

Corporate report: NDA Direct Research Portfolio (DRP) Projects: Quarterly Update

Updated: Updated with latest version.

The Direct Research Portfolio (DRP) addresses issues that could affect multiple sites, or Site Licence Companies, in areas of strategy, technology innovation and skills.

This document shows the DRP projects that are ongoing or were commissioned during Financial Year 2018 to 2019. Each project is aligned to an R&D topic in the [NDA's 5 year R&D plan](#).

The document shows the contractor, purchase order value, R&D driver and current status.

Where projects are complete, the final reports are available upon request.

This information is updated quarterly as new projects are awarded.

These projects are delivered through competed framework contracts awarded to a wide range of supply chain organisations, based on the following themes:

Lot A – University interactions

Scope: to ensure the right level of academic technical capability is available.

Lead contractor

National Nuclear Laboratory Frazer-Nash Consulting

Consortium members

Lot B – Integrated waste management and site decommissioning and remediation

Scope:

Integrated Waste Management

Higher Activity Wastes (HAW)

- development and analysis of options for HAW management
- development of innovative technologies
- sponsoring R&D that enables the NDA to respond strategically to government policy and oversee Site Licence Companies' HAW work

Lower Level Wastes, non-radioactive and hazardous waste

- sponsoring R&D that enables the NDA to respond strategically to government policy and oversee SLCs' work on these wastes Site Decommissioning and Remediation
- technical underpinning for the NDA's strategy on decommissioning, land quality and site end states

Lead contractor

Consortium members

Wood Group (previously
Amec Foster Wheeler Ltd)

Arcadis Consulting (UK)
Ltd

Arup

Masons, CL:AIRE, r3
Environmental Technology,
Dalton Nuclear Institute

Eden NE Ltd

Project Time and Cost
International Limited

Galson Sciences Ltd

Lancaster University,
University of Leeds,
University of Manchester,
University of Sheffield

NSG Environmental Ltd

University of Surrey

Andra, Brenk Systemplanung and Jülich Research
Centre, Cogentus Consulting, DAS Ltd, Imperial
College London, Longenecker & Associates, MMI
Engineering, NuVision, OC Robotics, Fortum,
University of Birmingham, University of Bristol,
University of Cambridge, University of Manchester

AdvanSci, Applied Photonics (APL), Areva RMC,
Aurora, ESI, MDecon, Pöyry, ProNu-Dec, Tradebe
Inutec, TWI, University of Liverpool, Dalton
Nuclear Institute, University of Surrey

Costain, Pöyry, Studsvik, James Fisher Nuclear
Ltd, SN3, AdvanSci, MCM, Bilfinger GVA, Pinsent

Cavendish Nuclear, DBE TECHNOLOGY GmbH, Golder
Associates Limited, Tradebe Inutec,

National Nuclear Laboratory, Frazer-Nash
Consulting, AdvanSci, Amphos 21, Cogentus
Consulting, Integrated Decision Management,
Jacobs, Kurion, Rodgers Leask, VTT, University of
Bristol,

AECOM, ARC, Oxford Technologies, NPL, ESG,
Quintessa, React Engineering, KDC, Tradebe
Inutec, Synergy Health, Nuclear AMRC,
Loughborough University, University of
Manchester,

Lot C – Spent fuel and nuclear materials

Scope:

Sponsoring R&D that enables the NDA to set and monitor Site Licence Company delivery of our strategy on Magnox spent fuel, oxide spent fuel, exotic fuels and uranics

- ensuring skills in spent fuel management and plutonium handling are maintained over the longer term

- to support NDA development of options for managing the UK's uranium inventory and stockpile of separated plutonium
- sponsoring R&D that enables the NDA to respond to government policy and oversee SLC activities on management of uranium and plutonium

Lead contractor	Consortium members
Wood Group (previously Amec Foster Wheeler Ltd)	Andra, Brenk Systemplanung and Jülich Research Centre, DAS Ltd, Fortum, MMI Engineering, NPL, NRG, OC Robotics, Studsvik, University of Birmingham, University of Manchester, University of Bristol, University of Cambridge, Loughborough University, Imperial College
Areva NC	NSG Consultancy, MDecon, Quintessa, University of Liverpool, University of Sheffield
National Nuclear Laboratory	Frazer-Nash Consulting, Galson Sciences Ltd, ALD France, Aquila Nuclear Engineering, DBD, DAS, IDM, Jacobs, Kurion, Rodgers-Leask, University of Bristol, Lancaster University, University of Leeds, University of Manchester, University of Sheffield, Imperial College

Livelink ref: 23012904

[Transparency data: Environment Agency objections to planning on the basis of flood risk](#)

Updated: Updated list of Environment Agency objections to planning on the basis of flood risk.

An annual list of the Environment Agency's initial objections to planning applications on the basis of flood risk and water quality. Many of these issues will be resolved before a final decision is made.

The list will help local authorities complete their annual monitoring reports which help measure the effectiveness of local planning. It will also help local authorities submit information on the Single Data List to government.

Corporate report: Environment Agency's planning consultation response timeliness

Updated: We've published the annual report to the Ministry of Housing, Communities and Local Government: 2017 to 2018 – the Environment Agency's timeliness on responses to planning consultations in England.

This report shows the Environment Agency's performance as a consultee in the spatial planning system in England.

Guidance: Marine Pollution (MARPOL) Annex II Surveyors

Updated: Surveyor list updated Aug 2018

MARPOL Annex II Surveyors

The International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) Annex II, Regulation 16 requires the Government of each party within the convention to appoint or authorise surveyors for the purposes of exercising control procedures developed by the International Maritime Organisation. The Merchant Shipping (Dangerous or Noxious Liquid Substances in Bulk) Regulations 1996 (Statutory Instrument (S.I.) 1996/3010, as amended by S.I. 1998/1153) implements Annex II of MARPOL and refers to MARPOL surveyors in Regulation 9(2).

Duties of a MARPOL Surveyor

A MARPOL Surveyor will only attend if required by a ship owner or his agent. The duties of a MARPOL Surveyor are briefly:

- To attend the completion of the unloading of all Category X substances and verify that the pre-wash has been conducted.
- To attend where the unloading of Category Y and Z substances cannot be carried out in accordance with the ship's Procedures and Arrangements Manual.

- To attend vessels, such as “offshore supply vessels,” and verify that cargo tanks which have contained noxious liquid substances of pollution category X, Y or Z have been cleaned and the residues and washings have been put ashore to port waste reception facilities in accordance with the Procedures and Arrangements Manual.
- To exempt ships from the requirements of Regulation 13.4 of MARPOL ANNEX II, Exemption for a “pre-wash”, as required. If the pre-wash requirements cannot be met at the discharge port, but will be carried out at the next port, it is to confirmed in writing that a reception facility at the other port is available and is adequate for such purpose.
- To endorse each ship’s Cargo NLS Record Book accordingly.
- To provide prompt and accurate returns, using the [returns form](#) and including nil returns, every six months.

Surveyor Operations

When attending a vessel the MARPOL Surveyor should be supervised at all times by a responsible ships officer who is involved in cargo operations. The responsible ships officer should be present when any cargo sampling is carried out. He should be fully conversant with all aspects of the ship’s sampling system including the operational characteristics of the valves.

The responsible ships officer should be satisfied that the sampling equipment is compatible with the ship’s sampling points before starting any sampling.

The surveyor should only take samples from a designated sample point, as indicated by the ships officer. The sampling operations are to be conducted in a safe and efficient manner which will preclude any escape of cargo liquid or vapours to the atmosphere or the deck of the ship beyond that required by the sampling process. Any spillage is to be cleaned up immediately.

The Surveyor should not be left unattended whilst taking samples.

Fees for Undertaking MARPOL Surveyor Duties

MARPOL Surveyors may charge for their services. The amount of any charges should be fixed by agreement between the Ship’s Master and Surveyor.

Annual Registration of MARPOL Surveyors

MARPOL Surveyors must re-register with the Maritime and Coastguard Agency(MCA) every year in order for the Authorisation to remain valid. It is the responsibility of the employing company to make sure that details of all authorised MARPOL Surveyors are sent to the MCA in the period from 1st to 31st October of each year. Failure to do so will result in the removal of the

company and associated Surveyors from the List of Authorised MARPOL Surveyors. Re-registration should be undertaken using the [re-registration form](#).

Updating MARPOL Surveyors Information

The Maritime and Coastguard Agency should be informed, at the address given at the bottom of this note, of any changes to the MARPOL Surveyor List. This includes changes:

- to the primary contact,
- company address details or
- the addition or
- loss of MARPOL surveyors to the company listed.

Companies should not wait until the annual re-registration to inform the MCA of any changes.

MARPOL Surveyors must inform the Maritime and Coastguard Agency if they change employer as this requires a new authorisation to be issued. Changes of this kind may be charged at the current hourly rate. If you do not inform the Maritime and Coastguard Agency of any changes like this it will result in MARPOL Surveyor Authorisation becoming invalid.

Future Appointments

Any application for appointment as a MARPOL Surveyor should be made to the address shown at the bottom of this page. Upon receipt of an enquiry regarding an application for Authorisation the MCA will send costs and details of the information required.

Environmental Policy Branch

Maritime and Coastguard Agency

Bay 2/29

Spring Place

105, Commercial Road

Southampton

S015 1EG

Detailed guide: General binding rules: small sewage discharge to a surface water

Updated: New sentence to clarify the rules for existing and new treatment systems: Where properties with septic tanks that discharge directly to surface water are sold before 1 January 2020, responsibility for the replacement or upgrade of the existing treatment system should be addressed between the buyer and seller as a condition of sale.

You must read [septic tanks and treatment plants: permits and general binding rules](#) before you follow this guidance.

New rules came into force on 1 January 2015. If your system was installed and discharging before 31 December 2014 you have an 'existing discharge'. If your system was installed and discharging on or after 1 January 2015 you have a 'new discharge'.

Rules for existing and new treatment systems

Use the correct treatment system

You must use a small sewage treatment plant to treat the sewage if you're discharging to a surface water such as a river or stream. A small sewage treatment plant (also known as a package treatment plant) uses mechanical parts to treat the liquid so it's clean enough to go into a river or stream.

Discharges from septic tanks directly to a surface water are not allowed under the general binding rules.

If you have a septic tank that discharges directly to a surface water you will need to replace or upgrade your treatment system by 1 January 2020. Where properties with septic tanks that discharge directly to surface water are sold before 1 January 2020, responsibility for the replacement or upgrade of the existing treatment system should be addressed between the buyer and seller as a condition of sale.

If the Environment Agency finds evidence that your septic tank discharging to a surface water is causing pollution, you will need to replace or upgrade your system earlier than 1 January 2020. You will usually have to do this within 1 year, although this will be agreed on a case-by-case basis.

You may be able to:

- connect to mains sewer – where available
- install a drainage field (also known as an infiltration system) so the septic tank can discharge to ground instead

- replace your septic tank with a small sewage treatment plant

[Contact the Environment Agency](#) to discuss your options.

You can apply for a permit for an existing or new discharge to a surface water from a septic tank. A permit is only granted in exceptional circumstances. [Contact the Environment Agency](#) to discuss.

If you're planning to use a septic tank conversion unit to upgrade an existing septic tank discharging to a surface water [contact the Environment Agency](#) to check it meets the required standard. You will be asked to provide evidence that it will treat to the equivalent standard as a sewage treatment plant. You will still need to apply for a permit.

Your treatment system must meet the right standards

Your treatment system must meet the relevant British Standard which was in force at the time of installation. The standards currently in force for new systems are:

- BS EN 12566 for small sewage treatment plants
- BS 6297:2007 for drainage fields

Your treatment plant met the British Standard in place at the time of installation if:

- it has a [CE mark](#)
- the manual or other documentation that came with your tank or treatment plant has a certificate of compliance with a British Standard
- it's on [British Water's list of approved equipment](#)

You can also ask the company that installed your equipment to confirm that it complies with the British Standard that was in place at the time the equipment was installed.

If there were no British Standards in place when your treatment system was installed (that is before 1983) you do not need to do anything else to meet this requirement.

Your treatment system must be installed properly and have enough capacity

Your treatment system must be large enough to handle the maximum amount of sewage it will need to treat. If you install a new small sewage treatment plant you must check with the installer that it meets the sizing requirements in [British Water's Flows and Loads 4 guidance](#).

If the amount of sewage the system needs to treat increases (for example, because you've extended your property or connected an additional property) you must make sure the treatment system is still big enough. You must also [recalculate](#) the maximum daily volume of your discharge and apply for a permit if it is more than 5 cubic metres (5,000 litres) a day.

Your treatment system must be installed in line with the manufacturer's specification (the instruction manual or technical set of requirements that comes with the equipment).

If you're in a tidal area (an area where the water level changes according to tides), you must make sure the top end of the pipe that releases sewage is below the 'mean low water spring mark'.

This is the average low water mark at the time of spring tides. Find out the [low water mark where you live](#) on the Admiralty tide tables.

[Contact the Environment Agency](#) if your exact location is not shown.

Have your treatment system regularly emptied and maintained

You must get the sludge which builds up in your sewage treatment plant removed (desludged) before it exceeds the maximum capacity. As a minimum, you should have your treatment system desludged once a year or in line with the manufacturer's instructions.

The company you use to dispose of your waste sludge must be a registered waste carrier. Ask the company to confirm this when you arrange to have your tank emptied or ask the tanker driver for a copy of the company's waste carrier's certificate.

You should have your treatment system regularly maintained in line with the manufacturer's instructions. If these are not available, ask your local maintenance company for advice.

You must have your treatment system repaired or replaced if it is not in good working order, for example if it has:

- leaks
- cracks in tank walls or pipes
- blocked pipes
- signs that the effluent is not draining properly (pools of water around the drainage point)
- sewage smells
- a failed motor
- a failed pump
- a failed electrical supply

Anyone who carries out maintenance on your system must be competent. Competent people include those on British Water's [list of Accredited Service Engineers](#).

You sell your property – tell the new owner about the sewage treatment system

If you sell your property, you must tell the new operator (the owner or person responsible for the sewage treatment plant) in writing that a sewage discharge is in place.

Include:

- a description of the treatment plant and drainage system
- the location of the main parts of the treatment plant, drainage system and discharge point
- details of any changes made to the treatment plant and drainage system
- details of how the treatment plant should be maintained, and the maintenance manual if you have one
- maintenance records if you have them

You stop using your treatment system – make sure it's properly decommissioned

You must remove anything that could cause pollution (for example, remaining sludge) when you stop using a septic tank or sewage treatment plant.

This does not apply if you only stop using the equipment temporarily, for example if your property is empty.

You can ask a maintenance company for advice on how to decommission your septic tank or treatment plant properly.

Additional rules for new treatment systems installed and in use on or after 1 January 2015

You must follow these additional rules if you:

- started a new discharge from a small sewage treatment plant on or after 1 January 2015
- had a discharge to ground before 1 January 2015 which you now want to change to discharge to a surface water (or the other way round)
- had a discharge to a surface water before 1 January 2015 and you want to install a new drainage pipe which discharges more than 10 metres away from the existing one or which goes to a different surface water

Check if there's a public sewer nearby

If any part of the building your treatment plant serves is within 30 metres of a public sewer, the Environment Agency will not allow you to start a new discharge from a sewage treatment plant under the general binding rules.

If you are building a development of more than one property, this distance must be multiplied by the number of properties. For example, if there are 3 properties then the distance will be 3 x 30 metres = 90 metres.

To find out if there is a public sewer near your property, contact your [local water company](#).

If there is a good reason why you cannot connect to the sewer (for example, there is a river or a hill in the way) then you must apply for a permit so that the Environment Agency can decide whether to allow you to use a sewage treatment plant instead. [Contact the Environment Agency](#) to find out what

information you will need to put in your application.

Building regulations and planning approval

You must have [planning permission](#) and [Building Regulations approval](#) if you have or are planning to install a new sewage treatment plant.

Check if the discharge point is in or near a designated sensitive area

If you have or are planning to start a new discharge to a surface water in or near to a designated sensitive area, you must apply for a permit.

You will need a permit if the new discharge will be in or within 500 metres of any:

- [special areas of conservation](#)
- [special protection areas](#)
- [Ramsar sites](#)
- biological [sites of special scientific interest](#)
- freshwater pearl mussel population
- designated bathing water
- protected shellfish water

You will also need a permit if the new discharge will be in or within:

- 200 metres of an aquatic local nature reserve
- 50 metres of a chalk river or aquatic local wildlife site

[Contact the Environment Agency](#) to check if you're in or near a designated sensitive area and to find out if you need a permit.

Make sure the surface water has flow

New discharges are not allowed to a ditch or a surface water that does not contain flowing water throughout the whole year. That is unless there is a drought or an unusually long period of dry weather.

New discharges to watercourses that seasonally dry up are not allowed under the general binding rules, nor are discharges to enclosed lakes or ponds.

[Contact the Environment Agency](#) if you are unsure whether the surface water you want to discharge to is suitable.

Using a partial drainage field – check it meets the requirements

A partial drainage field (also known as a seasonal soakaway) is a system for discharging to water which allows effluent to drain into the ground when levels in the watercourse are low, and into the watercourse when groundwater levels are high.

If you're using a partial drainage field for a new discharge, you must install it within 10 metres of the edge of the watercourse and you must only

use it with a small sewage treatment plant, not a septic tank.

See the full list of [general binding rules](#) published by the government.

If there are any rules you cannot comply with [contact the Environment Agency](#) to discuss what you need to do.

Enforcement and sanctions

See the Environment Agency approach to [enforcement, sanctions and offences](#).