

Our ref: PCS/122813
Your ref: P121353

Lucy Greene
Aberdeen City Council
Planning and Sustainable Development
Business Hub 4, Marischal College
Broad Street
Aberdeen
AB10 1AB

If telephoning ask for:
Rebecca Raine

16 October 2012

By email only to: lgreene@aberdeencity.gov.uk

Dear Ms Greene

Scoping consultation
EIA Scoping Report RE: Proposed urban extension at Grandhome (The site is identified as an Opportunity Site (OP12) in the Aberdeen City Local Development Plan - Grandhome, Aberdeen

Thank you for consulting SEPA on the scoping opinion for the above development proposal by way of your e-consultation which SEPA received on 9 October 2012. We would welcome meeting with the applicant at an early stage to discuss any of the issues raised in this letter. Please note that all of the issues below should be addressed in the Environmental Statement (ES), but 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.

1. Flood risk

- 1.1 The site should be assessed for flood risk from all sources in line with Scottish Planning Policy (Paragraphs 196-211). Our [Indicative River & Coastal Flood Map \(Scotland\)](#) is 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](#).
- 1.2 As outlined in our response letter dated 14 December 2010 (our ref: PCS/110084) to the Aberdeen City Local Plan, the Grandhome site was identified as a site which was at risk of flooding, and that a flood risk assessment will be required to accompany any future development proposals for this site.
- 1.3 SEPA have also provided pre-planning advice on the provisional Flood Risk Assessment in a letter dated 27 March 2012, (our ref: PCS/119324), however advised that at the detailed planning stage, a more detailed Flood Risk Assessment may be required to support the development, outlining the watercourses (Danestone Burn and Woodland Burn) within the site. Section 7.11 of the Scoping report informs that a Flood Risk Assessment will be carried out but further states that no hydraulic modelling will be carried out. It is agreed that hydraulic modelling may not be required but this should be determined on receipt of a site



Chairman
David Sigsworth

Chief Executive
James Curran

Aberdeen Office
Inverdee House, Baxter Street
Torry, Aberdeen AB11 9QA
tel 01224 266600 fax 01224 896657
www.sepa.org.uk

plan and Flood Risk Assessment.

- 1.4 A full Flood Risk Assessment should be carried out following the guidance set out in the Annex to the [SEPA-Planning Authority flood risk protocol](#). Our [Technical flood risk guidance for stakeholders](#) outlines the information we require to be submitted as part of a Flood Risk Assessment, and methodologies that may be appropriate for hydrological and hydraulic modelling.

2. Waste water drainage

- 2.1 Details of the waste water provision for your development should be provided in the ES or planning submission, including consideration of options for waste water treatment facilities. Drainage is a material planning consideration and will be assessed as part of your planning application in line with [PAN 79 Water and Drainage](#) and Policy NE6 – Flooding and Drainage in the Aberdeen City Local Plan. Where there is a public sewerage system, waste water drainage from development within and close to the settlement envelope should be directed to that system. If the system has insufficient capacity, then early dialogue with Scottish Water will be required to determine if works are planned to overcome this problem, or what developer pro-rata contributions will be necessary to remove the constraint.
- 2.2 If there is no or limited public sewerage infrastructure, given the scale of development we would still expect the development of strategic infrastructure to adoptable standards. Contact should be made with Scottish Water to determine the standards required to ensure adoption of new infrastructure. Please note that we are not likely to support proposals for private foul drainage systems for significant development (e.g. more than 25 houses) where development of public infrastructure is the sustainable long-term solution. An interim solution may be acceptable provided an appropriate upgrade has been agreed with Scottish Water and there will be no unacceptable impact on the water environment. For further guidance please refer to our [Policy and Supporting Guidance on Provision of Waste Water Drainage in Settlements](#)

3. Surface water drainage

- 3.1 The treatment of surface water runoff by sustainable drainage systems (SUDS) is a [legal requirement](#) for most forms of development; however the location, design and type of SUDS are largely controlled through planning. We encourage surface water runoff from all developments to be treated by SUDS in line with [Scottish Planning Policy](#) (Paragraph 209), [PAN 61 Planning and Sustainable Urban Drainage Systems](#), [PAN 79 Water and Drainage](#) and [Policy NE6 – Flooding and Drainage in the Aberdeen City Local Plan. SUDS help to protect water quality, reduce potential for flood risk and release capacity in the public sewerage network where the alternative is use of combined systems. Discharges to combined sewers should be avoided to free up capacity for waste water discharges.
- 3.2 It is important to ensure that adequate space to accommodate SUDS is incorporated within the site layout. Consideration should be given to this matter early in the planning process when proposals are at their most fluid and modifications to layout can be easily made with less expense to the developer. Each individual type of SUDS facility, such as a filter drain, detention basin, permeable paving or swale, provides one level of surface water treatment. The level of SUDS required is dependant on the nature of the proposed development, for example residential or non residential, the size of development, and the environmental risk posed by the development which is principally determined by the available dilution of the receiving waterbody. Best practice requires the following levels of treatment:

- Residential developments of more than 50 houses and retail/ commercial/ business parks with car parks of more than 50 spaces require two levels of treatment for all hardstanding areas including roads. An exception is run-off from roofs which requires only one level of treatment. We recommend, as best practice, the second level of treatment to be a basin or pond designed in accordance with Sewers for Scotland Second Edition. Please also refer to section 3.3 below;
- All roads schemes typically require two levels of treatment, except for residential developments of 50 houses or less and retail/commercial/business parks with car parks of 50 spaces or less. For technical guidance on SUDS techniques and treatment for roads please refer to the [SUDS for Roads](#) manual.

3.3 For all developments, run-off from areas subject to particularly high pollution risk (e.g. yard areas, service bays, fuelling areas, pressure washing areas, oil or chemical storage, handling and delivery areas) should be minimised and directed to the foul sewer. Where run-off from high risk areas cannot be directed to the foul sewer we can, on request, provide further site specific advice on what would be the best environmental solution.

3.4 The SUDS [treatment train](#) should be followed which uses a logical sequence of SUDS facilities in series allowing run-off to pass through several different SUDS before reaching the receiving waterbody. Further guidance on the design of SUDS systems and appropriate levels of treatment can be found in the CIRIA C697 manual entitled [The SUDS Manual](#). Advice can also be found in the SEPA Guidance Note [Planning advice on sustainable drainage systems \(SUDS\)](#). Please refer to the [SUDS section](#) of our website for details of regulatory requirements for surface water and SUDS. Comments should be sought from the local authority roads department and the local authority flood prevention unit on the acceptability of post-development runoff rates for flood control.

3.5 Comments from Scottish Water should be sought where the SUDS proposals would be adopted by them. We encourage the design of SUDS to Sewers for Scotland Second Edition standards and the adoption of SUDS features by Scottish Water as we are of the view that this leads to best standards and maintenance.

3.6 SUDS must be used on all sites, including those with elevated levels of contaminants. SUDS which use infiltration will not be suitable where infiltration is through land containing contaminants which are likely to be mobilised into surface water or groundwater. This can be overcome by restricting infiltration to areas which are not affected by contamination, or constructing SUDS with an impermeable base layer to separate the surface water drainage system from the contaminated area. SUDS which do not use infiltration are still effective at treating and attenuating surface water. Please refer to the advice note on [SUDS and brownfield sites](#) for further information.

4. Pollution prevention and environmental management

4.1 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.

4.2 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. Details of the specific issues that we expect to be addressed are available on the Pollution Prevention and Environmental Management section of our [website](#).

- 4.3 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).
- 4.4 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](#)

5. Engineering activities in the water environment

- 5.1 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. Danestone Burn within site has been realigned and straightened and Woodland Burn also lies within the site. This lies close to the River Don (Dyce to tidal limit) which is currently at moderate status because of alterations to beds and banks.
- 5.2 Engineering activities such as culverts, bridges, watercourse diversions, bank modifications or dams should be avoided unless there is no practicable alternative. Paragraph 211 of SPP 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.
- 5.3 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 and we should be consulted as detailed below.
- 5.4 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.
- 5.5 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.

6. Disruption to wetlands including peatlands

- 6.1 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
- 6.2 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.
- 6.3 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.
- 6.4 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.
- 6.5 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.

7. Disturbance and re-use of excavated peat

- 7.1 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.

- 7.2 By adopting an approach of minimising disruption to peatland, the volume of excavated peat can be minimised and the commonly experienced difficulties in dealing with surplus peat reduced. The generation of surplus peat is a difficult area which needs to be addressed from the outset given the limited scope for re-use.
- 7.3 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.
- 7.4 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.
- 7.5 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.
- 7.6 Our [Planning and Energy webpage](#) provides links to current best practice guidance on peat survey, excavation and management.

8. Existing groundwater abstractions

- 8.1 Roads, foundations and other construction works associated with large scale developments can disrupt groundwater flow and impact on groundwater abstractions. To address this risk a list of groundwater abstractions both within and outwith the site boundary, within a radius of i) 100 m from roads, tracks and trenches and ii) 250 m from borrow pits and foundations) should be provided.
- 8.2 If groundwater abstractions are identified within the 100 m radius of roads, tracks and trenches or 250 m radius from borrow pits and foundations, then either the applicant should ensure that the route or location of engineering operations avoid this buffer area or further information and investigations will be required to show that impacts on abstractions are acceptable. Further details can be found in Appendix 2 (which is also applicable to other types of developments) of our [Planning guidance on windfarm developments](#).

9. Water abstraction

- 9.1 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 below should be included. Whilst we regulate water abstractions under The Water Environment (Controlled Activities) (Scotland) Regulations 2011, we require the following information 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.

9.2 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.

10. Space for waste management provision within site layout

10.1 In accordance with Scottish Planning Policy and Policy R3 – New Waste Management Facilities in the Aberdeen City Local Plan, space for collection, segregation, storage and possibly treatment of waste (e.g. individual and/or communal bin stores, composting facilities, and waste treatment facilities) should be allocated within the planning application site layout. Please consult with your local council's waste management team to determine what space requirements are required within the application site layout. Some local authorities have an information sheet setting out space requirements.

11. Borrow pits

11.1 Detailed investigations in relation to the need for and impact of such facilities should be contained in the ES or planning submission. Where borrow pits are proposed, information should be provided regarding their location, size and nature. In particular, details of the proposed depth of the excavation compared to the actual topography and water table should be submitted. In addition details of the proposed restoration profile, proposed drainage and settlement traps, turf and overburden removal and storage for reinstatement should be submitted.

11.2 The impact of such facilities (including dust, blasting and impact on water) should be appraised as part of the overall impact of the scheme. Information should cover, in relation to water; at least the information set out in [Planning Advice Note PAN 50 Controlling the Environmental Effects of Surface Mineral Workings](#) (Paragraph 53). In relation to groundwater, information (Paragraph 52 of PAN 50) only needs to be provided where there is an abstraction or groundwater dependent terrestrial ecosystem within 250 m of the borrow pit. Additional information on groundwater is provided above.

12. Air quality

12.1 The local authority is the responsible authority for local air quality management under the Environment Act 1995, and therefore we recommend that Environmental Health within the local authority be consulted.

12.2 They can advise on the need for this development proposal to be assessed alongside other developments that could contribute to an increase in road traffic. They can also advise on potential impacts such as exacerbation of local air pollution, noise and nuisance issues and cumulative impacts of all development in the local area. Further guidance regarding these issues is provided in NSCA guidance (2006) entitled [Development Control: Planning for Air](#)

[Quality](#).

13. Regulatory advice for the applicant

- 13.1 Details of regulatory requirements and good practice advice for the applicant can be found on our website at www.sepa.org.uk/planning.aspx. 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:

Inverdee House, Baxter Street, Torry, Aberdeen, AB11 9QA; tel: 01224 266600

If you have any queries relating to this letter, please contact me by telephone on 01224 266655 or e-mail at planning.aberdeen@sepa.org.uk

Yours sincerely

Rebecca Raine
Senior Planning Officer
Planning Service

Copy to: Turnberry Planning LTD at info@turnberryuk.com

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](#).