe crossings. If necessary, local Scottish Water personnel may be able to visit the site to offer advice. All of Scottish Water's processes, standards and policies in relation to dealing with asset conflicts must be complied with.

In the event that asset conflicts are identified then early contact should be made with the Scottish Water Asset Impact Team (AIT) at service.relocation@scottishwater.co.uk. All detailed design proposals relating to the protection of Scottish Water's assets should be submitted to the AIT for review and written acceptance. Works should not take place on site without prior written acceptance by Scottish Water.

Annex 1 includes a list of precautions to be taken when working within the vicinity of Scottish Water assets. This list of precautions is not exhaustive but should be taken into account as the development progresses through the planning and development process.

If you have any questions relating to the above, or in relation to the information presented in Annex 1, please do not hesitate to contact me.

Yours sincerely,

Rebecca Williams
Strategic Planner – Environmental Impact Assessment
EIA@scottishwater.co.uk

Annex 1: Precautions to protect drinking water and Scottish Water assets during development activities

General requirements

1. The proposed timing of the works, including planned start and completion dates, should be submitted to Scottish Water in advance of any activities taking place on-site. This information should be submitted to EIA@scottishwater.co.uk.
2. If a connection to the water or waste water network is required, a separate application must be made to the Scottish Water Development Operations Team for permission to connect. It is important to note that the granting of planning consent does not guarantee a connection to Scottish Water assets. The Development Operations Team can be contacted by telephone on **0800 389 0379** or via email at developmentoperations@scottishwater.co.uk.
3. In the event of an incident occurring that could affect Scottish Water we should be notified without delay using the Customer Helpline number **0800 0778 778** and the local contact if known.

Protecting drinking water quality

Regulatory requirements

4. Scottish Water is required to ensure that any activity within a drinking water catchment does not affect the ability of Scottish Water to meet its regulatory requirements.
5. Water Treatment Works are designed to treat the specific parameters of the raw water source they receive (i.e. the specific chemical, biological and other characteristics of natural, untreated water). If the characteristics of the raw water change or deteriorate, it can affect the ability of the works to supply drinking water to customers at the required standards.
6. The regulations relating to the quality of drinking water supplied by Scottish Water are the Water Supply (Water Quality) (Scotland) Regulations 2001. Quality Standards are derived from the European Drinking Water Directive 98/83/EC.
7. Drinking water catchments feed Scottish Water abstractions which supply water to water treatment works. Under Article 7 of the Water Framework Directive, waters used for the abstraction of drinking water are designated as Drinking Water Protected Areas (DWPA). The objective of the Water Framework Directive is to ensure that no activity results in the deterioration of waters within the DWPA. If an activity falls within a DWPA or drinking water catchment, it is essential that water quality and quantity are protected

Specific precautions for drinking water protection

8. A detailed, site specific Construction Method Statement including e.g. Construction Environmental Management Plan, Risk Assessment, Pollution Prevention and Contingency Plan must be submitted to Scottish Water at least three months prior to the works commencing. This should be agreed with Scottish Water prior to any operations taking place. Any other associated documents (e.g. Drainage Plan, Peat Management Plan etc.) should also be submitted and agreed with Scottish Water at least three months prior to works commencing. In the first instance, this information should be supplied to EIA@scottishwater.co.uk.
9. Where possible, infrastructure and activities should be located outside of the drinking water catchment. If this can be demonstrated to be impracticable then all infrastructure and activities should be located 50m from any watercourse where possible, and a minimum of 10m distant where 50m can be demonstrated to be undeliverable. This does not apply to infrastructure or activities associated with the watercourse, for example, surface water discharge points, watercourse crossings, etc.
10. Any potential effect on the hydrology of the area resulting from the construction and operation of the proposed development should be assessed and the findings presented in the Environmental Statement or environmental appraisal accompanying the planning application. This should include consideration of natural drainage patterns, base flows/volume, retention/run-off rates and potential changes to water quantity. Any required mitigation measures and proposed monitoring should also be detailed in the Environmental Statement or environmental appraisal accompanying the planning application.
11. When constructing roads, drainage ditches and trenches, drainage should not be directed into adjacent catchments but retained within the existing catchment.
12. Any potential pollution risk which could affect water quality should be considered and mitigation measures implemented to prevent deterioration in water quality and pollution incidents. This includes sediment run-off, soil or peat erosion, management of chemicals and oils, etc. (see also point 16 below). This should be considered for operations at all stages of development including pre- and post-construction.

13. Mitigation measures to prevent pollution to watercourses should be outlined in the Environmental Statement or environmental appraisal accompanying the planning application, and adopted in the Construction Method Statement/Construction Environmental Management Plan prior to work starting onsite. Any measures implemented should be regularly checked, maintained and improved if pollution occurs.
14. Watercourses that feed into any watercourses or reservoirs that Scottish Water abstracts from should be considered when developing new road or access infrastructure. Any crossing of these watercourses should be kept to a minimum. Pollution prevention measures should be put in place at each crossing point and silt traps, or equivalent, should be installed at regular intervals to minimise the risk from pollution.
15. Once constructed, site roads and access routes should be regularly maintained to ensure minimal erosion, and hence run-off and pollution, from the road surface. Site roads should be constructed from inert, non-metalliferous material, with low erodibility and low sulphide content.
16. No refuelling or storage of fuel or hazardous materials should take place within the drinking water catchment area. If this can be demonstrated to be impracticable, then the appropriate Scottish Environment Protection Agency (SEPA) Pollution Prevention Guidelines (PPG 2: Above ground oil storage, PPG 6: Working and Construction and Demolition Sites, PPG 8: Safe storage and disposal of fuel oils, PPG 21: Pollution incident response planning and PPG 22: Incident response – dealing with spills) should be followed. Where possible, 50m buffers should be applied to all surface watercourses, groundwater borehole abstraction points and springs. Oil storage should be in accordance with The Water Environment (Oil Storage) Regulations (Scotland) 2006. There should be dedicated oil storage areas created. Spill kits should be located within all vehicles, plant and high risk areas.
17. Waste storage, concrete preparation and all washout areas should not be within the drinking water catchment area. If this can be demonstrated to be impracticable then this should be in dedicated areas 50m from a watercourse where possible and should be designed to be contained and to prevent escape of materials/run-off to the environment.
18. Welfare/waste water facilities should preferably be located outside the drinking water catchment. If not practicable, then portable toilets should be used and waste disposed of off-site. Alternatively secondary treatment and soakaways should be used and, if required, a sampling chamber installed and sampling programme agreed. The proposed method of managing welfare and waste water facilities should be detailed in the Environmental Statement or environmental appraisal accompanying the planning application. If sampling is required, Scottish Water should be contacted via EIA@scottishwater.co.uk in the first instance.
19. Any proposed abstractions for activities such as welfare facilities or cement batching plants should be detailed in the Environmental Statement or environmental appraisal accompanying the planning application.
20. Induction training should be given to all personnel on-site and should include Scottish Water site sensitivities in relation to drinking water catchments and assets (see below), as well as spill response as outlined in PPG 22: Dealing with spills.
21. Construction and Environmental Management Plans, Pollution Prevention and Contingency Plan and associated documents should include the Scottish Water Customer Helpline Number **0800 0778 778** and the local contact details.

Protecting drinking water in peatland areas

22. When peat is present within the proposed area of activity the Environmental Statement or environmental appraisal accompanying the planning application should include an assessment on the potential release of colour and dissolved organic carbon quality as a result of changes to hydrology and/or physical disturbance. This should cover the construction and post construction phases.
23. Excavations and ground disturbance in areas of deep peat should be avoided. Deep peat is considered to be peat greater than 0.5m deep.
24. The natural hydrology within peat should be maintained and/or restored. Any necessary measures to maintain natural drainage of peat and sub-surface hydrology, such as tailored drain spacing on access tracks, should be implemented as part of the design of the development.
25. Scottish Water requests that, where possible, access tracks in the drinking water catchment are constructed as floating tracks with adequate provision for maintaining existing drainage patterns.
26. Exposed soils and peat can release sediment, colour and dissolved organic carbon. The use of geotextiles, turf replacement and/or reseeded, should be undertaken as soon as possible.
27. Restoration of any degraded peat should be considered for areas within the drinking water catchment.

Protecting drinking water due to forestry activity

28. An assessment of any forestry activity, including felling, planting or other activity, likely to affect the drinking water catchment should be included in the Environmental Statement or environmental appraisal accompanying the planning application. Any specific mitigation measures should be identified and incorporated into the Construction Environmental Management Plan for the site prior to works commencing.
29. The Environmental Statement or environmental appraisal accompanying the planning application should include details on the harvesting/clearance process for any felling/woodland removal. The least disturbing method/s should be selected where possible.
30. Any historic drains and ditches within the site boundary that discharge directly to a watercourse in the drinking water catchment, these should be blocked and slowly discharged to a buffer area in line with current Forestry Commission Forest and Water Guidelines. Where possible, this should be undertaken in advance of any work being carried out on site, to provide protection for watercourses during site activities.

Monitoring requirements to protect drinking water quality

31. During construction, a programme of daily visual inspection of the watercourses, flow conditions (i.e. high, medium, low, or no flow), prevailing weather and any other pertinent observations, will be required to be implemented. The results should be recorded and the information submitted to Scottish Water (i.e. in a monthly progress report). This should be undertaken when water quality samples are taken. In the first instance proposals for monitoring should be provided to EIA@scottishwater.co.uk.
32. Depending on the vulnerability of the public water supply, Scottish Water may request that a water sampling programme shall be established and agreed with Scottish Water. This should assess the baseline water quality for a minimum of one year prior to any activities commencing on-site where possible, including ground investigations and any felling activities, to allow an accurate understanding of baseline conditions at the site. Water sampling should continue during construction and then post-construction for a minimum of one year. Following completion of one year of sampling post-construction, this should be reviewed to determine whether this should continue for a further agreed period. The parameters, frequency and sampling locations will also need to be agreed with Scottish Water. This monitoring will establish if any decline in water quality can be attributed to the development. It may also be necessary to establish trigger levels to determine when any potential issues should be reported to Scottish Water.
33. The appointed Contractor/Site Foreman or Ecological or Environmental Clerk of Works should have relevant knowledge and experience to provide advice and monitor compliance with measures for the protection of water quality in relation to abstractions for water supply.
34. Depending on the vulnerability of the public water supply, Scottish Water may request that a dedicated Environmental Manager be appointed and present on-site to assess and monitor any effects caused by the development.

Guidance documents

35. Please ensure that appropriate Guidance Documents are followed:
 - Floating Roads on Peat. Forestry Civil Engineering and SNH. (August 2010).
 - Planning Advice Note 61: Planning and Sustainable Urban Drainage Systems. Scottish Government (2001)
 - Planning Advice Note 79: Water and Drainage. Scottish Government (2007).
 - Water Assessment and Drainage Guide, SUDS Working Party (2016).
 - Sewers for Scotland 3rd Edition, Scottish Water (2015)
 - Water for Scotland 3rd Edition, Scottish Water (2015)..
 - Forests and water UK Forestry Standard Guidelines, 5th Edition. Forestry Commission (2011).
 - General Binding Rules under the Controlled Activities Regulations (see The Water Environment (Controlled Activities) Scotland Regulations (as amended) A Practical Guide, Version 7.2, SEPA (March 2015)).
 - SEPA Pollution Prevention Guidance (<http://www.sepa.org.uk/regulations/water/guidance/>).

Protecting Scottish Water assets

36. If an activity associated with a development proposal is located within close proximity to Scottish Water assets, including water and waste water pipe infrastructure, treatment works and reservoirs etc., it is essential that these assets are protected from damage. To this end, the developer will be required to comply with Scottish Water's current process, guidance, standards and policies in relation to such matters.
37. Copies of Scottish Water's relevant record drawings can be obtained from the undernoted Asset Plan Providers. This is distinct from the right to seek access to and inspect apparatus plans at Scottish Waters area offices, for which no charge is applied.

Site Investigation Services (UK) Ltd

Tel: 0333 123 1223
Email: sw@sisplan.co.uk
www.sisplan.co.uk

National One-Call

Tel: 0844 800 9957
Email: swplans@national-one-call.co.uk
www.national-one-call.co.uk/swplans

Cornerstone Projects Ltd

Tel: 0151 632 5142
Email: enquiries@cornerstoneprojects.co.uk
<http://www.cornerstoneprojects.co.uk/index.php/scottishwaterplans>

38. It should be noted that the site plans obtained via the Asset Plan providers are indicative and their accuracy cannot be relied upon. It is therefore recommended that the developer contacts the **Scottish Water Asset Impact Team** at service.relocation@scottishwater.co.uk for further advice if assets are shown to be located in the vicinity of the proposed development, and where the exact location and the nature of the infrastructure shown could be a key consideration for the proposed development. An appropriate site investigation may be required to confirm the actual position of assets in the ground. Scottish Water will not be liable for any loss, damage or costs caused by relying upon plans or from carrying out any such site investigation.
39. Prior to any activity commencing, all known Scottish Water assets should be identified, located and marked-out.
40. Scottish Water expects method statements, safe systems of work and risk assessments to be prepared and submitted in advance to Scottish Water for formal review and acceptance. These documents shall consider and outline in detail how existing Scottish Water assets are to be protected and/or managed for the duration of any construction works and during operation of the development if relevant. These documents must be submitted to Scottish Water's Asset Impact team for formal prior written acceptance.
41. The developer shall obtain written acceptance from Scottish Water's Asset Impact Team where any site activities are intended to take place in the vicinity of Scottish Water's assets. The Asset Impact Team can advise on any potential risk mitigation measures that may be required.
42. Scottish Water and its representatives shall be allowed access to Scottish Water assets at all times for inspection, maintenance and repair. This will also ensure that the Scottish Water assets are protected and that any Scottish Water requirements are being observed.
43. Any obstruction or hindrance of access to Scottish Water assets should be avoided. The prompt and efficient use and manipulation of valves, hydrants, meters or other apparatus is required at all times. There should also be no interference with the free discharge from water main scours or sewer overflows.
44. In the event of an incident occurring that could affect Scottish Water, including any damage to assets, Scottish Water should be notified without delay, using the Customer Helpline number **0800 0778 778**, and the local contact if known. Scottish Water apparatus should not be interfered with or operated by anyone other than Scottish Water personnel.
45. The 'offset distance' is the distance between any Scottish Water asset and adjacent properties and structures. Scottish Water reserves the right to ask for an offset distance in accordance with its own current policy and standards and to suit specific circumstances. The details of this requirement should be confirmed with Scottish Water as an early part of the design process.
46. Stationary plant, equipment, scaffolding, construction or excavated material, etc. should not be placed over, or close to, any Scottish Water assets without the prior written consent of Scottish Water which may be withheld depending on circumstances on-site.

47. Special care should be taken to avoid the burying of Scottish Water assets or the obstruction of sewers or manholes with fill or other material. Arrangements for altering the level of any chambers should be agreed in advance with Scottish Water and these should be constructed in accordance with Scottish Water requirements. The cost of any work to Scottish Water assets will be met by the project developer.
48. Excavation works (e.g. of wind turbine foundations) should not be carried out in the proximity of a water or waste water main without due notice having been given to Scottish Water and prior written acceptance obtained. The developer will comply fully with any Scottish Water specific site requirements.
49. Any tree planting associated with the development (e.g. compensatory planting or screening etc.) should be undertaken in line with Water for Scotland 3rd Edition (April 2015) to ensure that Scottish Water assets are not put at risk by future growth of tree roots.
50. Vibration in close proximity to Scottish Water pipelines or ancillary apparatus should be managed in accordance with British Standard 5228-1:2009 (Code of practice for noise and vibration control on construction and open sites). The predicted levels of vibration should be agreed in advance with Scottish Water as part of the risk assessment and method statement and agreed vibration monitoring arrangements will be required.
51. The developer will consider the possibility of increased loading on Scottish Water apparatus and measures will be taken to eliminate or mitigate increased loading on assets. Care should be taken to identify any assets which may be crossed by vehicles on the access route to the site and crossing points will be engineered to the requirements of Scottish Water. Any pipe crossing proposals are subject to prior written acceptance by Scottish Water.
52. Scottish Water will not accept liability for any costs incurred in fulfilling any of the above requirements during the development planning, construction or operational phases, either by the developer, the developer's associates, contractors or any other person or organisation involved in the project.
53. If the developer damages any Scottish Water asset they will be held liable for any costs resulting from this.
54. Scottish Water may require costs associated with the development to be reimbursed by the developer or the developer's agents.



HISTORIC
ENVIRONMENT
SCOTLAND

ÀRAINNEACHD
EACHDRAIDHEIL
ALBA

By email to: Alan.Edgar@south-ayrshire.gov.uk

South Ayrshire Council
Planning Development
Burns House
Burns Statue Square
Ayr
KA7 1UT

Longmore House
Salisbury Place
Edinburgh
EH9 1SH

Enquiry Line: 0131-668-8716
HMC consultations@hes.scot

Our ref: AMN/16/SQ
Our case ID: 300022824
Your ref: Scoping Opinions
16 November 2017

Dear Mr Edgar

[The Town and Country Planning \(Environmental Impact Assessment\) \(Scotland\) Regulations 2017](#)
[Tarbolton Moss Landfill Extension](#)
[Request for a Screening and Scoping Opinion](#)

Thank you for your consultation which we received on 25 October 2017 about the above scoping report. We have reviewed the details in terms of our historic environment interests. This covers world heritage sites, scheduled monuments and their settings, category A-listed buildings and their settings, inventory gardens and designed landscapes, inventory battlefields and historic marine protected areas (HMPAs).

Your Council's archaeological and cultural heritage advisors will also be able to offer advice on the scope of the cultural heritage assessment. This may include heritage assets not covered by our interests, such as unscheduled archaeology, and category B- and C-listed buildings.

Proposed Development

I understand that the proposed development comprises an extension to existing landfill operations at the Tarbolton Moss Landfill site, Mauchline. The site would consist of ca. 15ha of extended landfill located to the east of the existing operational site.

Request for advice on a screening opinion

We note the approach to the screening and scoping study which is set out in chapter 4 of the screening and scoping report. We have no comments to make on the need or otherwise for an Environmental Impact Assessment (EIA) for this proposed development. However, it is unclear to us whether this project will have a significant effect on the environment from the information included within the screening and scoping report. On

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Scottish Charity No. **SC045925**
VAT No. **GB 221 8680 15**

this basis, we agree that impacts on the historic environment would be a relevant matter should you determine that EIA is required.

Scope of assessment

We note the intention to include archaeology and cultural heritage within the scope of an EIA and agree with this approach. We are broadly content with the method of assessment described in section 5.3.2 of the screening and scoping report although we would note that any impacts on setting should be considered as direct (i.e. as a direct result of the proposed development) rather than indirect. We welcome reference to the use of our Managing Change guidance within the assessment.

We hope this is helpful. Please contact us if you have any questions about this response. The officer managing this case is Adele Shaw and they can be contacted by phone on 0131 668 8758 or by email on adele.shaw@hes.scot.

Yours faithfully

Historic Environment Scotland

South Ayrshire Council – Environmental Health Service

Hi Alan,

I've had a look through the scoping report and the approach to **noise and air quality** is exactly in line with what EH is requiring, it looks to very robust and appears to me it is covering all the bases.

The only comment I would make is when baseline background measurements are made at potential noise-sensitive receptors, if applicable, due to the high amount of rainfall we have been having, if there are any streams/burns in the locale in spate, due consideration should be taken to ensure these do not provide a higher than normal background reading.

South Ayrshire Council – Sustainable Development

Hi Alan,

Further to the submitted: documents regarding the proposed Waste to Energy Facility at Ayrshire Environmental Park, Mauchline, I can advise as follows.

The identified: Landscape and Visual Amenity topic as mentioned under section 5.2 in the submitted EIA Scoping Report, is still to be carried out. The assessment is proposed to be prepared in accordance with the Guidelines for Landscape and Visual Impact Assessment in order to identify effects of the proposals on the landscape and outline mitigation measures that could be implemented.

I have no objections to the proposed.

Kind regards,
Mira