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Request for Quotation

1. Request for Quotation

Project title

Determining the nutrient performance levels of Onsite Wastewater Treatment Systems for nutrient neutrality calculations: Methodology and tool development (reference NEOWTS01)

You are invited, to submit a quotation for the requirement described in the specification below.

Please confirm, by email, receipt of these documents and whether you intend to submit a quote. Your response should be returned to the following email address by:

Email: charitos.zapitis@naturalengland.org.uk

Date: Wednesday, 5th December 2022

Time: 17:00 GMT

Ensure you state the reference number and 'Final Submission' in the subject field to make it clear that it is your response.

Contact Details and Timeline

Charitos Zapitis will be your contact for any questions linked to the content of the quote pack or the process. Please submit any questions by email and note that, unless commercially sensitive, both the question and the response will be circulated to all tenderers.

Action	Date
Date of issue of RFQ	14-November-2022 at 17:00 GMT
Deadline for clarifications questions	28-November-2022 at 17:00 GMT
Deadline for receipt of Quotation	5-December-2022 at 17:00 GMT
Intended date of Contract Award	13-December-2022
Intended Contract Start Date	15-December-2022
Intended Delivery Date / Contract Duration	24-March-2023

Glossary

Unless the context otherwise requires the following words and expressions used within this Request for Quotation shall have the following meanings (to be interpreted in the singular or plural as the context requires):

"Authority"	Means the Department for Environment, Food and Rural Affairs acting as part of Natural England
"RFQ"	Means this Request for Quotation and all related documents published by the Authority and made available to suppliers
"Contract"	Means the contract to be entered into by the Authority and the successful supplier.

2. Conditions applying to the RFQ

You should examine your response to the RFQ and related documents ensuring it is complete prior to submitting your completed quotation.

Your quotation must contain sufficient information to enable the Authority to evaluate it fairly and effectively. You should ensure that you have prepared your quotation fully and accurately and that prices quoted are arithmetically correct for the units stated.

The supplier by submitting a quotation is deemed to accept the terms and conditions in the RFQ. Failure to comply with the instructions set out in the RTQ may result in the supplier's exclusion from this procurement.

Acceptance of Quotations

By issuing this RFQ the Authority does not bind itself to accept any quotation and reserves the right not to award a contract to any supplier who submits a quotation.

Costs

The Authority will not reimburse you for any costs and expenses which you incur preparing and submitting your quotation, even if the Authority amends or terminates the procurement process.

Mandatory Requirements

The RFQ includes mandatory requirements and, if you do not comply with them, your quotation will not be evaluated. All mandatory requirements are set out in Bravo.

Clarifications

The Authority reserves the right to discuss, confidentially, any aspect of your quotation with you prior to any award of Contract to clarify matters.

Amendments

The Authority may amend the RFQ at any time prior to the deadline for receipt. If it amends the RFQ the Authority will notify you in writing and may extend the deadline for receipt in order to give you a reasonable time in which to take the amendment into account.

3. Conditions of Contract

The terms and conditions attached Condensed Terms and Conditions will be included in any contract awarded as a result of this RFQ process. The Authority will not accept any material changes to these terms and conditions proposed by a supplier.



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4. Specification

The Authority is Natural England. The Authority's priorities are to secure a healthy natural environment; a sustainable, low-carbon economy; a thriving farming sector and a sustainable, healthy and secure food supply. Further information about the Authority can be found at: [Natural England](#).

The staff and teams within Natural England requesting this project are Charitos Zapitis (Water Quality Senior Specialist – Genetics, Air Quality, Water Quality team – Chief Scientist Directorate; and supported by Helen Wake, Water Quality Senior Specialist in the same team).

Introduction

Onsite Wastewater Treatment Systems (OWTS), such as Septic tanks and Packaged treatment plants, are installed to treat sewage at individual houses and small groups of dwellings. Natural England's Nutrient Neutrality (NN) methodology requires calculations on the contributions of such systems in Special Areas of Conservation (SAC), Special Protection Areas (SPA), and Ramsar sites (hereby called Habitat sites) unfavourable for nutrients (see Section 8: Annex 1, below).

The local planning authorities (LPAs), as competent authorities, are responsible for undertaking an appropriate assessment of the implications of the plan or project on the Habitats sites in question. To achieve that, applicants are requested to provide information on the nutrient budgets associated with their projects, and any mitigation proposed. This requires information on the nutrient discharge concentrations — Total Phosphorus (TP/l) and total Nitrogen (TN/l) — from OWTS to be provided to be able to undertake the NN calculations (Section 8: Annex 1, below). An example of the calculations along with the default values is provided in the "Nutrient Neutrality Generic Methodology Part1.3.E" (Section 8: Annex 1, below). An example of a calculator that includes both total Phosphorus and total Nitrogen is provided in Annex 2 (Section 8, below).

Some OWTS will have undergone British Standards testing (BS EN 12566) and will have certification outlining the effluent pollutant concentrations. The certification may or may not include nutrients. British Water has published a [List of Certified Small Wastewater Treatment Systems Up to 50PT \(britishwater.co.uk\)](http://britishwater.co.uk) and their certifications. However, further certifications may be available by BS and could be considered. Some OWTS however may

not have undergone British Standards testing but monitoring of the effluent has been undertaken.

Natural England advises local planning authorities to take a precautionary approach in line with existing legislation and case law when addressing uncertainty and calculating nutrient budgets. To ensure the use of representative and precautionary values of nutrient discharge concentrations from OWTS in NN calculations, NE wants to develop a system to determine the nutrient discharge concentrations based on the technical specifications and the monitoring findings for the proposed OWTS.

This project concerns the development of a methodology and a tool that can be used by NE, local planning authorities and others to obtain representative and precautionary nutrient (TP and TN) concentrations to apply to the NN calculations when assessing a project or plan when conducting an appropriate assessment in a NN catchment.

This is a functional specification; NE specifies the desired outcome and proposes steps to deliver it. However, NE will also consider different methodologies and welcomes potential suppliers to use their expertise to propose, and provide justification, for a different approach to deliver the outcome.

For the assessment criteria, please see the assessment Section 5, below.

Project output

Develop the methodology and provide a system/tool (e.g. excel spreadsheet, or series of criteria in a flow diagram) for determining sufficiently precautionary effluent nutrient concentrations for OWTS, to be used for Nutrient Neutrality calculations.

This should be based on an assessment of the technical specifications and the monitoring data that verify the constancy of performance of the different OWTS. The system/tool will need to cover different treatment technologies (e.g. active treatment, aeration, continuous treatment, batch treatment) and plant types (e.g. septic tanks, packaged treatment plants). It will also need to take into account the different circumstances and reasons for undertaking monitoring (e.g. for British Standards testing or other purposes) and any differences in monitoring which will affect the level of certainty and potentially affect how to determine a precautionary effluent nutrient concentration.

Step 1. Review the British standards and provide an overview of their assessment process

- Review the following reports
 - BS EN 12566-1:2016 - Prefabricated septic tanks
 - BS EN 12566-3:2016 - Packaged and/or site assembled domestic wastewater treatment plants
 - BS EN 12566-4:2016 - Septic tanks assembled in situ from prefabricated kits
 - BS EN 12566-6:2016 - Prefabricated treatment units for septic tank effluent
 - BS EN 12566-7:2016 - Prefabricated tertiary treatment units
- Write a short summary of the monitoring specification required by BS for the different systems.

*If applicable, costs for obtaining the aforementioned reports will be covered by the supplier shall be costed in the proposed budget.

Step 2. Develop methodology for determining a precautionary nutrient effluent concentration.

This should include consideration of the following:

- OWTS which have undergone the British Standards testing and the certification includes total Nitrogen and/or total Phosphorus effluent concentration.
 - o For these, ascertain if the concentration set out in the BW certificate is sufficiently precautionary to use in the NN calculations.
 - o If not, then the methodology should determine how to obtain an effluent concentration which is sufficiently precautionary.
- OWTS which have undergone the British Standards testing, but the certification does not include a specified effluent concentration for total Nitrogen and/or total Phosphorus
 - o For these, ascertain if it is possible and, if so, develop a methodology to determine effluent concentration which is sufficiently precautionary to use in the NN calculation.

The development of any methodology should take into account what data will be accessible to those applying the methodology/tool and consider how data deficiencies may result in not being able to use accredited systems in NN calculations.

- OWTS which have not undergone British Standards testing but have undertaken effluent monitoring
 - o For these, ascertain whether or under what circumstances it is possible and, if so, develop a methodology to determine an effluent concentration which is sufficiently precautionary to use in the NN calculation. This should consider any minimum monitoring/data requirements and whether or not it needs to be comparable to British Standards and/or whether there are different levels of precaution that need to be applied.
- Write a report to outline the methodology developed and the decisions taken in the process.

* The proposed methodology must be discussed and agreed upon with NE to ensure effectiveness, efficiency and application feasibility (easy to use).

Step 3. Develop a quick and easy-to-use system/tool which can be used by NE/LPAs/others to consistently obtain representative and precautionary nutrient discharge concentrations for OWTS for the categories described in Step 2.

- Develop a system in a format agreed with NE (e.g. an excel spreadsheet, or series of criteria in a flow diagram) on a widely used software (e.g. Microsoft word or excel).

The developed system must be trialled and agreed upon with NE.

Step 4. Write a technical report explaining how to use the system/tool developed in Step 3 (including examples of specific OWTS that will be agreed with NE) and present it to NE staff

- Write a technical report explaining how to use the system/tool developed in Step 3, followed by an online (MS Teams) demonstration session for NE staff which will include a questions and answers part

* Recording the session is required as it will be used for future training purposes.

* The report format must align with NE's accessibility guidance. This will be shared with the service provider.

It is anticipated that this contract will be awarded for a period of approximately 3.5 months to end no later than 24/03/2023. Prices will remain fixed for the duration of the contract award period. We may at our sole discretion extend this contract to include related or further work. Any extension shall be agreed in advance of any work commencing and may be subject to further competition.

Prices

Prices must be submitted in £ sterling, inclusive of VAT, including a total price for the project output.

5. Quotation Submission

As part of the quotation, Natural England ask that the following is also submitted:

- Any proposed research methodologies
- VAT registration number
- Details on any similar past work

Within the quotation, please provide a separate price for each Step and the planned meetings (see below):

- Step 1. Review the British standards and provide an overview of their assessment process
- Step 2. Develop methodology for determining a precautionary nutrient effluent concentration.
- Step 3. Develop a quick and easy-to-use system/tool which can be used by NE/LPAs/others to consistently obtain representative and precautionary nutrient discharge concentrations for OWTS for the categories described in Step 2.
- Step 4. Write a technical report explaining how to use the system/tool developed in Step 3 (including examples of specific OWTS that will be agreed with NE) and present it to NE staff

Activity		Daily rate excl. VAT	Number of days	Total excl. VAT
1	Step 1			
2	Step 2			
3	Step 3			
4	Step 4			

Online meetings/training			Total excl. VAT
1	Initial meeting (December 2022)		
2	Meeting after reviewing the BS (January 2023)		
3	Meeting after sharing the proposed methodology report (Feb 2023)		
4	Meeting after submitting the final reports and system/tool (March 2023)		
5	Online training session with NE staff (March 2023)		

We will award this contract in line with the most economically advantageous tender (MEAT) as set out in the following award criteria:

Price – 50%
Quality – 50%

The following quality criteria are weighted in accordance with the importance and relevance attached to each one.

Criteria	Weighting	To include:
Staff (Recent experience of carrying out similar work and/or experience with OWTs functionality, effluent monitoring, and the British Standards)	35	To include: <ul style="list-style-type: none"> • please submit pen portraits/thumbnails separately and the time of each staff member on the different steps (no more than 1 side of A4).
Methodology	50	<ul style="list-style-type: none"> • please submit an Outline method of how you propose to develop the methodology and deliver the service (no more than 3 sides of A4).
Quality Assurance measures and Risk management	10	<ul style="list-style-type: none"> • please detail the quality assurance measures you intend to apply on the process of developing the methodology • please outline the project risks and the mitigation approach you will apply (no more than 1 side of A4)
Completion time	5	<ul style="list-style-type: none"> • please submit an outline of the timeline indicating how the final report will be submitted by 24th March 2023 • (no more than 1 side of A4)

Score	Justification
For a score of hundred (100):	Excellent - Response is completely relevant and excellent overall. The response is comprehensive, unambiguous and demonstrates a thorough understanding of the requirement and provides details of how the requirement will be met in full.
For a score of seventy (70):	Good - Response is relevant and good. The response demonstrates a good understanding and provides details on how the requirements will be fulfilled.
For a score of fifty (50):	Acceptable - Response is relevant and acceptable. The response provides sufficient evidence to fulfil basic requirements.
For a score of twenty (20):	Poor - Response is partially relevant and/or poor. The response addresses some elements of the requirements but contains insufficient / limited detail or explanation to demonstrate how the requirement will be fulfilled.
For a score of zero (0):	Unacceptable - Nil or inadequate response. Fails to demonstrate an ability to meet the requirement.

6. Contract Management

This contract shall be managed on behalf of the Authority by
Charitos Zapitis

Email: charitos.zapitis@naturalengland.org.uk

Mob: 07920032817

Below are the details on managing the contract, the meetings and milestones.

Proposed Timeline

The contract is anticipated to start by 15th December 2022.

- December
 - a start-up MS teams meeting between NE and the contractor
- by mid-January (**Step 1**)
 - provide the short summary of the BS monitoring requirements (Step 1)
 - an MS teams call to discuss what BS cover, if they cover the whole range of OWTS (e.g. those of continuous and non-continuous flow) and steer the project
 - initial discussion on the proposed methodology
- mid-January to mid-February (**Steps 2-4**)
 - work on methodology development and draft report write up
- mid-end of February
 - draft report and system/tool shared with NE
 - report feedback given from NE to the contractor and an MS teams call within the week to discuss any issues (1 week will be required to provide feedback)
- by March 13th
 - final reports, system/tool, and any other supporting evidence provided to NE

- by March 20th
 - feedback meeting, opportunity for final details and discuss any changes to report
- by March 24th
 - final submission of all outputs
 - training session to NE staff on using the system/tool

* There is room for flexibility within the proposed timeline. However, the final submission deadline must be met.

We will raise purchase orders to cover the cost of the services and will issue to the awarded supplier following contract award.

- first invoice (Step 1): after receiving the BS and providing the monitoring requirement summary (expected in January 2022)
- second invoice (Step 2): after receiving the report on the methodology development (expected in February)
- third and final invoice (Steps 3 and 4): after receiving the final submissions of all outputs (final reports, system/tool, and online training session recording; expected by March 24th)

7. Disclosure

All Central Government Departments, their Executive Agencies and Non Departmental Public Bodies are subject to control and reporting within Government. In particular, they report to the Cabinet Office and HM Treasury for all expenditure. Further the Cabinet Office has a cross-Government role delivering overall Government policy on public procurement, including ensuring value for money and related aspects of good procurement practice.

For these purposes, the Authority may disclose within Government any details contained in your quotation. The information will not be disclosed outside Government during the procurement.

In addition, the Authority is subject to the Freedom of Information Act 2000 and the Environmental Information Regulations 2004, which provide a public right of access to information held by public bodies. In accordance with these two statutes, the Authority may be required to disclose information contained in your quotation to any person who submits a request for information pursuant to those statutes.

By submitting a quotation you consent to these terms as part of the procurement.

Disclaimers

Whilst the information in this RFQ and any supporting information referred to herein or provided to you by the Authority have been prepared in good faith the Authority does not warrant that this information is comprehensive or that it has been independently verified.

The Authority does not:

- make any representation or warranty (express or implied) as to the accuracy, reasonableness or completeness of the RFQ;
- accept any liability for the information contained in the RFQ or for the fairness, accuracy or completeness of that information; or
- accept any liability for any loss or damage (other than in respect of fraudulent misrepresentation or any other liability which cannot lawfully be excluded) arising as a result of reliance on such information or any subsequent communication.

Any supplier considering entering into contractual relationships with the Authority following receipt of the RFQ should make its own investigations and independent assessment of the Authority and its requirements for the goods and/or services and should seek its own professional financial and legal advice.

Protection of Personal Data

In order to comply with the General Data Protection Regulations 2018 the contractor must agree to the following:

- You must only process any personal data in strict accordance with instructions from the Authority
- You must ensure that all the personal data that we disclose to you or you collect on our behalf under this agreement are kept confidential.
- You must take reasonable steps to ensure the reliability of employees who have access to personal data.
- Only employees who may be required to assist in meeting the obligations under this agreement may have access to the personal data.
- Any disclosure of personal data must be made in confidence and extend only so far as that which is specifically necessary for the purposes of this agreement.
- You must ensure that there are appropriate security measures in place to safeguard against any unauthorised access or unlawful processing or accidental loss, destruction or damage or disclosure of the personal data.
- On termination of this agreement, for whatever reason, the personal data must be returned to us promptly and safely, together with all copies in your possession or control.

General Data Protection Regulations 2018

For the purposes of the Regulations the Authority is the data processor.

The personal information that we have asked you provide on individuals (data subjects) that will be working for you on this contract will be used in compiling the tender list and in assessing your offer. If you are unsuccessful the information will be **held and destroyed**

within two years of the award of contracts. If you are awarded a contract it will be retained for the duration of the contract and destroyed within **seven years** of the contract's expiry.

We may monitor the performance of the individuals during the execution of the contract, and the results of our monitoring, together with the information that you have provided, will be used in determining what work is allocated under the contract, and in any renewal of the contract or in the award of future contracts of a similar nature. The information will not be disclosed to anyone outside the Authority without the consent of the data subject, unless the Authority is required by law to make such disclosures.

8. Annex

1. Nutrient Neutrality generic methodology

- includes a section on Septic tank and PTP calculations and provides default values



Natural England
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2. Nutrient Neutrality calculator example

- includes both total N and total P – further examples available upon request.



Itchen Nutrient
Budget Calculator -