**BAS ENVIRONMENTAL IMPACT ASSESSMENT (EIA) IN SUPPORT OF A**

**REGULATED ACTIVITY PERMIT (RAP) APPLICATION TO THE**

**GOVERNMENT OF SOUTH GEORGIA & THE SOUTH SANDWICH ISLANDS (GSGSSI)**

|  |  |  |
| --- | --- | --- |
| **Revision No.** | **Revision description** | **Revision date** |
| 1 | Introduction of new form | 13 May 2022 |

|  |
| --- |
| **This form is to be used by BAS staff or those operating under BAS logistics to:**1. **assess the environmental impact of activities in SGSSI area;**
2. **agree suitable mitigation measures with BAS Environment Office;**
3. **gain BAS Environment Office approval for your project; and**
4. **support your Regulated Activity Permit (RAP) online application to GSGSSI**[[1]](#footnote-2)**.**
 |

**Guidance notes for completing this form:**

* **Applications for which an OSPQ/ non-science OSPQ has not been completed will not be processed by Environment Office[[2]](#footnote-3).**
* Submit your application to nicoup@bas.ac.uk by the **30th June** for the following season.
* **Submissions or amendments received outside the application deadline will only be considered under exceptional circumstances and must be discussed with the BAS Environment Office in advance.**

**Privacy Notice:***The British Antarctic Survey, a constituent organisation of the Natural Environment Research Council, will retain the personal data provided as confirmation of agreement with the conditions in this EIA Form. A copy of your completed form may be circulated to all or any of the named participants, internally to BAS colleagues and GSGSSI. The personal data on this form and all other information provided will be retained for long-term environmental monitoring purposes. By submitting this form, you are also agreeing to the* [*GSGSSI privacy policy*](https://www.gov.gs/docsarchive/Visitors/Regulated_Activity/Privacy%20Policy_2021.pdf)*. No personal data will be supplied to any other third party (other than those stated) without your consent.*

# Project Description

|  |  |  |  |
| --- | --- | --- | --- |
| OSPQ number *(where applicable[[3]](#footnote-4))*  |  | Title of Project |  |
| Personnel involved. Please provide names and job titles of all personnel who will be involved in the project specifically identifying their project role e.g. Principal Investigator, Field Leader, team members and external collaborators/contractors and identify if these are BAS or non-BAS |
| Full Name | Organisation and Job Title | Project Role |
|  |  | Person responsible for completing the BAS EIA *(must be named)* |
|  |  | Principal Investigator |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| Location |
| Name each location to be visited with a description of the area, and state whether the site has been visited before.  |
| **Location Name** | **Location Description***(e.g. coastal, ice-free, glacier, open ocean etc.)* | **Has the location been visited previously?** *Please provide detail.* |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| Please provide a brief description of your project including: *Summary of the main aims of your project;**Outline of project plan including proposed dates, duration of the project, route and mode of travel, number of persons and time spent at each location;**Details of methodology (including equipment required); and* *Brief justification of the environmental impact as applicable* |
|   |

# Identification of Potential Impacts

|  |
| --- |
| Chemicals and Hazardous SubstancesIf you intend to use any chemicals, hazardous substances, radioactive material or stable isotopes please confirm this here and also submit a copy of your [CAR form](https://www.bas.ac.uk/for-staff/polar-predeployment-prep/intro-guidelines-and-forms/health-safety-guidlines-and-forms/) along with this EIA form to the BAS Environment Office (the CAR form must also be submitted to the BAS Laboratory Manager for review and approval emfi@bas.ac.uk). Please also contact Kath Nicholson for advice on how to package hazardous goods and hazardous waste for shipping - ekani@bas.ac.uk |
| Do you intend to use any chemicals, radioactive material or stable isotopes likely to interact with the environment outside of the laboratory/ in the field? If so, please provide detail explaining how you intend to use them and list the mitigation measures you intend to use to safeguard the environment. *(You can provide a copy of your CAR form).* |  |
| Do you intend to use any other hazardous substances e.g. paints, batteries etc.? |  YES [ ]  |  NO [ ]   |
| If so, please list substances likely to interact with the environment here and provide detail on how you intend to use them listing the mitigation measures you intend to use to safeguard the environment.  |  |
| Waste Management Please refer to the [BAS Waste Management Handbook](https://www.bas.ac.uk/wp-content/uploads/2021/10/Waste-Management-Handbook.pdf) for further information on waste packaging and consignment.  |
| How much hazardous, radioactive, non-hazardous waste will the project produce? *Please include approximate weights/volumes (and radioactive levels where applicable) by waste type anticipated.* |  |
| Is your project taking place on a BAS station or supported by BAS in the field? | YES [ ]  *Please go to 2.2.3* | NO [ ]  *Please go to 2.2.4* |
| Please indicate the anticipated quantities and type(s) of waste packaging required, in particular for hazardous waste.*Environment Office will review this against the standard station supply and advise whether additional waste packaging for your project is required.*  |  |
| Is your project taking place on the *Sir David Attenborough*?  | YES [ ]  *Please go to 2.2.5* | NO [ ]  *Please go to 2.2.6* |
| Please provide the quantities and type(s) of waste packaging required, in particular for hazardous waste. *BAS Environment Office will procure and provide the necessary waste packaging materials and ensure they are delivered to the vessel. If you do not provide any details here, you will be responsible for organising your own compliant packaging prior to boarding the ship.**All waste produced on the SDA by science cruises within South Georgia waters should be consigned to the BAS Environment Manager in the UK for disposal. BAS Environment Office will then organise and pay for the disposal of this waste. However, please note that radioactive waste transport and disposal costs will be charged back to the responsible project.* |  |
| If your project is logistically supported by a non-BAS Antarctic operator or non-BAS vessel, please provide further details. * *BAS Environment Office will not supply waste packaging or provide waste disposal. Please confirm that the operator/vessel/you will provide appropriate and compliant waste packaging and confirm how the waste will be disposed of in accordance with all relevant waste legislation[[4]](#footnote-5).*
 |  |
| Oil Spill Response (for field activities only) |
| Please confirm the type and quantity of fuel that will be taken into, used, and stored in the field. |  |
| All field parties must be familiar with the BAS fuel spill protocols. Please confirm that you have discussed your field fuel needs and requirement for spill kits with the BAS Field Operations Manager. |   YES [ ]  |
| Deployment and Installation of Equipment |
| Do you intend to install or deploy any equipment in the field or ocean (including data loggers/markers on animals, moorings, gliders, etc.)?  | YES [ ]  *Please complete questions 2.4.2 – 2.4.6.* | NO [ ]  *Please go to 2.5* |
| Provide a brief description of the equipment including details of the materials, dimensions, weight, and any hazardous substances such as batteries or oils. |  |
| Provide a brief summary of the location where equipment will be installed or deployed (including coordinates). |  |
| Equipment should be easily identifiable as science instrumentation and be able to be traced back to the organisation or project. Provide details of how the equipment will be labelled and referenced. |  |
| Describe how and when the equipment is to be maintained and removed. Confirm if funding and operational support is in place for your retrieval plans. *If any of the equipment you deploy in the field or ocean is lost or cannot be retrieved as planned you will need to report this at the time of the incident on Maximo[[5]](#footnote-6).* |  |
| Is the intention for any of your equipment to remain in the field/ocean permanently (e.g. mooring anchors, buried seismic conduits, etc.)? If, so please detail the equipment to be left behind intentionally and explain why it cannot be retrieved. |  |
| Remotely Piloted Aircraft Systems (RPAS), other remotely operated marine or terrestrial vehicles (ROVs) or Human Occupied Vehicle (HOV) |
| Does the project intend to utilise RPAS or other remotely operated marine or terrestrial vehicles or human occupied vehicles?  | YES [ ]  *Please complete questions 2.5.2 –2.5.5.* | NO [ ]  *Please go to 2.6* |
| Does the project involve Beyond Visual Line of Sight (BVLOS) operations? If so, please provide details. |  |
| Please provide detail including the type, size, make, model and operating capacity (e.g. maximum wind resilience, flight time, fail safes, etc.) |  |
| Describe the location in which the RPAS/ ROV/ HOV will be operated (e.g. off a ship, deep field, near a station, over wildlife, etc.) |  |
| Please confirm you have read and will commit to follow the [BAS Regulations on RPAS use in Antarctica](https://nercacuk.sharepoint.com/sites/BASDigitalw/whats-new/OperationsEngineering/UAS1/BAS%20Regulations%20on%20Remotely%20Piloted%20Aerial%20Systems.pdf). |   YES [ ]  |
| Construction and Maintenance Work |
| Do you intend to import natural materials to South Georgia (e.g. untreated wood, aggregate, sand etc.)? Provide details of type, quantity and from where the materials will be sourced. Please refer to Section 4.4 of the [BAS Biosecurity Regulations](https://www.bas.ac.uk/wp-content/uploads/2021/08/BAS-Biosecurity-Regulations.pdf) and discuss with Environment Office as appropriate.  |  |
| Will the work require concrete mixing on site? Provide details of the expected quantity and working methods.  |  |
| Do you anticipate the alteration, removal or destruction of equipment, buildings or structures (or parts of buildings or structures)? |  |
| Biosecurity |
| All projects must follow the standard biosecurity procedures detailed in the [BAS Biosecurity Regulations](https://www.bas.ac.uk/wp-content/uploads/2021/08/BAS-Biosecurity-Regulations.pdf) (and the GSGSSI [Biosecurity Handbook).](https://www.gov.gs/docsarchive/Environment/Biosecurity/Biosecurity_Handbook.pdf) Please confirm that you have familiarised yourself with these. |   YES [ ]  |
| Sampling |
| Mineral and biological samples If you intend to sample mineral resources, snow, water, ice or sample, capture, kill or harmfully interfere with any marine or terrestrial flora or fauna (including invertebrates) please complete the following sections. If not, please proceed to Section 4.1. *Please note that opportunistic/recreational sampling is prohibited* |
| Do you intend to sample rock, soil, peat, sediment, seabed nodules, fossils, meteorites, minerals, water, snow, or ice? |  YES [ ]  *Please complete questions* *3.1.2 – 3.1.4* |  NO [ ]  *Please go to 3.1.5* |
| Please provide a description of the activities you intend to undertake and the mineral resources/water, snow, or ice you intend to sample. |  |
| Provide information on estimated quantities and volumes or mass of mineral resource or water/snow/ice samples and the number and location of sampling sites below.  |
| **Type of sample****e.g. soil, snow, water** | **Sampling location** *(please also coordinates)* | **Number of samples**  | **Estimated mass/volume per sample of single sample**  | **Estimated total mass/volume of samples at the site** | **Units for mass / volume** | **Method of extraction/collection**  |
| e.g. soil | e.g. Terrestrial – Grytviken | e.g. 3 |  e.g. 100 | e.g. 300 | e.g. g | e.g. 5cm soil core |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Do you intend to import any biological samples (e.g. soil, sediments, algae in water) to the UK?  | YES [ ]   | NO [ ]   |
| If you answered ‘**Yes**’ to the above question, please take note: You must ensure you have read and understood the separate import licence requirements detailed in the note under point 3.1.9.  |
| Do you intend to sample, capture, kill or harmfully interfere with any marine or terrestrial flora or fauna (including invertebrates)? | YES ☐ *Please complete questions* *3.1.6* *–3.1.9*  |  NO [ ]  |
| Does your project involve working with vertebrates and/or cephalopods? If you answer yes, your project must be subject to Animal Welfare and Ethics Review.  |  YES [ ]  *By selecting ‘Yes’ you agree that your project is subject to Animal Welfare and Ethics Review by the* [*BAS AWERB*](https://nercacuk.sharepoint.com/sites/BASDigitalw/people-teams/science-teams/Pages/SH-Ethics.aspx)*. It is your responsibility to apply and obtain ethics approval. Evidence of your ethics approval will be required by GSGSSI in order to process your RAP application.* |  NO [ ]   |
| Please provide a description of the activities you intend to undertake and the biological samples you intend to take.  |  |
| Please complete the table below detailing the species that would be affected by the activity. Provide information on life stage, sample type, location of sampling sites, estimated quantities, volumes/mass of biological samples and any devices fitted. |
| **Species/ Taxon**  | **Life stage** (if applicable) | **Sample type**  | **Sampling location** *(please also coordinates)* | **Estimated numbers of individuals to be handled/ collected** | **Estimated mass/volume of single sample** (if applicable) | **Total mass/volume of samples for the site**(if applicable) | **Units for mass/ volume** | **Details of device** (if applicable) |
| e.g. Gentoo penguin | e.g. Adult – non-breeding | e.g. blood | e.g. Terrestrial - Bird Island | e.g. 12 | e.g. 1 | e.g. 12 | e.g. ml | e.g. n/a |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Do you intend to import any biological specimens (animals or plants) to the UK?  | YES [ ]  *Please refer* *to note below.*  | NO [ ]   |
| If you answered ‘**Yes**’ to the above question, you must ensure you have read and understood the separate import licence requirements as detailed below and if necessary, contact the Cambridge Laboratory Team: *Importation of biological or soil samples (including algae) to the UK requires a relevant DEFRA/CITES import licence which is not covered by this ‘EIA form’. Only samples collected and permitted for scientific purposes are supported for import.**How and where your samples will be stored and curated may have an impact on the import licences required.* *If you require storage at BAS Cambridge, please agree this in advance with the Cambridge Laboratory Team. Please contact Elaine Fitzcharles in the first instance:* *emfi@bas.ac.uk**.* *For further details on the protocols and procedures for consigning biological samples from all stations and ships please refer to* [*https://www.bas.ac.uk/for-staff/polar-predeployment-prep/intro-guidelines-and-forms/importing-biological-samples-into-the-uk/*](https://www.bas.ac.uk/for-staff/polar-predeployment-prep/intro-guidelines-and-forms/importing-biological-samples-into-the-uk/) *or contact emfi@bas.ac.uk* |

# Environmental Impact Matrix

## Environmental Matrix (please complete as per guidance and examples provided in the table below)

| **Science and logistical activities undertaken as part of your project***(see examples below)* | **Identify possible impacts - direct, residual and/or cumulative[[6]](#footnote-7)** | **Mitigating measures***Please provide details of the mitigation measures you intend to implement to ensure that* ***negative impacts are minimised or avoided****.* *Please review the guidance documents provided below (please note that this is not an exhaustive list) and where applicable, reference these and any other environmental guidance relevant to your activities here.* |
| --- | --- | --- |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| ***Examples*** |
| *E.g. Importing equipment to South Georgia* | *E.g. Possible introduction or intra-regional spread of non–native species (vegetation and/or invertebrates, including those in soil) on contaminated equipment*  | *E.g. Biosecurity briefing provided to all team members prior to departure**Boots, clothing and equipment to be cleaned thoroughly before departure from the UK.* *Visual checks/cleaning between sites to check no soil is stuck to boots or equipment.**Follow guidelines in BAS Biosecurity Regulations and the GSGSSI Biosecurity Handbook.* |
| *E.g. Undertaking field projects i.e. long days away from station with occasional overnight stays in huts* | *E.g. Generation of domestic waste and human waste* | *E.g. All team members to read and be briefed on the ‘Field Operations Manual’ relating to Environmental Management and the BAS Waste Management Handbook.**All domestic waste will be segregated in the field and returned to station for disposal in line with the BAS Waste Management Handbook. Human waste will be discharged on the shoreline, under the tidal mark.* |
| *E.g. Deploying retrievable sensors in the field* | *E.g. Impact to wilderness and aesthetic value of the region.* *Risk of equipment becoming waste if not recovered.* | *E.g. Design phase of project has identified biodegradable and low toxic materials to be used in the construction of the sensors.**The Environment Office will be informed of sensor deployment locations if equipment is not retrieved, and the details will be added to the ‘lost equipment’ log.*  |
| **Reference guidance documents*** [BAS Wildlife Interaction Manual](https://www.bas.ac.uk/wp-content/uploads/2022/04/BAS-Wildlife-Interaction-Manual.pdf)
* [BAS Waste Management Handbook](https://www.bas.ac.uk/wp-content/uploads/2021/10/Waste-Management-Handbook.pdf) for guidance and advice on waste management
* [BAS Biosecurity Regulations](https://www.bas.ac.uk/wp-content/uploads/2021/08/BAS-Biosecurity-Regulations.pdf) for guidance and advice on appropriate biosecurity measures
* GSGSSI [Biosecurity Handbook](https://www.gov.gs/docsarchive/Environment/Biosecurity/Biosecurity_Handbook.pdf)
 |

# Statement of Agreement

|  |
| --- |
| In signing this form, you the PI (or other designated deputy) are confirming the following: |
| * I have read and agree with the BAS and GSGSSI ‘Privacy Notices’.
 |
| * The information provided in this BAS Environmental Impact Assessment (EIA) is accurate and up to date. Any deviation from the information provided in this form will be communicated to the BAS Environment Office at the earliest opportunity.
 |
| * Where my project involves animal handling, I confirm that I have applied to BAS AWERB to obtain ethics approval. I will attach the relevant approval document to my SG online Regulated Activity Permit application.
 |
| * The information I have provided in this form, and the mitigation measures including those relating to biosecurity to which I have committed, will be communicated to all members of the project team. This requirement is irrespective of any other mitigation measures that may be stipulated by GSGSSI.
 |
| * I confirm that I will apply to GSGSSI for the relevant category of Regulated Activity Permit[[7]](#footnote-8), using this form as proof of BAS Environment Office approval.
 |
| * Should any environmental incidents occur, I will report these on the [Maximo](https://nercacuk.sharepoint.com/sites/BASDigitalw/people-teams/OperationsPolar/Pages/HS-AINME.aspx).
 |
| **Applicant / PI Name:** | **Date:** |
|  | **Revision date:** |
| **Approved by BAS Environment Office**  | **Date:** |
|  | **Revision date:** |

1. You are required to upload this EIA form to your GSGSSI [RAP online application](https://www.gov.gs/visitors/regulated-activity-permit/). [↑](#footnote-ref-2)
2. This does not apply to AIMP projects or BAS/ NERC cruises. (If in doubt, please confirm with chrdri@bas.ac.ukor olies57@bas.ac.uk as necessary). [↑](#footnote-ref-3)
3. This does not apply to AIMP projects or BAS/ NERC cruises. If you haven’t completed an OSPQ or you are in doubt if you need to complete one, please confirm with chrdri@bas.ac.ukor olies57@bas.ac.uk. [↑](#footnote-ref-4)
4. Waste (England and Wales) (Amendment) Regulations 2012, The Duty of Care Regulations 1991, and the Hazardous Waste (England and Wales) (Amendment) Regulations 2009. These regulations affect the packaging, containment, storage, transportation and disposal of waste from source to final disposal. This includes transportation from the UK port, where the waste is offloaded from the ship, and to the waste disposal site. [↑](#footnote-ref-5)
5. ##  [Maximo](https://nercacuk.sharepoint.com/sites/BASDigitalw/people-teams/OperationsPolar/Pages/HS-AINME.aspx) is the BAS enterprise asset management system used for Incident Reporting

 [↑](#footnote-ref-6)
6. Direct impacts of your activities on flora, fauna, air quality, water quality (fresh and marine), geology, soils, permanent ice, noise levels or cultural heritage. Residual impacts once your project is complete such as leaving equipment in the field longer term, permanent removal of samples from the field, and impacts on the value of the locality for future science. Cumulative impacts: If you are aware of any other projects or activities in the past, present or foreseeable future then these could, combined with your proposed project, result in a significant environmental impact. [↑](#footnote-ref-7)
7. Please refer to the [GSGSSI website](https://www.gov.gs/visitors/regulated-activity-permit/) for more information on GSGSSI RAP Categories. [↑](#footnote-ref-8)