
Reference Number: 08/02245/DET
Applicants Name: Scottish Water
Application Type: Detailed
Application Description: Stabilisation of rock face: erection of Waste Water Treatment Works and ancillary development and alterations to existing access.
Location: Bullwood Quarry, Bullwood Road, Dunoon

(A) THE APPLICATION

(i) Development Requiring Express Planning Permission

- stabilisation of rockface involving blasting and excavation;
- excavation to 2 metres within the quarry floor to create a base for building and tank foundations;
- erection of Waste Water Treatment Works (WWTW) (providing primary and secondary treatment) comprising erection of main works building (green-coloured profiled metal cladding roof and external walls), inlet works structure, odour control plinth with a 19.0 metre high odour control stack, covered Aeration Tanks (7.1 metres high), Final Settlement Tanks (2.5 metres high);
- alterations to access from the A815 Bullwood Road with new access gates leading to a hardstanding tarmac access area with turning areas and access to main plant and buildings;
- a 2.4 metre high security fence across the front of the site set back from the footway and screened;
- earthworks around the Settlement and Aeration Tanks;

(ii) Other specified operations.

- Laying of outfall pipe to below Mean Low Water Spring (details submitted, 'permitted development').

(B) RECOMMENDATION

It is recommended that, following notification to the Scottish Ministers, planning permission be **Granted** subject to the conditions and reasons together with '*notes to the applicant*' set out overleaf.

(C) SUMMARY OF DETERMINING ISSUES AND MATERIAL CONSIDERATIONS

(i) Development Plan Context:

In the adopted Cowal Local Plan, the application site is located between the established linear settlements of Dunoon and Bullwood and located within the Central and East Cowal Local Scenic Area. The former quarry site is covered specifically by policy RUR11 which relates to the former use of Bullwood Quarry.

In the Argyll and Bute Local Plan Post Inquiry Modifications (November 2008), the application site is located outwith the southern boundary of the Dunoon settlement boundary and within an area zoned Countryside Around Settlement.

(ii) Representations:

Three letters of objection have been received with two from the same objectors.

(iii) Consideration of the Need for Discretionary or PAN 41 Hearing:

Given that only three letters of objection have been received, it is not considered necessary to hold an informal hearing.

(iv) Reasoned Justification for a Departure from the Provisions of the Development Plan.

Not applicable.

(v) Is the Proposal a Schedule 1 or 2 EIA development:

Yes.

(vi) Does the Council have an interest in the site:

No.

(vii) Need and Reason for Notification to Scottish Ministers.

Yes. The Town and Country Planning (Notification of applications) (Scotland) Direction requires all EIA developments to be notified to Scottish Ministers

(viii) Has a sustainability Checklist Been Submitted:

No

**Angus J Gilmour
Head of Planning Services
31 March 2009**

Author: Brian Close
Reviewing Officer: David Eaglesham

Date: 13 March 2009
Date: 31 March 2009

NOTE: Committee Members, the applicant, agent and any other interested party should note that the consultation responses and letters of representation referred to in Appendix A, have been summarised and that the full consultation response or letter of representations are available on request. It should also be noted that the associated drawings, application forms, consultations, other correspondence and all letters of representations are available for viewing on the Council web site at www.argyll-bute.gov.uk

CONDITIONS AND REASONS RELATIVE TO APPLICATION 08/02245/DET

1. That the development to which this permission relates must be begun within five years from the date of this permission.

Reason: *in order to comply with Section 58 of the Town and Country Planning (Scotland) Act 1997.*

2. a) No development or any works whatsoever shall take place in advance of an investigation and an assessment, carried out by a competent person, on the ground contamination that shall be undertaken and reported to Planning Authority in consultation with the Public Protection Unit. The assessment shall seek to define, with reference to relevant and current standards, any risks to the development posed by contamination, and make recommendations as to the requirement for any actions necessary to render the site suitable for the proposed residential use. The recommendations shall be agreed in writing with the Planning Authority, in consultation with the Public Protection Service, prior to any development.

b) Where the investigation has indicated that action is necessary to render the site suitable for the proposed use, a competent person shall devise a remediation plan and such findings shall be reported to the Planning Authority, in consultation with the Public Protection Service. The remediation plan shall be agreed in writing with the Planning Authority, in consultation with the Public Protection Unit prior to the commencement of any site works. The plan should include details of the methodology that will be employed to demonstrate that the site will be rendered suitable for the proposed use; and

c) The remediation works shall be undertaken as detailed within the remediation plan, unless otherwise agreed, in writing, with the Planning Authority, in consultation with the Public Protection Unit, prior to the first use of the treatment works. Upon completion of remediation works a completion certificate shall be issued, by a competent person, certifying that the works identified within the remediation plan have been carried out in accordance with the plan.

Reason: *In the interest of public health and amenity as previous site investigation has concluded that contamination is present that may pose a hazard to the development.*

3. Before development commences, an Environmental Action Plan shall be submitted to and approved in writing by the Planning Authority. This plan shall cover the construction, commissioning and operational phases of the proposed development. It shall address issues such as foul drainage, contamination, the potential for dust, mitigation measures to be adopted and the methods of monitoring and recording matters relating to dust control, all to the satisfaction of the Planning Authority in consultation with the Public Protection Service and with reference to Planning Advice Note 50. The approved Environmental Action Plan shall be implemented commensurate with the start of work on site and thereafter for the lifetime of the proposed works.

Reason: *In the interests of public health and amenity.*

4. Before development commences, a full site specific Construction Method Statement (CMS) shall be submitted to and approved in writing by the Planning Authority in consultation with the Scottish Environment Protection Agency. The CMS shall incorporate detailed pollution avoidance and mitigation measures for all construction elements potentially capable of giving rise to pollution. The CMS shall specifically include:

- i) a list of all activities that have the potential to affect coastal and groundwater, outlining preventative measures to reduce the environmental impact;
- ii) an incident plan outlining actions to be taken in the event of accidental sediment release or chemical spill;
- iii) a water-monitoring plan;
- iv) proposals and mitigation measures for the dewatering before concreting begins and whilst the concrete is being cured;
- v) specific measures to prevent entry of cement materials to the water environment and proposed mitigation related to this; and
- vi) the location and design of the bulk storage of fuel or oils and its subsequent use. Any oil or fuel stores shall have impervious bases and be placed within a secure bund. The use of drip trays

or similar shall also be required. All vehicles and plant shall be regularly inspected, with particular emphasis on hydraulic hoses, for fuel and oil leaks. Oil spill kits shall be maintained on site. Transformer areas shall be bunded and all bunding shall be in accordance with SEPA's guidelines for Above Ground Oil Storage Tanks – PPG2.

The approved Construction Method Statement shall be implemented commensurate with the start of work on site and thereafter for the lifetime of the proposed works.

Reason: *In the interests of public health and amenity and to prevent pollution.*

5. Noise from the Waste Water Treatment Works and ancillary operations (during its construction, commissioning and operation) within the site, including traffic movements shall not result in an increase to ambient background noise levels at the nearest noise sensitive properties at Ardvarney and Ardhalow Gate Lodge. All measurements shall be taken in accordance with BS4142:1997 or an equivalent standard to be agreed in writing with the Planning Authority in consultation with the Public Protection Service.

Before development commences, a detailed Noise Management Plan shall be submitted in writing to the Planning Authority, approved in writing and thereafter implemented in full by Scottish Water for the construction and commissioning periods and during the lifetime of the proposed works. This plan shall include the full details on the measures to be adopted to ensure that and shall include:

- (a) full details of the maximum specific noise levels from equipment at the works which will be necessary to ensure that the predicted noise levels in the environmental impact assessment are met;
- (b) full details of the proposed noise mitigation measures for the site to ensure that the noise level at the façade of Ardvarney at both first floor level and ground floor level is 25dB(A) L_{Ar} (5 minutes) between the hours of 1800 and 0800, and 30dB(A) L_{Ar} (5 minutes) between the hours of 1800 and 0800 together with an assessment that this will be achieved;
- (c) full details of the subjective and objective noise monitoring arrangements including type of monitoring, equipment, locations, frequencies and the competency of monitoring staff;
- (d) a risk assessment of the potential sources of noise, potential problems and contingency measures to be taken in the event of breaches, problem or complaint
- (e) management arrangements for the recording of monitoring work, responding to complaints and incidents at work;
- (f) working arrangements at the site including restrictions in the hours when vehicles can enter the site;
- (g) maximum levels and abatement measures to control the impact of noise and vibration from the blasting activities, including monitoring and liaison arrangements with residents;
- (h) details of the maintenance and servicing arrangements with odour abatement plant and processes within the works; and
- (i) arrangements for reviewing details of this plan in light of operational experiences, proposed changes to the processes (including new equipment, operational procedures etc) and complaints.

Reason: *In the interests of public health and amenity.*

6. Prior to work starting on site, full details of the proposed acoustic barrier adjacent to the dwellinghouse known as Advarney shall be submitted to and approved in writing by the Planning Authority. Thereafter, the barrier shall be installed in its approved form prior to the start of any other construction process on site.

Reason: *In the interests of the amenity of residents at Ardvarney.*

7. Prior to work starting on site, full details of any external lighting to be used within the site or its access point shall be submitted to and approved in writing by the Planning Authority. Such details shall include details of the location, type, angle of direction and wattage of each light which shall be so positioned and angled to prevent any glare or light spillage outwith the site boundary. All lighting shall comply with the Institute of Lighting Engineers Guidance Notes for the Reduction of Light Pollution.

Reason: *In order to avoid the potential of light pollution infringing on surrounding land uses/properties*

8. Notwithstanding the submitted information, construction works within the site shall be restricted to the hours of 0800 to 1900 Monday to Friday and 0800 to 1300 on Saturdays. No working shall take place on Sundays or Bank Holidays, except as otherwise agreed in writing with the Planning Authority. Prior to the start of work on the site, a list of days classed as Bank Holidays in the locality shall be agreed in writing with the Planning Authority.
9. When the waste water treatment works is operational, no vehicles shall enter the site outwith the hours of 0800 to 1800 on any day, except in the case of an emergency.

Reason: *In the interests of protecting adjoining residents from undue disturbance outwith normal working hours.*

10. Prior to work starting on site, full details of the external finishing materials of the following parts of the development shall be submitted to and approved in writing by the Planning Authority:
- the proposed profile sheet cladding to be used on the exterior of the treatment building, including the manufacturer's name, the profile of the cladding, and its British Standard colour number, which shall be for a matt finish dark green or similar;
 - the proposed 19 metre high (34.1m AOD) odour control chimney stack, which shall be a matt finished dark recessive colour or matt finish dark green colour to match the colour of the treatment building; and
 - the proposed primary sludge thickening building, inlet works building and primary sludge pump house, which shall include the manufacturer's name of the type of facing brick to be used together with its colour/BS reference, which should be dark brown, the colour and specification of any roughcast, which shall be a recessed colour to integrate with the rest of the buildings colour(s), the external colour/BS reference number of all doors, which shall be of a dark green matt finish to match the treatment building.

Reason: *In the interests of visual amenity and in order to integrate the proposal with its immediate surroundings and in order to ensure an integrated approach toward the design and finish of the entire works.*

11. Prior to work starting on site, full details of all boundary treatments including the 'anti intruder' weldmesh security fence, shall be submitted to and approved in writing by the Planning Authority.

Reason: *In the interests of visual amenity and in order to integrate the proposal with its immediate surroundings and in order to ensure an integrated approach toward the design and finish of the entire works.*

12. Prior to work starting on site, a tree survey shall be carried out in and around the site identifying those trees to be retained and those trees to be felled as a result of the construction process. Full details of the means of protecting the existing trees around the application site shall be submitted to and approved in writing by the Planning Authority. Such details shall include protection requirements in accordance with the provision of BS 5837 "Trees in relation to construction".

Reason : *In the interests of visual amenity and in order to ensure that the proposal will have an effective and maintained landscaping screen, including during the construction period, and to avoid any damaging operations to existing or proposed landscaping areas/features. The existing, proposed and continual maintenance of the areas of proposed landscaping is considered a key component in ensuring that the works can be accommodated into the landscape and effectively integrated/screened.*

13. a) Prior to work starting on site, full details of landscaping and treeplanting/shrub planting (including any trees to be felled and shrubs to be cleared) shall be submitted to and approved in writing by the Planning Authority. Such details shall include:
- a minimum 5.0 metre wide tree planting belt along the entire eastern boundary of the site that shall retain the existing birch trees where possible;
 - landscaping of all earth bunded slopes with grass and shrub planting;
 - landscaping works for the access road embankments;
 - other tree planting, shrub planting on remainder of site as may be agreed with the Planning Authority; and
 - the number, location, size and type of species to be used in each of the locations identified above, which shall include native species reflecting those found on surrounding wooded slopes.

b) The landscaping proposals required above shall be fully implemented within one planting season of work starting on site, unless otherwise agreed in writing with the Planning Authority. Any species lost for any reason including failure to root, vandalism, weather damage or for any other reason shall be replaced within one growing season with a similar species.

c) Full details of the proposed maintenance arrangements for the landscaping works required above shall be submitted to and approved in writing by the Planning Authority as part of the landscaped plan required under condition 11a). Such details shall include a maintenance period of 10 years together with the measures to be employed for identifying and replacing dying or dead species.

Reason : *In the interests of visual amenity and in order to ensure that the proposal will have an effective and maintained landscaping screen, including during the construction period, and to avoid any damaging operations to existing or proposed landscaping areas/features. The existing, proposed and continual maintenance of the areas of proposed landscaping is considered a key component in ensuring that the works can be accommodated into the landscape and effectively integrated/screened.*

14. Prior to the start of work on site, details of the following matters shall be submitted for the consideration and written approval of the Planning Authority, in consultation with Scottish Natural Heritage. Once approved the details shall be implemented in their approved form as part of the development:

- a) A method statement demonstrating that all potential impacts on wading bird species using intertidal areas of the coastline area for feeding and roosting would be minimised. The method statement shall indicate who the stratigraphy of the sediments would be preserved;
- b) A method statement demonstrating how the construction works would avoid impacts on any breeding birds in the quarry. This statement shall pay particular attention to :

- restricting access to sensitive areas of the site during the breeding season;
- the timing of construction works to avoid the breeding season, if possible;
- avoiding the removal of known nest sites of cliff nesting species; and
- the creation of new nesting ledges, which shall be implemented as part of the stabilisation of the rockface.

Reason: *To minimise the impact of the development of the site on bird species.*

15. Prior to the felling of any trees, trees shall be surveyed for the presence of bats by a suitably qualified and licensed ecologist and details shall be submitted for the consideration and written approval of the Planning Authority, in consultation with Scottish Natural Heritage. Once approved, the details shall be implemented in their approved form as part of the development. If bats are found during the course of the works, all work must stop and SNH contacted for advice on if and how to proceed.

Reason: *To minimise the impact of the development of the site on bat species.*

16. Prior to the commencement of any works to clear the site, full details of the method of the treatment and subsequent removal of the large areas of Japanese Knotweed (*Fallopia japonica*) on the application site, shall be submitted to and approved in writing by the Planning Authority. All removal and clearance operations shall be carried out prior to the start of construction, in accordance with such agreed course of action, unless consent for variation is obtained in writing from the Planning Authority.

Reason: *To prevent the spread of Japanese Knotweed outwith the site.*

16. Prior to work starting on site, full details of the proposed embankments around the proposed works platform shall be submitted to and approved in writing by the Planning Authority. Such details shall include a minimum of 4 evenly spaced cross sections through each of the embankments to show their height and finished gradient and irregular profile.

Reason: *In the interest of visual amenity and in order to integrate the proposed embankments with their surroundings.*

17. Prior to any works starting on site, full details of the following matters shall be submitted to and approved in writing by the Planning Authority:
- the geology of the site and the intended method of excavation and construction;
 - proposed vibration levels and controls, including the means to monitor and record the effect of vibration on adjoining premises;
 - the position and type of monitoring equipment to be used;
 - the agreed means of recording the vibration levels from the site;
 - the time intervals during construction when recorded vibration level information shall be submitted to the Public Protection Service; and
 - a management plan indicating the procedure for road closures when blasting takes place, incorporating the requirements of emergency vehicles.

If, during any part of the construction phase, the monitored levels exceed those agreed in writing with the Planning Authority as required in this condition, all excavation work on site shall stop with immediate effect and shall not restart until an alternative form of excavation is agreed in writing with the Planning Authority. Levels shall be measured and determined having regard to BS 6472:2008 and BS7385:1993 Part 2.

Reason: *In order to prevent adjoining properties/land uses being adversely affected by vibration during the course of construction works and to provide reassurance to the residents nearest the site.*

18. Prior to the start of work on site, details of the procedure for undertaking pre- and post-blasting structural surveys on all residential properties within 200 metres of the site boundary shall be agreed in writing with the Planning Authority. Thereafter, the surveys shall be undertaken in accordance with the agreed details.

Reason: *In order to prevent adjoining properties/land uses being adversely affected by vibration during the course of construction works and to provide reassurance to the residents nearest the site.*

19. Blasting operations shall only be undertaken between the hours of 1000 and 1600 hours Monday to Friday, provided that 24 hour notice has been provided to the adjacent residents and the Planning Authority.

Reason: *In order to prevent adjoining properties/land uses being adversely affected by vibration during the course of construction works and to provide reassurance to the residents nearest the site.*

20. No offensive odours from the waste water treatment works shall be detectable at the boundary of the site, as perceived by an officer authorised by the Planning Authority. This excludes the site boundary at the quarry face elevation.

Prior to construction of the waste water treatment works, an Odour Management Plan shall be submitted to in writing and approved by the Planning Authority, and thereafter implemented in full by the site operator during the commissioning period and the lifetime of the proposed works. This Odour Management Plan shall meet the requirements of the Scottish Government Code of Practice on Sewerage Nuisance and requires that odour emissions from the odour control unit stack shall comply with the point above. The odour management plan shall include the following:

- full details of the odour abatement measures on site;
- the provision of continuous stack emission monitoring for hydrogen sulphide and details of the monitoring proposals including concentration trigger values;
- full details of the monitoring arrangements for the release of odour from the whole works including abatement controls and local enclosures, the Odour Control Unit and boundary assessments;
- a full risk assessment of all potential sources of odour, details of their mitigation measures and the actions to be taken in the event of a perceived release of odour or problem (septicity at the works, failure in the Odour Control Unit etc);
- arrangement for the storage and removal of sludge from the site, including odour mitigation measures and arrangements for managing the emptying of sludge into the tankers;
- the training and assessment of staff undertaking monitoring work;
- maintaining accurate records of monitoring and incidents where there have been releases of odour, breaches of the planning conditions or complaints. These records shall be kept for a period to be agreed with the Planning Authority and made available to any authorised Officer of the Council.

- (h) confirmation that the works will not accept sludge to the works from other septic tanks or sewage works; and
- (i) details of the maintenance and servicing arrangements with odour abatement plant and processes within the works.

Reason: *In order to ensure that adequate odour control levels are provided for in the operations and in order to ensure effective monitoring of the odour control levels in order to avoid unacceptable levels of odours emission.*

21. Prior to work starting on site, full details of the proposed access and bellmouth with the A815 Road, including its surface treatment, shall be submitted to and approved in writing by the Planning Authority. Such details shall include the following matters and shall be implemented as part of the development of the site:
- a) the position of the entrance gates, which must be located a minimum of 16 metres from the edge of the road to allow bulk tankers to pull safely off the carriageway before reaching the gates;
 - b) the access width at the gates, which shall be 6 metres;
 - c) the access radii, which shall be 10.5 metres;
 - d) dropped kerbs, which shall be provided on the access radii to ensure safe passage of pedestrians along the footway;
 - e) the gradient for the first 12 metres behind the footway, must not exceed 4%;
 - f) the gradient for the remainder of the site access, which must not exceed 8%; and
 - g) 3 parking spaces provided and defined within the development.

Reason: *In the interests of road and pedestrian safety.*

22. Prior to work starting on site, the following matters shall be approved and/or implemented as applicable :
- a) visibility splays of 120 metres x 2.5 metres in both directions measured from the centre line of the proposed access shall be cleared and thereafter maintained clear of all obstructions over 1.0 metre in height measured from the nearside surfaced area of the metalled portion of the public road;
 - b) signs to identify "Heavy Goods Vehicles turning" shall be erected at locations 60 metres on either side of the entrance. The design and location of the signs shall be agreed in writing with the Planning Authority;
 - c) details of a vehicle wash-down area to prevent mud and other materials being dragged out of the site and onto the road and footpath. Once approved the washdown area shall be retained and used by all vehicles leaving the site for the duration of the entire construction period; and
 - d) the submission of a management plan to ensure that all vehicles involved with the construction and management of the development, including site workers' vehicles, are not parked on the A815.

Reason: *In the interests of road and pedestrian safety.*

23. During the commissioning of the plant, the applicant shall provide detailed information to the Planning Authority to demonstrate compliance with conditions 2 (contamination), 3 (Environmental Action Plan) and 20 (odours) above. This information shall include detailed assessments of odour and noise emissions from the specific equipment and the works in general.

Reason: *In order to prevent adjoining properties/land uses being adversely affected during the commissioning of the plant.*

ADVISORY NOTES TO APPLICANT RELATIVE TO APPLICATION 08/022245/DET

- (i) *During the course of this application a representation has been received from Scottish Natural Heritage that advises that bats may be roosting in the woodland surrounding Bullwood Quarry. It is strongly recommended that a survey for the presence of bat roosts or hibernacula be undertaken by an experienced and appropriately licensed surveyor during optimum times and conditions. Both the quarry and surrounding woodland should be included in the survey. A licence is required from the Scottish Executive to disturb any bats found. Details of the legal situation, which applies to bats and other European Protected Species (EPS), are attached to this permission. The applicant/developer is strongly advised to contact Scottish Natural Heritage to discuss this matter fully, please contact Elizabeth Pryor, Area Officer, Cowal and Bute, tel. 01369 705377.*
- (ii) *The applicant is advised by Scottish Natural Heritage (SNH) that the woodland enveloping the quarry is listed on the Ancient Woodland Inventory as 'ancient woodland' (of semi-natural origin). This is a habitat of national importance. SNH recommends full protection of the woodland during the course of construction and operation of the site in line with British Standards 5837:2005 – Trees in relation to Construction. The applicant/developer is strongly advised to contact Scottish Natural Heritage to discuss this matter fully, please contact Elizabeth Pryor, Area Officer, Cowal and Bute, tel. 01369 705377.*
- (iii) *The Area Roads Manager has advised that :*
- a Road Opening Permit (S56) will be required for the access and erection of "HGV" Warning Signs.*
 - a system of surface water drainage to be provided to prevent surface water running on to the footway and carriageway. Consideration should be given to prevent waste or by products from passing on to the footway and carriageway from site. A drainage system including positive surface water drainage measures should be agreed with the Area Roads Manager. The applicant is advised to contact the Area Roads Manager (Mr. Paul Farrell (tel. 01369 708613) directly in this regard.*

The applicant is advised to contact the Area Roads Manager (Mr. Paul Farrell, tel. 01369 708613) directly upon these matters.

- (iv) *The applicant/developer is advised by Scottish Environment Protection Agency that in terms of foul and surface water drainage a Controlled Activities Regulations (CAR) authorisation will be required (please refer to consultation response dated 2nd February 2009 attached to this decision notice for full details and further information).*

The attention of the applicant/developer should be brought to the advice contained in SEPA's guidance note PPG6: Working at Construction and Demolition Sites. This advice should be adhered to at all times during construction. From the commencement of work associated with this planning permission, including site clearance, until its completion, there shall be no burning or disposal of controlled waste on site, or at any other location, unless a Waste Management Licence is in force or a suitable exemption from Waste Management Licensing Regulations 1994 (as amended) has been registered with SEPA.

The applicant/developer is advised to contact SEPA (Alexei Zammit, Planning Unit Northern Region tel. 01224 248338) directly regarding these matters.

APPENDIX A – RELATIVE TO APPLICATION NUMBER: 08/02245/DET

MATERIAL CONSIDERATIONS AND ADVICE

(i) POLICY OVERVIEW AND MATERIAL ADVICE

(a) Argyll and Bute Structure Plan 2002:

Structure Plan objectives include strategic settlement strategies based on development projections that are co-ordinated with infrastructure provision. STRAT SI 1 'Sustainable Development' seeks to maximise opportunities for local community benefit and existing service infrastructure while making efficient use of vacant and/or derelict brownfield land.

Bullwood Quarry is located within Countryside Around Settlement where STRAT DC2 states that in special cases, a locational need or exceptional circumstance may justify a development.

(b) Cowal Local Plan 1993

The application site is covered specifically by policies RUR 9: 'Hard Rock Extraction' and RUR 11: 1981 Minerals Act, that relate to the former use of the site as a quarry. Policies RUR 1: Landscape Quality, RUR 2: Nature Conservation, COM5 'Bad Neighbour Development', BE9 'Layout and Design of Urban Development and PU 1: Local Pollution Problems also apply.

While an area of Ancient Woodland lies to the rear of the site, no trees are directly affected by the proposal. Tree planting, shrub planting and screening is proposed and this will augment existing stands of trees along the perimeter with the A815. Accordingly, it is considered that the proposal is not contrary to the provisions of Policy RUR 2 of the Local Plan.

Under POL COM 5: Bad Neighbour Development, the Council will oppose potential "Bad Neighbour" developments when it is considered that they are likely to adversely affect the amenity of neighbouring properties and land.

Under POL PU 1: Local Pollution Problems, as a result of substandard outfalls and the discharge of raw sewage, the Council will oppose developments or changes in the use of land which would exacerbate existing or create new local pollution problems.

(c) Argyll and Bute Local Plan Post Inquiry Modifications (November 2008)

The following policies are considered to be applicable :- Policy LP ENV 1 - Development Impact on the General Environment; Policy LP ENV 2 - Development Impact on Biodiversity; Policy LP ENV 6 - Development Impact on Habitats and Species; Policy LP ENV 7 - Development Impact on Trees/Woodland; Policy LP ENV 12 - Water Quality and Environment; Policy LP ENV 19 - Development Setting, Layout and Design; Policy LP CST 1 - Coastal Development on the Developed Coast (Settlements and Countryside around Settlements); Policy LP SERV 8 – Contaminated Land; Policy LP COM 1 – Community Facility Development; Policy LP BAD 1 – Bad Neighbour Development.

Note (ii): The Full Policies are available to view on the Council's Web Site at www.argyll-bute.gov.uk

(d) National Guidance

NPPG 10 - Planning and Waste Management emphasises that any sewage works should provide for a high standard of design and landscaping. This issue has been addressed in the assessment relative to RUR 1 in the Cowal Local Plan and LP ENV19 in the Argyll and Bute Local Plan Post Inquiry Modification, where it is concluded that the site will not be have an adverse visual impact, subject to safeguarding and landscaping conditions.

PAN 50 'Controlling the Environmental Effects of Surface Mineral Workings';

PAN 51 'Planning and Environmental Protection'

PAN 79 'Water and Drainage'.

This advice is substantially incorporated in the Council's adopted and emerging Development Plan policies.

(ii) SITE HISTORY

A detailed application (ref. 04/01120/DET) for a Waste Water Treatment Works (for primary treatment only) was withdrawn on 27th June 2005 on the basis that insufficient details were submitted in respect of odour modelling and a subsequent decision to provide secondary treatment.

A detailed application (ref. 05/02439/DET) for the stabilisation of the quarry rockface and erection of Waste Water Treatment Works, ancillary development and alterations to existing access, was refused by the Bute and Cowal Area Committee at a Hearing on 11th October 2006 but a subsequent appeal was upheld and permission granted by the Scottish Government on 15th April 2008.

Outline planning permission (ref.07/00494/OUT) for the erection of four dwellinghouses on the front part of the quarry site was granted by the Area Committee on 17th August 2007. An application for Reserved Matters (ref. 08/00988/REM) was withdrawn on 21st January 2009.

(iii) CONSULTATIONS

Scottish Environment Protection Agency (response dated 2nd February 2009): No objection in principle but comments regarding pollution prevention and imposition of a condition regarding the submission of a Construction Management Statement. Advisory notes regarding The Water Environment (Controlled Activities) (Scotland) Regulations 2005 (CAR).

Public Protection (response dated 12th March 2009): No objections. Satisfied that the WWTW can operate without potential nuisance provided that the works and sewerage infrastructure operate and are managed as they are intended. Safeguarding conditions in respect of odour, noise, light pollution, environmental impact and commissioning phase are recommended. Detailed comments from Public Protection are included in the assessment below.

Area Roads Manager (response dated 11th March 2009): No objections subject to conditions and advisory notes.

Scottish Water (response dated 23rd January 2009): No objections.

RSPB Scotland (response dated 8th January 2009) : No objection in principle to the proposal but comments regarding construction works and blasting to be undertaken outside the breeding season for bird species that might nest on the quarry face (i.e. outside the period mid February – June inclusive). Additionally, works to stabilise the rockface should avoid removing known nest sites of cliff nesting species or making them untenable. Consideration should be given to providing suitable alternative new nesting ledges or replacement ledges if necessary.

Scottish Natural Heritage (response dated 10th March 2009): No objections but recommends conditions to further minimise impacts arising from the development in respect of: - protection of bats and bat roosts, protection of ancient woodland during construction, a method statement be produced taking account of the intertidal habitat in respect of feeding and roosting birds, access operating and construction times within the quarry to minimise impact on breeding birds and control of Japanese Knotweed.

Transport Scotland (response dated 28th January 2009): No comment based on the fact that the proposed development is likely to cause minimal environmental impact on the trunk road network.

Historic Scotland (response dated 14th January 2009): No comments to offer.

The Scottish Government – Climate Change and Water Industry Directorate (response dated 29th January 2009): Note that any adverse construction and operational noise impacts can be controlled using the proposed mitigation measures and are assessed as being not significant.

(iv) PUBLICITY AND REPRESENTATIONS

The proposal has been advertised under Regulation 13 of The Environmental Assessment (Scotland) Regulations 1999 (publication date 16th January 2009, expiry date 13th February 2009); Section 34 (Bad Neighbour) of the Town & Country Planning (Scotland) Act 1997 (publication date 9th January 2009, expiry date 23rd January 2009); and as a 'Potential Departure' from the Development Plan Policies POL RUR 1, POL RUR 2, POL BE8 and POL COM 5 of the Cowal Local Plan 1993 (publication date 16th January 2009, expiry date 6th February 2009);

Three letters of representation have been received from the following:

1. Mr And Mrs J C Melville, *Lasata*, Ardhalow Park, (letter dated 13th February 2009 (with copy letters sent to Scottish Water and Scottish Government), and further letter dated 6th March 2009);
2. Campbell Kinnear, *Ardhalow Gate Lodge*, 89 Bullwood Road (e-mail dated 12th January 2009) and a copy e-mail sent specifically to Scottish Water dated 5th January 2009);

The points raised can be summarised as follows:

- *e-mail from Campbell Kinnear dated 5th January relates to specific complaints to Scottish Water and not to this application.*

Comment: Not considered to be relevant to this application.

- *Letter from e-mail from Mr and Mrs Melville dated 13th February 2009 contains copies of letters sent to Scottish Water and Scottish Government relating to specific complaints and not to this application.*

Comment: Not considered to be relevant to this application.

- *Proposed development should be better integrated within the site by landscaping, retention of trees or bunding. Development would be an eyesore on the coastline and visible from the road.*

Comment: The previously approved scheme had condition regarding colour and materials of buildings in addition to landscape screening and bunding. The currently revised scheme proposes to locate some of the higher buildings to the rear of the quarry where similar conditions will be imposed in terms of colours, materials, screening etc. Visually, the current scheme is an improvement on the approved scheme.

- *Mr and Mrs. Melville inquire as to who will be accountable for the loss of value to their home and impact of odour pollution and blasting. It is also stated that it is against the law to site a waste water treatment plant within a certain distance of residential properties.*

Comment: Planning approval has already been granted for a WWTW at the site. Refer to assessment.

- *Ability to see odour stack*

Comment : The odour stack would be screened by existing trees and unlikely to be viewed from either side of the quarry site. It would be visible from sea views but against the natural backdrop of the higher quarry walls.

(iv) Applicant's supporting Information

In support of their application, Scottish Water has submitted a Revised Environmental Statement, by the RPS Group Plc. published December 2008. The applicants comment that the previously approved scheme (ref. 05/02439/DET) which included primary and secondary treatment, was the subject of intensive discussions between the Council's Public Protection Service and their consultants in respect of achieving sufficient measures to mitigate and control environmental impact that included additional odour modelling.

The applicants comment that the Reporter concluded that '*the development complies with the provisions of then development plan*' and that '*in relation to other material considerations, the development also complies with the provisions of the finalised draft local plan, adheres to advice contained in Pan 50, Annex D, PAN51 and PAN79. No material considerations were identified which would indicate that the development should not be approved*'. Therefore, since the planning appeal was upheld and planning permission granted by The Scottish Government in April 2008, the principle of a Waste Water Treatment Works at this site has been established.

However, following the granting of planning permission Scottish Water carried out a review of the process design that identified a more suitable process for the removal of high amounts of fats, oils and greases. The proposed treatment process is conventional, robust, simpler to operate and more flexible than the one previously planned. The revised design involves the use of an aeration process which breaks down and kills bugs in the waste and produces an effluent which will meet the standards of SEPA. The new process does not require primary settlement, which can be a principal cause of odour and the system less sensitive to being affected by fats, oils and greases.

It is also considered that the potential impacts of the revised scheme are no greater than that of the consented scheme.

PLANNING LAND USE AND POLICY ASSESSMENT

A. Settlement Strategy

In the adopted Cowal Local Plan 1993, Bullwood Quarry is specifically identified and located between established linear residential development on the western side of the A815 Bullwood Road.

The immediate area is characterised by dispersed dwellinghouses between the established linear settlement zones of Dunoon/Bullwood to the north and Bullwood/Innellan to the south.

Development of the former quarry for a Waste Water Treatment Works would result in the redevelopment of a brownfield/derelict site and have no significant impact on the existing residential settlement pattern along the coastal road.

The Argyll and Bute Structure Plan policy STRAT DC 2 'Development Within The Countryside Around Settlements' encourages appropriate redevelopment which accords with the settlement plan. In special cases, a locational need or exceptional circumstance may justify a development.

Within Argyll and Bute Local Plan Post Inquiry Modifications (November 2008), the Bullwood Quarry site is shown within an area zoned as Countryside around Settlement between the main town settlement zone of Dunoon and the small town and village settlement zone of Innellan.

Accordingly, the proposal would be consistent with policies STRAT DC2 of the Argyll and Bute Structure Plan, and have a neutral impact on the Countryside Around Settlement zoning that splits the linear settlements of Bullwood of the Argyll and Bute Local Plan Post Inquiry Modifications.

B. Location, Nature and Design of Proposed Development

(i) Development Setting

Bullwood Quarry is located approximately 1.5 km south of Dunoon, west of the A815 below the wooded knoll of The Tom. The quarry ceased operations approximately twenty years ago but has been in use as storage for waste and building materials. The site is in environmental and visual terms an eyesore with scarred quarry walls and a scene of dereliction at the opening to the site. Three residential properties are located close to the quarry, viz. *Ardvarney* (located 6 metres from the site to the north), *Sunnybrae* (located 70 metres from the site to the north), and *Ardhallow Gate Lodge* (located 40 metres from the site to the south).

(ii) Development Layout/Background to Proposal

The proposal is for a new Waste Water Treatment Works (WWTW) located within Bullwood Quarry providing Primary and Secondary treatment to serve Dunoon and Sandbank. The existing sewerage infrastructure serving Dunoon has developed without the provision of waste water treatment, with waste water and storm water currently being discharged through unscreened outfalls into the Firth of Clyde.

The WWTW is being provided to meet the requirements of the Urban Waste Water Treatment (Scotland) Regulations 1994 (as amended 2003) (UWWT Regulations). A previous similar proposal for primary treatment only, was withdrawn (ref. 04/01120/DET) to allow secondary treatment to be incorporated within the new design as recently approved by The Scottish Government (ref. 05/02439/DET) but revised within the current application. It should be noted that this WWTW has been designed for the catchments of Dunoon and Sandbank only with Toward and Innellan served by separate systems. Work has already begun (or permissions in place) for the formation of six pumping stations at Sandbank, Ardnadam, Holy Loch, Jim Crow, East Bay, West Bay with associated outfalls, gravity mains, rising mains either in place or proposed.

(iii) Bullwood Waste Water Treatment Works

The waste water for the Dunoon and Sandbank catchments will be pumped to the new WWTW, where it will receive preliminary treatment at the inlet works and then secondary treatment in the aeration lanes and settlement in final tanks. Preliminary treatment will consist of screening and grit removal followed by secondary treatment involving aeration and mixing with activated sludge. The wastewater will flow through the treatment works by a mixture of gravity and pump before gravitating to a new sea outfall in the Firth of Clyde which will discharge the final effluent. Sludge produced from the treatment processes will be thickened via a drum thickener and then stored in a sludge holding tank. This mixture will then be exported by lorry from the site to sludge holding facilities at Shieldhall and then pumped to Daldowie Sludge Treatment plant.

(iii) *Buildings and Plant*

The proposal involves a revision to the 2005 scheme that was approved in April 2008. The main physical changes to the approved scheme are the relocation of the main works building and inlet works deeper within the quarry site. The front part of the site would now be used to accommodate two final settlement tanks and covered aeration tanks. The proposal involves excavation of the quarry floor by approximately 2 metres and levelling to create a base for the buildings and plant that will comprise primarily:

- the main works building (measuring approximately 16 x 14 x 6 metres) which would be sited in the centre of the quarry floor approximately 45 metres from the footway beside Bullwood Road. This rectangular building would be clad externally in metal cladding with a shallow pitched metal roof;
- a Returned Activated Sludge (RAS)/Surplus Activated Sludge (SAS) pumping station located on the eastern side of the works building;
- Inlet Works (including inlet break chamber, screenings washing plant, grit removal plant, skip area) located to the rear (west) of the site (measuring approximately 15 x 7 x 6 metres);
- a freestanding slim high odour control stack (19 metres high, 0.5 m diameter) reaching a total height of 34 metres AOD and located between the main works building and aeration tanks;
- covered aeration tanks located at the front of the site in the southern portion. These tanks would measure (approximately 25 x 14 x 16 metres) and housed within a shallow pitched roof structure;
- two cylindrical final settlement tanks located at the front of the site in the northern portion. These tanks would be 2.5 metres high and coloured to match other buildings and plant;
- a 2.4 metre high security fence is proposed across the front of the site set back from the heel of the footway and proposed to be screened with ivy;
- proposed embankment bund rising to 11 metres AOD to screen the settlement and aeration tanks;

(iv) *Outfall Pipeline*

A buried outfall pipe will be constructed from the works to discharge the final effluent beyond MLWS. This aspect of the proposal is considered to be '*permitted development*'.

(v) Assessment

The proposal must be assessed against LP ENV 19 'Development Setting, Layout and Design' and Appendix A of the Sustainable Siting and Design Principles contained in the Argyll and Bute Local Plan Post Inquiry Modifications. The appearance of isolated industrial and commercial development must be considered where the form and pattern of the landscape will largely determine the acceptability of the proposal. The extent to which the proposal would be clearly visible from a public road, viewpoints and neighbouring communities is also a factor. The following criteria will be taken into consideration:

- *Size and extent of proposal including visual impact of the scheme and distance/location from which it is visible.*
- *Location of proposal and its landscape setting where large buildings should be absorbed by the landscape as much as possible, whether by excavating and building into the landform, using existing landforms to mask the development or screening by new trees;*
- *The design and colour of the development and ancillary structures can be used to minimise their perceived bulk and visual impact.*

The revised scheme proposes a reconfigured layout and location of buildings that make better use of the shape of the quarry floor than the previously approved scheme. Both the Inlet Works building and main Works Building area located to the rear of the quarry that would be difficult to view from the A815 Bullwood Road. The main views of this site would be from the east but these sea views longer distance views can be mitigated against by the use of the quarry as a natural backdrop, the use of dark recessive colours for the buildings and plant and natural screening along the frontage of the site.

It is considered that the 'revised' proposal would have less of a visual impact than the previously approved scheme and, with safeguarding conditions, consistent with Policy BE9 of the adopted Cowal Local Plan and Policy LP ENV 19 of the Argyll and Bute Local Plan Post Inquiry Modifications.

C. Natural Environment

Ecological assessments have been carried out that included a Phase 1 Habitat Survey and a Bat Survey. A Breeding Bird Survey was also carried out in 2005 for the approved scheme. The main features of ecological value are the presence of a range of hard rock ledges suitable for breeding bird species. Vegetation is of limited diversity and dominated by alien and invasive species. The main ecological impacts will occur during construction of the WWTW and of the outfall pipe on inter-tidal habitats.

RSPB recommend conditions regarding impact of the proposal on breeding birds within the former quarry and conditions restricting blasting times. Scottish Natural Heritage recommends a similar condition in addition to conditions safeguarding bats, woodland, intertidal habitats and dealing with Japanese Knotweed. In terms of bats, SNH comment that the impact of the proposal on the species concerned would not be detrimental to the maintenance of these species at a favourable conservation status within its natural range but conditions are recommended in respect of tree felling, lighting and actions if bats are found during the course of works. Conditions and advisory notes are recommended.

On the basis of the above, the proposal is considered consistent with Policies RUR2 of the adopted Cowal Local Plan and policies LP ENV 6 and LP ENV7 of the Argyll and Bute Local Plan Post Inquiry Modifications.

D. Landscape Character and Visual

A landscape and visual assessment has been carried out which demonstrates that while the development is at variance to the local landscape character, there are only a few receptors. The visual assessment concludes that the application site is generally well enclosed with the exceptions of views from areas to the east. Mitigation measures aimed at reducing visual intrusion include tree and shrub planting along the A815, sensitive siting of the security fencing and choice of security fencing and building colour to reflect the predominant local landscape colours.

The proposed site is located on the landward side of the A815 Bullwood Road, close to three existing residential properties and open to view from this road when travelling in each direction. The site is also visible from a number of distant vantage points both in Dunoon, from the Firth of Clyde and from Inverclyde. The proposal itself contains a relatively high plant building, a tall slim stack, two settlement tanks and aeration tanks and a security fence together with an improved access. Whilst the site will only be open to view over a relatively short distance, it will have an impact on the landscape.

In terms of RUR 1 of the Cowal Local Plan and LP ENV 19 of the Argyll and Bute Local Plan Post Inquiry Modifications, it is necessary to establish if this impact would be unacceptable or if the landscape has the capacity to absorb the proposal without undermining the essentially rural quality of the surrounding hillside.

The boundaries of the quarry are covered in tree and scrub planting of mainly broadleaved trees interspersed with conifers and gorse scrub. The quarry is set into the hillside of The Tom rising to 145m and is surrounded by Ancient Woodland along the upper slopes. The character of the quarry is dominated by the exposed rock face rising on the north-western boundary and extensive areas of woodland enclosing it.

Landscape and visual assessments suggest mitigation measures to lessen the impact of the development and these include:-

- proposed tree/shrub planting along the A815 to reduce the overall visual impact from viewpoints to the north and east and enhance the visual amenity of the site;
- reducing visual intrusion associated with the security fencing by sensitive siting and choice of colour reflecting the predominant landscape colours within the locality; and
- choice of external colour scheme for buildings and plant reflecting the predominant landscape colours within the locality and the use of a non-reflective surface.

The Environmental Statement and supporting information demonstrate that the proposed development is visually well enclosed and relatively small-scale in contrast to the surrounding large-scale landscape and to the sloping walls of the quarry. Any potential visual impact can be mitigated by additional perimeter planting.

The use of darker colours for the main treatment building and ancillary plant will also help to integrate the proposal within its surroundings. Effective screening and use of colours should help to lessen the overall visual impact and reduce any "industrial" look that the buildings and plant may have.

In order to achieve this in the long term there is a need for extensive landscaping, particularly to the east, north and south of the site, to give the site a rural/woodland feel. It should however be noted, that landscaping is not “instant” and takes a number of years to mature. Mature birch trees are located across the frontage of the site and these should be retained and augmented with additional treeplanting and shrub planting to provide suitable natural screening.

In conclusion, the existing derelict quarry has the capacity to absorb limited new development without undermining its surrounding rural character, providing the development is positioned within the landscape, with suitable screen planting and choice of colour and materials, all of which can be addressed by conditions.

On the basis of the above, the proposal is considered consistent with Policy RUR1 of the adopted Cowal Local Plan and policy LP ENV19 the Argyll and Bute Local Plan Post Inquiry Modifications.

E. Road Network, Parking and Associated Transport Matters

As mentioned in Section B above, the Area Roads Engineer has expressed no objection subject to conditions regarding maintenance of visibility splays, access design, car parking and turning.

There are no adverse road safety implications with the proposal subject to bellmouth, junction and visibility conditions. The Area Roads Manager advises that the location of the proposed development is off the A815 Bullwood Road, Dunoon within an urban 40mph speed restriction. The sightlines available exceed the requirements of 120 x 2.5m in both directions. Any fence, wall and hedges within the visibility splay must be no greater than 1 m above the road. The proposed access gates should be set back to allow large vehicles to pull completely off the road before reaching the gates. Parking and a turning area must be provided within the site for HGVs as well as provision for smaller vehicles. A system of surface water drainage to be provided to prevent surface water running on to the footway and carriageway from site. Signing advising “HGV Turning” required 60m either side of entrance.

On the basis of the above, the proposal is considered consistent with Policies LP TRAN 4 and LP TRAN 6 of the Argyll and Bute Local Plan Post Inquiry Modifications.

F. Infrastructure

It is proposed to connect to both the public water and waste water systems. Scottish Water has no objections.

On the basis of the above, the proposal is considered consistent with Policy POL PU 1 of the Cowal Local Plan 1993 and Policies LP SERV1 and LP SERV2 of the Argyll and Bute Local Plan Post Inquiry Modifications.

G. Geology and Hydrology

There are no surface watercourses within the site. Ground cover comprises mainly made ground, resulting from in-filling of quarry excavations and the site has also been used for the dumping and storage of waste materials. The historical use of the site as a quarry has the potential to have resulted in contamination and appropriate conditions are recommended.

On the basis of the above, the proposal is considered consistent with Policy LP SERV 7 of the Argyll and Bute Local Plan Post Inquiry Modifications.

H. Odour

The Public Protection Service notes that there are two properties in close proximity to the proposed site with the nearest being Ardvarney, Bullwood Road, Dunoon which is 10 metres from the site boundary. The close proximity of the dwelling to the WWTW increases the potential risk that the development could pose a bad neighbour development under POL COM 5. The site was subject to a previous application for consent as a WWTW (05/02439/DET) which, following an Appeal, was granted subject to stringent and detailed conditions to protect the local neighbourhood. The supporting information submitted for the previous application with regard to odours contained within the Environmental Impact Assessment by RPS dated December 2005 (reference SGP 5267/Final) and the Odour Modelling Assessment from The Airshed.com is considered relevant and applicable to this new revised application by Scottish Water. Having considered the application and supporting Revised Environmental Statement by RPS dated December 2008 and the Odour Modelling information detailed above, the Public Protection Service offer the following comments;

The main source of concern from this development is odour emissions from the waste water treatment works. The impact is further exacerbated by the close proximity of the dwelling at Ardvarney which is 10 metres from the site boundary, 20 metres from the nearest final settlement tank and 78 metres from the odour unit stack. Waste Water Treatment Works (WWTW) give rise to odours and therefore the success of odour control measures is dependant on the design of the works, operational management and the prevention of the incoming sewage from becoming septic. Septicity occurs where there are rising pumped mains and the sewage is lying for long period of time or where there is seawater infiltration into the sewer infrastructure.

Scottish Water was aware of Public Protection's concerns at the suitability of the site for a WWTW for the previous application and provided very detailed odour modelling. Factors including the close proximity of housing and the former quarry site have been considered in detail. The design of the works ensures that treatment of sewage is undertaken within closed buildings or covered tanks with extraction through the odour control plant and odour stack. The greatest potential for the release of odours will, in my opinion, arise from the emptying of the sludge tanks and odour emissions. These will be controlled through management controls.

As a result of our concerns we set onerous design criteria for the WWTW. Previous applications for WWTW by Scottish Water have been designed to 5 odour units/cubic metre (1 hour 98%ile) (OU/m³). The standard we specified, following discussions with Dr Brookes of Glasgow Scientific Services, was the more onerous 0.5 OU/m³ (1 hour 98%) at the nearest property. Following the outcome of the Planning Appeal, no prescribed standard was considered appropriate and a more subjective and qualitative boundary condition of 'no offensive odour to be detectable at any sensitive receptor' was accepted.

The odour modelling report by The Airshed concludes that "*with abatement and odour control, the odour impact of the development at Ardvarney and Ardhallow Lodge are likely to be of marginal significance. Local residents are unlikely to have a reasonable cause for annoyance provided the process is operated properly and the odour control systems are maintained.*" This report has been appraised by Dr B Brookes of Glasgow Scientific Services, on behalf of the Council, and in his report dated 10 April 2006, he agrees with this opinion. It is Dr Brooke's view that "the intended odours would not be expected to cause complaint". This is dependant upon :-

- i. The Waste Water Treatment Works being built as intended and as modelled
- ii. Bullwood with its rising main on the shoreline is particularly at risk and it would be essential that the whole system, the Waste Water Treatment Works and the sewers are built, operated and managed as intended.

It should be noted that the same standard is to be applied to the new application and due to the less complex processes for treatment works and the provision of all areas (including skip and sludge removal) to be covered and ducted to the odour control plant there should be an improvement in terms of odour control management on that that was previously accepted. The potential odour risk is reduced to an extent from the previous application, as the design of the plant relies on a commonly used and proven treatment processes which are easier to operate.

Public Protection conclude that the scientific evidence from odour modelling concludes that odour emissions from the Waste Water Treatment Works can be controlled through the design of the works and operational management procedures. These can be incorporated as planning conditions and safeguarding conditions are required in the interests of protecting the amenity of residents in the immediate locality.

Risk Assessment

There are risks associated with the WWTW and there is a greater potential that they will impact on residents given the close proximity of the site to the dwellings at Ardhallow and Ardvarney. There is also the risk that if problems do arise then it would be impossible to close the WWTW. Formal powers may be available dependant upon the odour nuisance level through planning controls and more appropriately by this service under the Water Services (Scotland) Act 2005. It is however difficult to quantify the level of risk.

The issues of septicity and saline infiltration have been addressed by Scottish Water (letter of 12 May 2006) which confirms that:-

- a) Saline intrusion will be minimal as the scheme includes a new Collection and Transfer (C&T) system of gravity and pumped mains which collect sewage from the landward areas. They have also replaced a substantial section of the damaged infrastructure at Milton Burn

- b) Septicity will be controlled by the installation of four septicity dosing plants (calcium nitrate) on the system. These will be dosing calcium nitrate solution to the sewage and the concentration will be dependant on the rate of flow of the sewage.
- c) Salinity samples will be taken to determine the saline concentration of the existing sewage to ensure the effective working of the Works.
- d) Odour from the operation of WW TW will be managed in accordance with an extensive and detailed Odour Management Plan which is required by the Code of Practice on Sewage Nuisance.

Public Protection are satisfied with the response provided from Scottish Water in respect of these areas and that the septicity dosing arrangements will reduce the risk of the sewage turning septic. Scottish Water cannot guarantee that these events will not occur. There is also a history of Scottish Water experiencing difficulties with their other WWTW at High Bogany, Isle of Bute (odour control plant problems); Inveraray (septicity), Campbeltown (inadequate design of sewer network and septicity).

The odour assessment matrix in the Scottish Executive "Code of Practice on Sewerage Nuisance – Assessment and Control of Odour from WWTW (April 2006)" provides for an objective measurement for the assessment of odour from WWTW. It can be applied retrospectively in the design of plants but this based on assumptions (how often will odour arise, impact, area affected strength). The most appropriate control will be the detailed odour modelling and this calculation can be used in the event of complaints occurring at the WWTW, should consent be granted.

The site is close to dwellings and there is evidence that Scottish Water have had difficulties at other WWTW in Argyll and Bute. There is a risk that if the works do not operate as intended then they will give rise to odours which will impact on the residents in the area. This cannot be quantified.

Whilst Public Protection have reservations that this is not the most appropriate site to construct a WWTW given its close proximity to housing, it is accepted that the Local Plan does not prohibit this development in this location and there is a need to evaluate the risks from the development and whether these are "acceptable".

In assessing the risks from this application, it should be noted that:-

- There will be on occasion odour arising from these works but this may not necessarily impact on residents as the strength of odour and time of emission may vary.
- There is a risk (modelling based on 98%) that there may be circumstances where odours may be detected and it will be the responsibility of Scottish water to manage and ensure that they respond to these instances. The major reasons for failure will be equipment failure, poor management or septicity and saline infiltration. The risk of the sewage turning septic will be reduced by the septicity dosing plants and saline infiltration will be improved by the new Collection and Transport sewer which collects the sewage which presently discharges directly into the Clyde from the public sewers.
- The success of these measures will only be evident through time, should the works receive consent.
- The risks are unquantifiable at this time.

In conclusion, should the works be designed and operated by Scottish Water as they have detailed in the application and Environmental Impact Assessment; should the infrastructure prevent saline infiltration and septicity and provided the works and the sewer infrastructure be built, operated and work as intended, then the bad neighbour aspects can be controlled by planning conditions.

In evaluating whether the risks are acceptable, there is the view that to construct a WWTW close to housing is not best practice and Scottish Water have had problems with other works that they have constructed in Argyll and Bute.

On balance, the Public Protection Service consider that the risks are minimised as the WWTW will be designed to very strict odour concentration standards; there will be a statutory requirement for an Odour Management Plan and control through planning conditions.

On the basis of the above, the proposal is considered consistent with Policy COM 5 of the Cowal Local Plan and LP BAD 1 of the Argyll and Bute Local Plan Post Inquiry Modifications.

I. Noise

Compared to the 2005 design, there have been a number of changes, most notably the location of the buildings within the quarry. Noise levels from construction and operational activities were assessed where the nearest properties *Ardvarney* (and to a lesser degree *Ardhallow Gate Lodge*) would be affected by noise and activities during construction phases. To this end, a temporary acoustic barrier is proposed between Ardvarney and the quarry to reduce noise levels from construction activities.

If approved, there will be noise generated from the running of the plant inside the works and by vehicles entering and leaving the works. It is proposed that there will be up to three tanker deliveries per week to take thickened sludge to the Shieldhall/Daldowie works for treatment. Loading of the tankers will take place outside the building and comprise idling engines and pumping noise. Both of these sources are considered low noise.

In light of the low background noise levels in this area, particularly at night, a condition is proposed to restrict noise levels for normal operation and to limit noise from any plant which may be brought into the works in an emergency (e.g. power cut, etc).

Noise emissions from the Waste Water Treatment Works will occur through the operation of the Works and ancillary activities and from the construction phase. Public Protection consider it appropriate to control noise emissions from the works by applying conditions on the planning consent.

(i) Construction noise

Construction noise will impact on the residents in the immediate locality. This impact will be minimised by the Councils' Protective Services through the provisions of the Control of Pollution Act 1974 where the contractor is required to advise and agree the noise mitigation measures to be implemented during the construction phase with environmental health officers. These will include restrictions in the working hours, the use of low noise output equipment, establishing maximum noise levels at the site boundary and effective management of noise from the site. It is the intention of the Public Protection Service to serve notice under section 60 of COPA '74 should this application be approved, prior to commencement of any construction, in order to control noise.

(ii) Operational noise

Operational noise sources include noise from road vehicle movements on site, mechanical plant and hydraulic noise (noise from pumps, flow over weirs, fans and motors associated with the odour control plant). There is a potential for operational noise to cause annoyance to the residents of Ardvarney and Ardhallow unless there are appropriate noise attenuation measures within the design and operation of the Works. Background noise levels at these properties are principally affected by traffic movement, weather and the impact of the Clyde.

Public Protection concludes that noise emissions can be controlled to levels which will not create annoyance to the adjacent residents through the use of planning conditions. Safeguarding conditions are recommended and should the application be approved, must be attached to the subsequent consent.

On the basis of the above, the proposal is considered consistent with Policy COM 5 of the Cowal Local Plan and LP BAD 1 of the Argyll and Bute Local Plan Post Inquiry Modifications.

J. Blasting Operations and Vibration

Limited blasting may be required to excavate rock in order to accommodate the treatment plant. Prior to blasting being carried out, details of the procedure for undertaking pre-and post-blasting structural surveys on all residential properties within 200 metres of the site boundary shall be agreed and the subject of a specific condition. Blasting will be carried out under controlled conditions by licensed blasting contractors and will only be undertaken during 1000 and 1600 hours Monday to Friday.

All excavation work will be carefully monitored and the resulting geotechnical conditions evaluated, and if necessary excavation techniques modified to optimise stability. Once excavation work has been completed, full Hazard and Risk Assessments will be carried out on all new faces to determine if/what remedial actions are required. Notwithstanding this, in order to avoid any adverse impact to adjoining premises from vibration during the construction phase, a condition requiring details of the specific means of extraction, proposed vibration levels and the means of monitoring the levels is recommended.

On the basis of the above, the proposal is considered consistent with Policy COM 5 of the Cowal Local Plan and Policy BAD 1 of the Argyll and Bute Local Plan Post Inquiry Modifications.

K. Dust

There is a potential for dust to be generated during the construction of the treatment plant from the excavation of the site, construction, including concreting and piling operations, and the possible storage of site materials. These will be addressed by Public Protection directly with Scottish Water and can be enforced using Part III of the Environmental Protection Act 1990. Notwithstanding this, an appropriate planning condition is recommended.

On the basis of the above, the proposal is considered consistent with Policy COM 5 of the Cowal Local Plan and Policy BAD 1 of the Argyll and Bute Local Plan Post Inquiry Modifications.

L. Lighting

Lighting will be provided on site and it is important that this designed to ensure that there is no glare or intrusion outwith the site. A condition shall be applied requiring the applicant to design the lighting installations to meet the Institute of Lighting Engineers Guidance for the Reduction of Light Pollution.

On the basis of the above, the proposal is considered consistent with Policy COM 5 of the Cowal Local Plan and Policy BAD 1 of the Argyll and Bute Local Plan Post Inquiry Modifications.

CONCLUSION

The proposal will improve the quality of discharges to the River Clyde and ensure that the discharge of sewage from Dunoon, Kirn, Hunters Quay and Sandbank will meet the requirements of the Urban Waste Water Directive. Scottish Water will through these proposals reduce the number of raw sewage discharges which are prevalent along the coast and sewage will be collected and diverted through a new rising and gravity mains to a Waste Water Treatment Works which will provide primary and secondary treatment. The quality of the discharge will be regulated by the Scottish Environment Protection Agency.

Planning permission has already been granted in April 2008 for a new Waste Water Treatment Works within the Bullwood Quarry site. The current proposal represents a 'revised' and improved scheme in respect of operation and layout and design compared with the previously approved scheme. The scheme will provide a new Waste Water Treatment Works providing primary and secondary treatment, serving the catchment areas of Dunoon and Sandbank. It involves the erection of new buildings and plant for which there is a locational need and the infilling and landscaping of an obsolete quarry. The applicant has stated that there is a legislative requirement to upgrade wastewater collection and treatment facilities for Dunoon and Sandbank and that this site has been chosen using a range of criteria. While the proposed buildings and plant would have a limited visual impact, this will be mitigated by the use of dark colours and effective tree and shrub screen planting.

The issue of odour and noise control can be addressed through the imposition of conditions recommended by the Public Protection Service following previous detailed discussions. From these discussions and background to the previously approved scheme, the material considerations were identified as they pertain to the proposed site. In this instance, the most significant issues were odour control, noise, landscape and habitat impact and road safety. Further to extensive investigation, discussion and assessment, it is considered that adequate, reasonable and enforceable standards can be prescribed in order to achieve an acceptable development, which will not result in a "bad neighbour", a road safety or a health hazard.

Should this application be granted with the recommended safeguarding conditions as attached, Public Protection advises that the developers be required to demonstrate **at the commissioning phase**, that the WWTW meets all conditions and standards of the planning consent prior to the full handover to Scottish Water Operations Teams.

Scottish Water has indicated in its submission for odour concludes that *"with abatement and odour control, the odour impact of the development at Ardvarney and Ardallow Lodge are likely to be of marginal significance. Local residents are unlikely to have a reasonable cause for annoyance provided the process is operated properly and the odour control systems are maintained."* The Public Protection Service concludes that *"Using objective standards for odour modelling and noise, the Waste Water Treatment Works can operate **without potential nuisance provided that the Works and the sewerage infrastructure operate and are managed as they are intended.** Safeguarding conditions can be applied to any consent which will control and regulate these factors."*

Three letters of objection have been received from two households raising issues which have been addressed in this report and safeguarded by recommended conditions. Other matters in terms of responsibility of operation lie with the owners of these properties and Scottish Water.

It is considered that the 'revised' proposal would not have a significantly detrimental visual impact largely due to the design and colour of the buildings and plant, repositioning of buildings and plant within the quarry and partial screening. Subject to certain safeguarding conditions, it is considered that it would not have an adverse effect upon the amenity of the area in terms of noise and disturbance.

Given all of the foregoing, it is considered that the proposal can be accommodated on this site. Having due regard to the Development Plan and all other material considerations and on the basis of the above, the proposal is considered to be acceptable.