**Invitation to Tender**

**Title:** **ISO 11 Incinerator Life Extension Project – WP 5 Refractory Replacement**

**Project Ref: BC22-004**

**Date: 9th September 2024**

**Procurement: John Nixon**

**Owner: Anthony Clarke**

**Client: The Pirbright Institute**

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# Introduction

Pirbright is a National Capability due to the combination of unique facilities and highly skilled staff. ISO 11 is a unique SAPO CL4 large animal facility in the UK, is the only facility in the UK able to study foot-and-mouth disease virus and other SAPO4 agents in vivo, and now has dedicated capacity to study highly pathogenic avian influenza virus. This underpins a strategic aim to predict, detect, understand and prevent high-consequence livestock viral diseases exotic to the UK.

The current operational High Containment facilities at Pirbright comprise of Isolation Unit 11 (ISO 11), and Plowright Building (BBSRC National Virology Centre). ISO 11 is a High Containment Large Animal Facility, operating at SAPO Containment Level 4 (CL4), subject to the Institute’s Licence from HSE under the Specified Animal Pathogens Order 2008 (SAPO). Under SAPO CL4, all waste must be inactivated by a “validated means” within the laboratory, (or animal unit). FMDV minimum standards state that “Solid waste (animal carcasses, feedstuffs, laboratory waste etc.) 59. The principle requirement is on-site inactivation of FMDV in waste using a validated method.”, referencing the methods of Incineration on site and Rendering of carcasses on site. (Appendix 1 shows further detail).

Pirbright is also internationally recognised as a leader in animal welfare in containment facilities and one important contributing factor is the use of straw for animal bedding and enrichment in appropriate species. Straw, and animal faeces cannot be disposed of via rendering. In addition, the size and quantity of large animal carcasses, including up to 250kg cattle has necessitated the use of on-site incineration as the primary means of waste inactivation. The ISO 11 incinerator is fundamental in ensuring SAPO compliance and biorisk containment and control.

The ISO 11 incinerator was installed in approximately 1994 during the construction of a previous facility ISO 8, which itself was decommissioned around 2007/8. The incinerator has in recent years experienced numerous issues related to the age and obsolescence of key components. A recent ISO11 incinerator HAZOP has identified several obsolescence, reliability, and safety issues which require remediation as soon as reasonably possible to maintain safe and reliable operation of ISO 11. This includes the burner fuel system, the Continuous Emissions Monitoring System (CEMS), the incinerator control system and deterioration of the refractory lining.

The key benefits of this project are to:

* Reduction in Risk to As Low As Reasonably Practicable (ALARP) of regulatory breaches of SAPO, Animals (Scientific Procedures) Act 1986 (ASPA) and Environmental licenses through addressing HAZOP risk assessment findings and other regulatory identified issues.
* Extends lifespan of Incinerator for a minimum of 10 years.

**This Invitation to Tender is for the** **Design and Build of Work Package 5 -** **Incinerator Kiln Refractory Lining replacement for the Primary and Secondary Combustion Chambers.**

Both the primary and secondary incinerator chambers are coated in a high temperature “refractory” lining of 200mm thickness. This insulates the incinerator and prevents damage to the kiln mild steel shell. The excessive number of repeated heat cycles results in the premature breakdown of the refractory lining and an upgrade of the lining is required to ensure 10 years’ reliable operation. Appendix 6 shows some examples of the refractory lining breaking down within the primary chamber, around the loading area and in the secondary chamber causing a significant visible hot spot. These refractory defects were patched by specialist contractors, but the occurrence of defects is increasing, indicating that a full refractory replacement of both chambers is required for reliable operation into the future. If not addressed, these could eventually lead to structural failure of the incinerator.

The ISO 11 Facility has pre-existing maintenance shutdowns which are fixed dates and cannot be changed. There are two shutdowns which have been agreed for these works which are:

* 23rd December 2024 – 14th February 2025
* 26th August 2025 – 10th October 2025

The works can be scheduled for a single shutdown or split over the two shutdowns. Since these dates are fixed, any preparatory works which can take place outside of these dates would be recommended to maximise the time for works during the shutdown.

# Contract Scope

The contract is for a single supplier to provide Design and Build of Work Package 5 - Incinerator Kiln Refractory Lining Upgrade to the Primary and Secondary Combustion Chambers, as per the user requirement specification (URS) for The Pirbright Institute (Pirbright), Ash Road, Pirbright, Surrey, GU24 0NF.

The scope of this contract is to replace the Kiln Refractory Lining for the Primary and Secondary Incinerator Chambers to ensure that the ISO 11 incinerator remains available to operate, safe, reliable and will serve the building for a minimum of 10 years.

The scope of works will involve:

* Detailed design and configuration of the new refractory lining and anchors based on the existing plant, drawings and documentation.
* Supply and delivery of all refractory materials and anchors.
	+ This would include any materials used for forming, moulding, and support structure (e.g. wood, polystyrene) and 1 tonne waste bags with sealable tops.
* Deconstruction of existing refractory lining and Anchors (Disposal of waste by others)
* Installation of the new anchors and refractory lining as per agreed detailed design.
* Management of drying out and curing of the lining.
* Management of all subcontractors employed by the supplier to complete these works.
* On completion, an O&M is to be submitted which provides details of works from design to completion. The O&M should include all relevant items shown in the PIF and a separate section which provides details of the following
	+ Brief Description of the works being carried out.
	+ Project Risk Assessment.
	+ Key structural principals.
	+ Hazardous materials used.
	+ Information on the future removal of installed plant.
	+ H&S information about equipment provided for cleaning or maintaining installed plant.
	+ The nature, location and markings of significant services.
	+ Information and as built drawings of buildings, plant and equipment.
	+ Step by step activities to carry out the works.
	+ Lesson Learnt, challenges met and how they were overcome.
	+ Details on how the curing burners are set up and how the ventilation and ID fans are set up to draw away the heat.
* As part of the works, the supplier should also provide the following:
	+ Provision to ensure safe access and egress to confined spaces (Gas monitors, Rescue Personnel, Outside Watchman, etc)
	+ All provisions for the deconstruction, installation and drying / curing of the refractory, including but not limited to:
		- All necessary machinery and equipment required for the works.
		- Provision of lighting in the individual plant sections.
		- Provision of transport vehicles required for the works which is not listed as part of the CDM site below.
		- Provision of weather protection for any equipment and materials used/stored outside.
		- Air compressor and fuel.
		- Extraction fans and filtration to minimise dust generation within area of works.
		- All PPE required for safe working during all works.
		- Equipment and fuel required for drying and curing of the refractory lining. Recommend diesel burner as gas would be difficult to arrange on site.

~~A CDM Construction site will be set up as part of the overall project which will provide for the following:~~

* ~~Site Supervision~~
* ~~HERRAS fencing and appropriate signage around CDM area~~
* ~~Site Office~~
* ~~Welfare Office including changing areas~~
* ~~Waste skips~~
* ~~Scissor lift~~
* ~~Fork-lift truck / telehandler~~
* ~~CDM documentation / inductions / daily logs / management of RAMS~~

A CDM construction site will be required to be set up as part of these works. Based on the scenario that the work can be delivered in the first shutdown (23rd December 2024 – 14th February 2025), the supplier is requested to provide a cost for the supply and management of the CDM site required for the refractory works only. It is expected that the supplier should allow for the following at a minimum:

* Acting as Principal Designer & Principal Contractor for Work Package 5
* Site Supervision
* Site Establishment
* HERRAS fencing and appropriate signage around CDM area
* Site Office
* Welfare Office
* Waste skips
* Access Equipment
* CDM documentation / inductions / daily logs / management of RAMS
* Management of Works Package Contractors

**Additional information:**

As part of the tender, the supplier is to provide option costs and timescales for the following:

* Completion of both chambers within a single visit based on normal working hours only.
* Completion of both chambers within a single visit based on normal and extended working hours.
* Completion of both chambers over two visits (i.e. one chamber per visit) based on normal working hours only.
* Completion of both chambers over two visits (i.e. one chamber per visit) based on normal and extended working hours.

## Document Purpose

The primary purpose of this document is to provide potential suppliers with the information to allow them to submit adequate information to tender for the works. It also provides the delivery timeline and any other constraints which are relevant to the tender process.

## Contract Notice

A notice for this contract was placed on Find a Tender Service and Contracts Finder on the 9th September 2024 by The Pirbright Institute.

## Form of Contract

The appointed Contractor will be required to enter into a Contract with the Authority in the form set out at Appendix D – The Contract. The form of agreement will be NEC4 Engineering and Construction Contract (ECC).

## Contract Duration

The contract duration will be **19th November 2024 – 31st December 2025**.

## Suggested Payment Schedule

The following payment schedule is suggested for this Contract, but the supplier is free to provide their proposed payment schedule:



# Instructions to Tenderers

## Location of Works

The works will take place at the following address:

The Pirbright Institute

Ash Road

Pirbright, Surrey

GU24 0NF

## Procurement Timetable

The timetable for this tender is anticipated as below:

| Key Task/Milestone  | Date |
| --- | --- |
| Tender Stage |
| Notice published (Open Procedure) Find a Tender and Contracts Finder | 9th September 2024 |
| Invitation to Tender issued through Contracts Finder or on Request | 9th September 2024 |
| Receipt of the signed Appendix H - Confidentiality Agreement  | ASAP |
| Full tender pack issued on receipt of signed Appendix H - Confidentiality Agreement |  |
| Site Visits  | 18th - 20th September 2024 |
| Deadline for receipt of questions relating to the tender | 12:00 (Noon) 25th September 2024 |
| Answers to questions circulated | 16:00 2nd October 2024 |
| Date for receipt of Tender Submissions | 12:00 (Noon) 11th October 2024 |
| Evaluation of Tender Submissions | 14th – 25th October 2024 |
| Contract Award Stage |
| Notification of award decision & commencement of standstill period | 29th October 2024 |
| Expiry of 10-day standstill period | 8th November 2024 |
| Contract Award | 12th November 2024 |
| Contract Commencement Date | 19th November 2024 |

## Tender Submission Requirements

Tenderers should ensure that their Tender is submitted on company headed paper and confirm the following:

* Cover Letter on company headed paper
* Tenders for works broken down where appropriate into project stages
* Proposed Payment Schedule
* Confirmation of Insurances
* Acceptance statement of THE PIRBRIGHT INSTITUTE chosen T&Cs detailing any modifications required (Appendix D)
* Acceptance statement of confidentiality statement included in this ITT document
* Details of how the specifications will be met, including confirmation of how each requirement in Section 5 of Appendix E will be achieved.
* Details of relevant experience of the team, including training records
* Details of relevant qualification of the team, including certificates
* Details of 3 relevant Case Studies. Please note this is separate to any requests in Appendix A - Standard Selection Questionnaire (SQ) to provide contract examples as part of your tender response.
* Details of Quality management system processes/accreditations utilised
* Details of Safety management system processes utilised
* An example relevant RAMS

Tenderers should fully complete and include the following as part of their Tender submission:
* Appendix A - Selection Questionnaire (SQ)
* Appendix C - Pricing Schedule
* Appendix F - Form of Offer

## Tender Submission and Clarifications

The PIRBRIGHT INSTITUTE contact for queries and clarifications is

|  |  |  |
| --- | --- | --- |
| Name | Position | Email & Telephone |
| John Nixon | Procurement Buyer | Procurement.department@pirbright.ac.uk  |

All queries will be collated, and clarifications issued to all tenderers during the process.

If you would like to visit site on the dates/s specified in the timetable please contact Veekash Bhowruthveekash.bhowruth@pirbright.ac.uk.

Deadline for receipt of questions relating to the tender by no later than **12:00 (Noon) 25th September 2024.**

Tender submissions to PirbrightTenders@pirbright.ac.uk **only** and by no later than **12:00 (Noon) 11th October 2024.**

## Tender Evaluation

Once received, tenders will be evaluated by members of PIRBRIGHT Ref BC22-004 Project Team.

Tenders will be evaluated based on cost, commercial and quality aspects, and references will be sought where appropriate.

Evaluation will take the form of scoring via a scoring matrix see Appendix B.

Where required, clarifications will be sought by PIRBRIGHT from tenderers to ensure scoring is impartial and does not disadvantage tenderers.

Where tender contract price is deemed by PIRBRIGHT to be abnormally high or low, they may be discounted from the competition and not taken through to the scoring stage of the tender. It will be at the discretion of PIRBRIGHT whether clarification is sought for the abnormally high/low proposal. In the event that a tender submission contains other abnormal factors, clarification will be sought by PIRBRIGHT. Should PIRBRIGHT not be satisfied with the clarification response, they may disqualify the tender from the competition and no further evaluation/scoring will be conducted for the tender submission.

On completion of evaluation and scoring of tender submissions, where the highest scoring submissions are within 5% of each other, it will be at the discretion of PIRBRIGHT to award the contract to the supplier they deem most appropriate for the contract provision.

A key element of delivering this work is for the tender to meet the requirements set out in Section 5 of Appendix E. If any ‘Must Have’ requirements cannot be met, then clarification will be sought by PIRBRIGHT. Should PIRBRIGHT not be satisfied with the clarification response, they may disqualify the tender from the competition and no further evaluation/scoring will be conducted for the tender submission.

## Confidentiality

Should you wish to tender for this Contract, please complete the form in Appendix H and return to PirbrightTenders@pirbright.ac.uk as soon as possible. Once received, technical information for this contract will be sent.

By submitting a tender proposal in response to this ITT the tenderer is agreeing to the following:

All information supplied to you by The Pirbright Institute, including this ITT and all other documents relating to this Procurement Process, either in writing or orally, must be treated in confidence and not disclosed to any third party (save to your professional advisers, consortium members and/or sub-contractors strictly for the purposes only of helping you to participate in this Procurement Process and/or prepare your tender response) unless the information is already in the public domain or is required to be disclosed under any applicable laws.

You shall not disclose, copy or reproduce any of the information supplied to you as part of this Procurement Process other than for the purposes of preparing and submitting a tender response. There must be no publicity by you regarding the Procurement Process or the future award of any contract unless the Customer Organisation has given express written consent to the relevant communication.

This ITT and its accompanying documents shall remain the property of Pirbright.

Pirbright reserves the right to disclose all documents relating to this Procurement Process, including without limitation your tender response, to any employee, third party agent, adviser or other third party involved in the procurement in support of, and/or in collaboration with, the Customer Organisation Pirbright further reserves the right to publish the Contract once awarded and/or disclose information in connection with supplier performance under the Contract in accordance with any public sector transparency policies (as referred to below).

By participating in this Procurement Process, you agree to such disclosure and/or publication by the Customer Organisation in accordance with such rights reserved by it under this paragraph.

The Freedom of Information Act 2000 (“FOIA”), the Environmental Information Regulations 2004 (“EIR”), and public sector transparency policies, including the placing of contract award notices on the Contracts Finder database, apply to The Pirbright Institute (together the “Disclosure Obligations”).

You should be aware of Pirbright’s obligations and responsibilities under the Disclosure Obligations to disclose information held by Pirbright. Information provided by you in connection with this Procurement Process, or with any contract that may be awarded as a result of this exercise, may therefore have to be disclosed by Pirbright under the Disclosure Obligations, unless Pirbright decides that one of the statutory exemptions under the FOIA or the EIR applies.

If you wish to designate information supplied as part of your tender response or otherwise in connection with this tender exercise as confidential, you must provide clear and specific detail as to:

* The precise elements which are considered confidential and/or commercially sensitive.
* Why you consider an exemption under the FOIA or EIR would apply.
* The estimated length of time during which the exemption will apply.

The use of blanket protective markings of whole documents such as “commercial in confidence” will not be sufficient. By participating in this Procurement Process you agree that Pirbright should not and will not be bound by any such markings.

In addition, marking any material as “confidential” or “commercially sensitive” or equivalent should not be taken to mean that Pirbright accepts any duty of confidentiality by virtue of such marking. You accept that the decision as to which information will be disclosed is reserved to Pirbright, notwithstanding any consultation with you or any designation of information as confidential or commercially sensitive or equivalent you may have made.

You agree, by participating further in this Procurement Process and/or submitting your tender response, that all information is provided to Pirbright on the basis that it may be disclosed under the Disclosure Obligations if Pirbright considers that it is required to do so and/or may be used by the Customer Organisation in accordance with the provisions provision of this ITT.

Tender responses are also submitted on the condition that the appointed supplier will only process personal data (as may be defined under any relevant data protection laws) that it gains access to in performance of this Contract in accordance with Pirbright ’s instructions and will not use such personal data for any other purpose. The contracted supplier will undertake to process any personal data on Pirbright ’s behalf in accordance with the relevant provisions of any relevant data protection laws and to ensure all consents required under such laws are obtained.

## Conditions of Tender

* In submitting a proposal in response to this invitation to tender tenderers do so on the conditions specified or referred to herein and on the following express conditions.
* Tenderers should consider only the information contained within this invitation to tender, or otherwise communicated in writing to tenderers, when making their offer.
* Information supplied by Pirbright is supplied for general guidance in the preparation of tenders. Tenderers must satisfy themselves by their own investigations with regard to the accuracy of such information. Pirbright cannot accept responsibility for any inaccurate information obtained by Tenderers.
* Tenderers shall not, before the date and time specified for return of the tender, communicate to any person the amount or approximate amount of the tender or proposed tender
* The tender shall be a bona-fide tender and shall not be fixed or adjusted by or under or in accordance with any agreement or arrangement with any other person.
* Tenderers shall not enter into any agreement or arrangement with any other person with the intent that the other person shall refrain from tendering or between you agree as to the amount of any other tender to be submitted.
* Pirbright shall not be liable for, or pay any direct or indirect costs howsoever incurred by any Tenderer in the preparation of their tender, or for the costs of any post-tender clarification meetings, presentations, demonstrations or by any Tenderer who fails to respond by the deadline set.

# APPENDICES

**Appendix A - Selection Questionnaire (SQ)**

**Appendix B – PMINCIN Life Extension Work Package 5 Contract Scoring Matrix**

**Appendix C - Pricing Schedule**

**Appendix D - NEC4**

**Appendix E - WP5 Refractory Replacement Specification**

* **Appendix E1 - Site Documents**
* **Appendix E2 - Incinerator Dimensions**
* **Appendix E3 - Front Plate Technical Datasheets**

**Appendix F - Form of Offer**

**Appendix G - The Pirbright Institute's use of animals in research**

**Appendix H – Confidentiality Form**