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SEPA has a strong track record of regulating to improve the Scottish environment. We are proud of what we have achieved since we were set up just over two decades ago in 1996. We know we need to do more over the next two decades to build on this success. Much more.

The mounting scientific evidence about climate change, plastics in our oceans, the pressure on our freshwater and more, shows us that humanity must rise to tackle major environmental challenges. This scientific knowledge underpins SEPA's strategy for how we will regulate - One Planet Prosperity. If everyone in the world lived as we do in Scotland, we would need three planets. There is only one.

So, we will regulate to help Scotland prosper within the means of our one planet. Successful businesses in future will be those that use low amounts of water. materials and carbon-based energy and create little waste. Prosperous societies will be comprised of these businesses. This can be Scotland.

In every sector we regulate, this means we will have two simple aims.

- 1. We will ensure that every regulated business fully meets their compliance obligations; and
- 2. ensure as many regulated businesses as possible will go beyond the compliance standards.

This draft sector plan outlines how we will do this in our regulation of the oil and gas decommissioning sector.

This is an important emerging sector for Scotland, one with huge potential to re-circulate valuable resources back into the economy in high value uses. We want to work with the sector to help it to put environmental protection and sustainable resource use at the heart of its development, managing decommissioned waste streams in ways that create economic and social success from environmental excellence. We will work with businesses in this sector as it develops to help them to be compliant with environmental laws and to help them innovate by looking for ways to go further. As the world faces shortages in metals and environmental constraints on their use, we will encourage the development of new technologies and business models that reduce resource use and environmental impacts in ways that meet market needs.

Our draft plan is ambitious. It spells out how we will use traditional environmental protection agency (EPA) regulatory tools, such as permits and enforcement, in clearer and more powerful ways. It sets out some completely new ways, such as novel partnerships, that we will develop and use to support innovation in this sector.

We would love to hear what you think of our draft plan. Once it's finalised, we are going to push on and implement it. So if you think we've got something wrong, missed something out or not been as transparent as possible, please let us know your thoughts. We want to get this right and then get on with it.

Terry A'Hearn SEPA Chief Executive Officer



## 1. Introduction

For SEPA to help create a prosperous Scotland that lives within the means of our one planet, we need to radically change the way we work. In the past, our approach to regulation has been grounded in the different set of rules we manage to protect the environment. This has helped us to deliver, for example, improvements in water quality. However, it will not enable us to make the transformational changes needed to tackle today's problems.

So, we are moving instead to ground our regulation in working across whole sectors. In this way we can systematically identify the compliance issues that need to be tackled by the sector. We can also identify where the biggest opportunities are for us to help the sector to go beyond compliance. In both ways this will help regulated businesses operate successfully within the means of one planet.

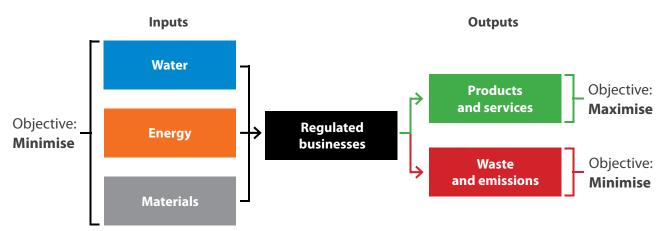
All businesses that we regulate in a sector use water, energy and raw materials to produce the products and services they sell. In doing so, they also create waste and emissions. We can think of these as environmental flows that need to be managed by the business (Figure 1).

We want to help as many businesses as possible to manage these flows effectively and reduce their use of natural resources and creation of waste in ways that enable them to meet their legal obligations, drive further improvements and operate their business successfully. To do this, we are preparing sector plans for every sector that we regulate.

Sector plans are at the heart of everything we do, shaping the interactions with every sector and the businesses in them. Through them, operators will get the relationship that their attitude and performance earns. Those that demonstrate a commitment to good environmental performance and deliver solid outcomes will receive powerful support through guidance and advice. Those that demonstrate behaviour which leads to significant or chronic non-compliance can expect us to use the most appropriate enforcement tools to bring them into compliance.

This is our plan for the oil and gas decommissioning sector. It outlines how we are going to regulate the sector and work with it to protect and improve the environment. The plan focuses on how we will work directly with oil and gas operators, waste operators, port authorities and trade bodies. We will also work closely with other environment agencies, other regulators and government bodies to encourage a consistent approach to the sector. Working to bring people together and building relationships within the sector will be key to helping to achieve the objectives of the sector plan. It explains how we will work directly with operators and also includes ways in which we will work with them to use our shared influence to improve environmental performance throughout the industry supply chain.

### **Environmental flows (Figure 1)**





## 2. Our vision for the oil and gas decommissioning sector

Environmental protection and sustainable resource use are cornerstones of oil and gas decommissioning. Operators and regulators work together to ensure, whether within Scotland, the UK or abroad, that infrastructure is processed at well-equipped yards which offer a high degree of environmental protection.

Equipment from decommissioned installations is circulated for reuse and refurbishment, and metals and other materials are recycled for high value use.

Scotland is recognised worldwide for its responsible approach, high quality infrastructure and technical skills and experience. The sector is creative in problem solving and is highly innovative, with ideas, solutions and expertise that can be exported worldwide.

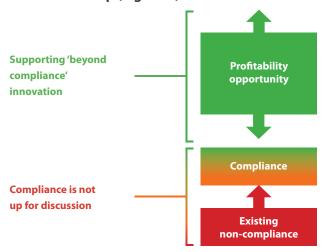
### **Our objectives**

The objectives of the sector plan are to:

- ensure all operators in the sector reach and maintain full compliance with Scottish, UK and European environmental protection laws;
- help as many operators as possible in the sector to move beyond compliance.

This is illustrated by the sector roadmap (Figure 2):

Sector roadmap (Figure 2)



This sector plan sets out how SEPA will work with the oil and gas decommissioning sector. For our vision and objectives to be achieved, our staff will work with partners and facilitate liaison between them and the sector to create opportunities that link business success with environmental success.

We want to bring together skilled, experienced and innovative people from across the sector to understand key challenges and opportunities to create innovative solutions. If we get this right, it will mean that a high quality environment is a platform on which economic and social success can be built, putting the sector on a pathway to becoming a "one planet" sector.



## 3. The oil and gas decommissioning sector

Oil and gas installations in the North Sea are reaching the end of their economic life, and a large programme of decommissioning is underway.

Between 2016 and 2030 at least 60% of the platforms in the Northern and Central North Sea will be decommissioned. The Oil and Gas Authority estimates<sup>1</sup> that up to £60 billion could be spent on decommissioning from now until 2030 with the UK government funding between 50-70% of those costs. As Scotland competes to win decommissioning contracts, there is a potential for at least 480,000 tonnes of material to be brought to Scotland for processing.

#### Who is the sector?

The sector is diverse in nature and consists of:

- large global oil and gas production companies - installation owners;
- offshore decommissioning specialists work on behalf of production companies who arrange the removal and transport of the installations to shore for decommissioning;
- onshore decommissioning operators dismantle installations for reuse, recycling and disposal;
- secondary waste operators for example metal recyclers, hazardous waste disposal operators.

### Facts and figures (Figure 3)



**Estimated cost of** decommissioning until 2025



Oil fields decommissioned in four regions of North Sea 2017-2025



Oil fields on UK Continental Shelf (UKCS)



Oil fields on Dutch Continental Shelf



Oil fields on Norwegian **Continental Shelf** 



Oils fields on Danish Continental Shelf

Across the four regions of North Sea 2017-2025



Platforms completely or partially removed



Wells plugged and abandoned





**Tonnes of waste expected** to arrive onshore in the next 5-10 years



**Estimated number of Decommissioning Programmes to** be approved up to 20232

Source: Oil & Gas UK Decommissioning Insight 2017

<sup>1</sup> Oil and Gas Authority. <a href="https://www.ogauthority.co.uk/decommissioning/cost-estimate/">https://www.ogauthority.co.uk/decommissioning/cost-estimate/</a>

<sup>2</sup> Oil and Gas UK. https://www.gov.uk/guidance/oil-and-gas-decommissioning-of-offshore-installations-and-pipelines

The UK and Scottish Government's priority is to work with the oil and gas industry to maximise economic recovery from the remaining North Sea oil reserves.

The Scottish Government also wants Scottish businesses to win contracts for the decommissioning work, and their Decommissioning Challenge Fund<sup>3</sup> is supporting infrastructure upgrades at ports and harbours, as well as helping firms build business cases for private investment. Scottish Enterprise<sup>4</sup>, Highlands and Islands Enterprise<sup>5</sup> and Zero Waste Scotland<sup>6</sup> also work to promote decommissioning opportunities for Scottish businesses.

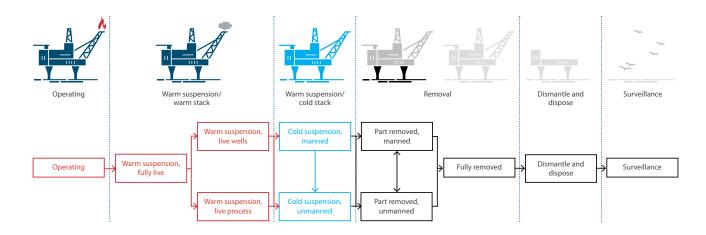
Decom North Sea is the only decommissioning trade body, a not for profit organisation working to enhance knowledge transfer and facilitate a collaborative approach. Supporting the sector are many academic/research institutions, technology centres and consultancies.

Decommissioning is regulated by the Offshore Petroleum Regulator for Environment and Decommissioning (OPRED) which sits within the Department of Business, Energy and Industrial Strategy (BEIS). Operators are required to submit their Decommissioning Programme (DP) to OPRED for approval to start the decommissioning process.

Decommissioning of installations generally commences at cessation of production (CoP), however planning for decommissioning begins at least two years prior to CoP with OPRED and other agencies consulted throughout the process. SEPA is consulted prior to and throughout the life of the DP. Figure 4 illustrates the decommissioning development phases.

Decommissioning has been taking place for a number of years, with installations being exported outside the UKCS for recovery, however decommissioning in Scotland is a developing sector. There are currently a limited number of facilities throughout Scotland to support large scale decommissioning.

### Decommissioning Programme Development Stages (Figure 4)7



<sup>3</sup> http://www.gov.scot/Topics/Business-Industry/Energy/Energy-sources/traditional-fuels/oilandgas/DCF

<sup>4</sup> Scottish Enterprise <a href="https://www.scottish-enterprise.com/knowledge-hub/articles/publication/oil-gas-decommissioning-action-plan">https://www.scottish-enterprise.com/knowledge-hub/articles/publication/oil-gas-decommissioning-action-plan</a> 5 HIE reference <a href="http://www.hie.co.uk/growth-sectors/energy/oil-and-gas.html">http://www.hie.co.uk/growth-sectors/energy/oil-and-gas.html</a>

<sup>6</sup> ZWS reference https://www.zerowastescotland.org.uk/content/north-sea-oil-and-gas-rig-decommissioning-re-use-opportunity-report-0

<sup>7</sup> Courtesy of OPRED

There are five key stages in the decommissioning process starting before CoP and continuing through the early identification of options, to detailed assessment and drafting of a DP, followed by execution and then post completion activity. The stages and an example of a materials inventory are detailed below.

Stage 1 Early discussions	Stage 2 Planning and producing the decommissioning programme (DP)	Stage 3 Submit the programme	Stage 4 Execution of the programme	Stage 5 Close out
Preliminary discussions with OPRED.  Possible option screening for pipelines.  Data and evidence collection and surveys.	Detailed discussions with OPRED.  Assessment of options – comparative assessment or similar including assessment of risk. Development and submission of consultation DP and environmental appraisal to OPRED and through consultation to other interested parties/public for consideration.  Derogation case – OSPAR consultation prior to final submission.	Draft DP following comment resolution with OPRED.  Formal submission of the DP and approval under the 1998 Act.	Commence main works.  Regular DP progress reports to OPRED.  Identify and discuss potential DP revisions.	Close out report and detail of all post DP surveys, within one year of full completion.  Update OPRED with amendments to post DP monitoring plan. Monitoring of site and site remediation as required.  Management plan for any infrastructure remaining in situ.

### Example of a stage 1 materials inventory (Figure 5)8

Area	Functional category	Description	EWC Code	EWC Classification	Weight {Te}	Comments
Topside	Plant and equipment	Powder extinguisher	16 05 09 <sup>(1)</sup>	Non-haz	0.001	
Topside	Plant and equipment	Lead acid batteries	16 06 01*(2)	Haz	0.002	
Topside	Plant and equipment	Separator	17 04 05 <sup>(3)</sup>	Non-haz	1.2	Assume NORM contaminated
Topside	Plant and equipment	Corrosion inhibitor	16 03 05*(4)	Haz	(5)	
Jacket	Structural	Jacket structural steel	17 04 05 <sup>(3)</sup>	Non-haz	10,000	

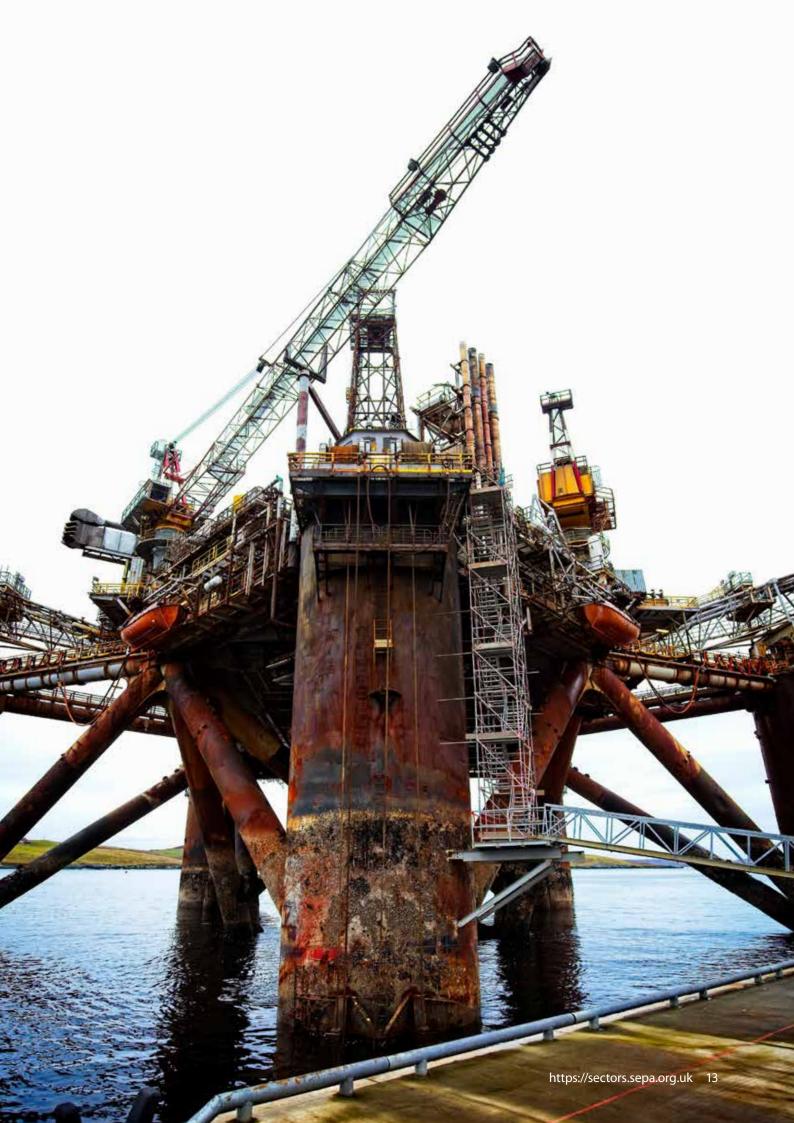
<sup>(1) 16 05 09</sup> discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08 (2) 16 06 01\* lead batteries (3) 17 04 05 iron and steel (4) 16 03 05\* organic wastes containing hazardous substances (5) weight unknown at this stage

## **Decommissioning programmes**

Figure 6 illustrates the number of decommissioning programmes currently identified in the North Sea, and some of the key ports currently involved with the sector.

## Number of decommissioning programmes (Figure 6)

Facility	Quayside Length Total	Longest Quay	Deepest Berth Draft (m) (all below CD)	Heaviest Quay Weight Bearing	Associated Open Area
Aberdeen**	1475m	525m	9m	10t per sqm	11ha
Arnish	559m	140m	7.5m	60t per sqm	48ha
Energy Park Fife	360m	184m	5.7m	20t per sqm	38ha
Kishorn	453m (incl. dry dock)	160m (dry dock)	13m (dry dock)	25t per sqm	19ha
Lerwick (Dales Voe)**	127m	127m	12.5m	60t per sqm	4ha
Lerwick (Greenhead Base)**	785m	468m	9m	Heavy Lift Pads 10t per sqm	20ha
Lyness	385m	171m	9m	150t per sqm	30ha
Montrose	977m	251m	9.5m	15t per sqm	1.4ha
Nigg	910m	370m	12m	50t per sqm	10.85ha
Peterhead**	1826m	486m	13m	50t per sqm	6.1ha
Port Babcock Rosyth	2830m	300m	12m	15t per sqm	_
Port of Cromarty Firth	950m	290m	14m	12t per sqm	7.5ha
Port of Dundee**	1100m	445m	9.5m	6.3t per sqm	2.2ha
Wick	1366m	140m	4.5m	11.5t per sqm	1.22ha

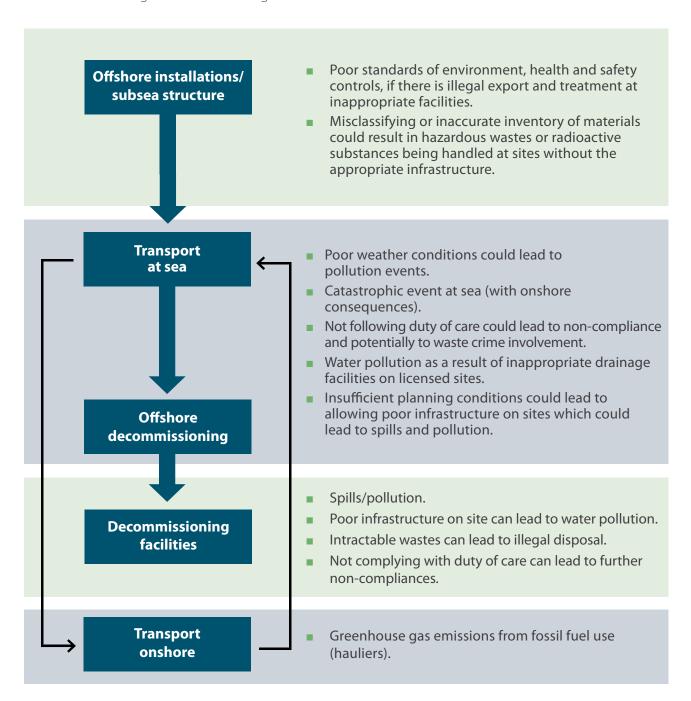




## 4. Environmental impacts and how we manage them

## **Environmental impacts throughout the supply chain**

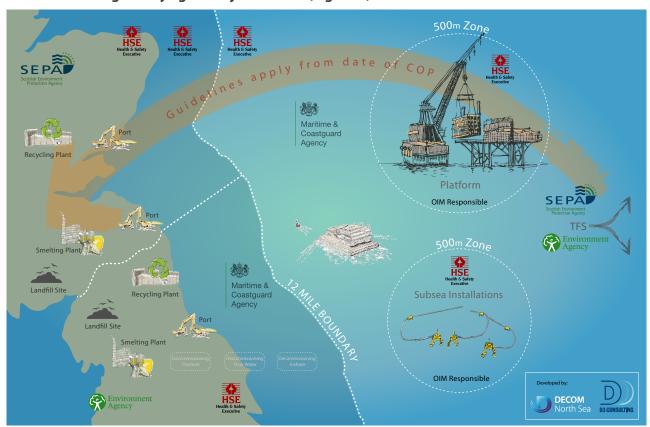
The flow diagram below highlights the potential environmental issues at the various stages of the supply chain of the oil and gas decommissioning sector.



### Environmental regulation of the oil and gas decommissioning sector

The decommissioning of offshore oil and gas installations and pipelines on the UKCS is controlled through the Petroleum Act 1998. The responsibility for ensuring that the requirements of this act are complied with rests with OPRED. The Oil and Gas Authority works with OPRED to assess decommissioning programmes on the basis of cost, future alternative use and collaboration, OPRED assesses and approves all decommissioning plans submitted by the operators through their Decommissioning Programmes (DP). SEPA is consulted prior to and throughout the life of the DP. There are other agencies involved in the regulation of decommissioning and these, along with their areas of jurisdiction are shown in Figure 7.

### Illustration of regulatory agencies jurisdiction (Figure 7)9



The OSPAR Convention requires installations to be removed from the seabed. However following an assessment, OPRED may give permission for derogation in appropriate circumstances to leave parts of the substructures, or whole installations in place (commonly known as 'rigs to reef').

### What is SEPA's regulatory role?

SEPA is responsible for environmental protection in a number of key areas. These are:

- Transfrontier Shipment of Waste Regulations 2007 (TFS)
- Duty of care obligations
- Pollution Prevention and Control (Scotland) Regulations 2012
- Waste management licencing
- Radioactive Substances Act 1993 (RSA 93)
- Water Environment (Controlled Activities) (Scotland) Regulations 2011

TFS 2007 is particularly important for this sector. We use these regulations to ensure that where installations are being transported for breaking abroad, it is only to the right countries with the right facilities. A key objective is that installations from the UKCS are not exported illegally to places where the environment and human lives are put at risk. The Basel Convention established notification requirements to restrict transboundary movements of hazardous wastes to protect human health and the environment against their adverse effects. Notification controls apply to all allowed imports and exports of hazardous waste for recovery operations and some non-hazardous waste for recovery operations to non-OECD countries.

9 Map courtesy of Decom North Sea

Shipments of wastes containing naturally occurring radioactive material (NORM) going outwith the UK require permission under RSA93 and TFS. The operator is required to apply to SEPA for a variation to the authorisation to allow NORM waste and NORM contaminated items to leave the UK. SEPA must give due regard to UK Government policy and the UK radioactive waste policy is based on self-sufficiency, so the operator must justify why the decommissioning of the installation cannot be carried out in the UK. In all cases the presumption is that any radioactive wastes will be returned to the UK, unless the waste does not add materially to the wastes needing to be disposed of in the country of destination.

Scottish facilities undertaking decommissioning must be authorised to do so by SEPA. We will ensure facilities are appropriately authorised, operators are 'fit and proper' and the right conditions are in place to protect the environment from pollution and communities from nuisance such as dust, odour and noise.

Decommissioning will result in a wide variety of waste materials such as metals, electrical and electronic equipment and asbestos. These wastes (other than steel) will move from the initial processing facility into the wider waste management industry for further treatment, recovery and disposal. Duty of care for waste places a responsibility on everyone managing waste to keep it secure, describe it properly and only pass it on to those authorised to accept it.

Part of the duty of care is a responsibility to apply the waste hierarchy in decision making. The waste hierarchy prioritises prevention, reuse, recycling, other recovery, and last of all disposal. The benefits of options higher up the hierarchy include carbon savings, reduced water consumption, protection of raw materials, creation of jobs and other economic opportunities.

OPRED's DP process provides operators with an opportunity to embed environmental protection and resource use objectives in their decommissioning plans. A materials inventory is key to ensuring management of materials though the process. SEPA is consulted on the materials inventory at stage one (as shown in Figure 4) to ensure that the waste hierarchy is considered and materials are used for maximum value and not deemed to be waste. At the end of the decommissioning process, the operator submits a close out report to OPRED, which details the fate of all materials in the inventory. SEPA is again consulted at this stage.

### SEPA's role in the development of the sector

There are a number of agencies involved in the regulation of the oil and gas sector, and consequently, it can be a complex and challenging area for industry to fully understand. SEPA is therefore bringing together at a strategic level, joint working with the Scottish Government, regulatory agencies, oil and gas industry, waste operators, and trade associations to ensure there is a full understanding of the expectations of the industry by all the regulators. The most significant benefit of working together will mean that opportunities for innovation, collaboration and best practice are identified and shared and the process of decommissioning is as efficient for all involved throughout the supply chain. Working together also means that unforeseen challenges can be readily identified and resolved effectively.

It is anticipated that SEPA's role in this sector will evolve as approval of decommissioning programmes accelerates. In the future, this collaborative way of working will develop knowledge and experience that will grow the industry into a successful, highly compliant and innovative sector. The result being that the Scottish framework for this way of working will be an exemplar to be used around the world.

## Wider influences on environmental performance of the sector

Full compliance with environmental legislation will not, by itself, deliver the change required to secure our One Planet Prosperity objectives<sup>10</sup>. The Oil and Gas Decommissioning Sector Plan needs to unlock the potential for businesses to gain strengths in resource efficiency and environmental innovation that will help them to succeed in their markets. We need therefore to combine the actions that we can take to influence the behaviour of a business through our regulatory role with all the other influences. Doing this will be the most effective way to secure full compliance and to help as many businesses as possible to move beyond compliance.

Working with the sector, we will place this more sophisticated way of operating at the heart of our work. Figure 8 summarises the main organisations that influence and are influenced by operators in the sector and those that we are likely to work with in both the short and longer term. As we implement the plan we will consider the opportunities these relationships provide and how we would like them to develop.

### **Key influences within the sector (Figure 8)**

## **Government agencies** and regulators

- SEPA
- BEIS
- OGA
- HSE
- Marine Scotland
- Scottish Government
- UK Government
- Zero Waste Scotland
- MCA
- Local authorities
- Enterprise agencies (HIE, SE)
- HMRC
- IMPEL
- European environment agencies
- SNH
- JNCC
- Scottish Water
- Crown Estate
- Scottish Institute for Remanufacturing, Reuse, Repair and Recondition
- Scottish Construction **Innovation Centre**
- Scottish Circular Economy **Business Network**
- Deconstruction Exchange Hub

### Competition

- Other port authorities/dry docks
- Downstream waste supply chain competition
- Innovators
- UK domestic competition (England, Wales, NI and Ireland)
- European competition (coastal European countries; including Nordic nations)
- International competition (rest of world)

## Oil and gas decommissioning sector

## NGO and community groups

Scottish, UK and global environmental and social NGOs and communities

## Supply chain

- Port authorities/dry docks
- UK and international metal recyclers
- UK and international smelters/foundries
- Landfill operators
- Specialist waste treatment operators
- Waste incineration operators
- Transport companies (shipping and road)
- Heavy lifting marine vessels
- NORM treatment specialists
- Brokers
- City funds
- Research and development universities etc.
- Oil & Gas Innovation Centre

## **Industry Trade bodies**

- Oil and Gas UK
- Decom North Sea
- BMRA
- Chartered Institute of Waste Managers





## 5. Tackling non-compliance and taking opportunities to go beyond

We believe that those societies and economies that are low resource use, low energy use, low water use and low waste will be the most successful in the 21st century. Businesses that are the most innovative will best rise to the challenges of our time, such as over use of resources and climate change and create sustainable economic growth.

To do this, every business must reach full compliance with environmental legislation. But mere compliance and small scale incremental change will not be enough. At SEPA we want to help businesses and sectors to implement successful innovation and support them in their ambitions to do more than they are required to by regulation.

We call this "moving beyond compliance": helping already high performing businesses to do more for the environment because it makes sense for them to operate in a sustainable manner.

## Compliance in the sector

Oil and gas decommissioning is a new, developing sector for Scotland. Decommissioning in the past has been on a relatively small scale. As a result, there is no compliance history for this new phase of large scale decommissioning at dedicated licenced sites. New sites, once licenced, will be assessed using our Compliance Assessment Scheme (CAS). Approval by SEPA of transfrontier shipments of waste from the UKCS by the sector has however, been ongoing for some years, but this is not captured in the CAS scheme (as CAS covers site licences only). We will therefore assess how we will measure compliance and success that covers our involvement with the whole sector.

## Where are the opportunities to go further?

Keeping metal materials flowing through the UK economy at as high a value as possible creates environmental and economic gains. Currently the route for reprocessing and recycling steel from decommissioning activities is export outside of the UK (under TFS). The sector should be encouraged to explore opportunities and options for reprocessing steel within the UK in order to maximise the value of steel within our own economy.

#### Water

The oil and gas decommissioning sector is not a significant water user but has the potential to impact the water environment through poor site management.

As most of the large scale facilities will be located in or around the coast, protecting coastal waters is important, therefore careful management of surface water is required.

#### SEPA will:

- bring together experts to share best practice and innovation for contaminated surface water treatment at decommissioning sites, which can be shared across sectors.
- encourage the sector to investigate methods that minimise water use for the removal of marine growth from metal surfaces.
- establish a baseline for water use at decommissioning facilities to identify opportunities for water efficiency, with the aim of identifying best practice across the sector.

## **Energy**

Due to the emerging nature of the sector, energy use at decommissioning facilities at this stage is unknown. Transportation of material flow through the facilities is also an unknown.

In order to initiate innovation around energy use, we need to understand where the highest impact of energy uses are. SEPA will, where appropriate, work with other partners to:

- benchmark energy use at new Scottish decommissioning facilities to identify opportunities for innovation and energy efficiency practices.
- gather overseas energy performance information to inform innovation and drive best practice within the sector.
- explore opportunities for fuel efficiency hauliers.

- work with research establishments, to investigate the potential for the productive use of marine growth.
- encourage secondary materials recovery to displace the production of virgin materials in order to reduce energy use.

#### **Materials**

A circular economy aims to use resources more efficiently, keep resources in use for as long a time as possible and to minimise waste. Keeping materials circulating in the economy at as high a value as possible creates environmental and economic gains. This is particularly relevant to the decommissioning sector where most of the materials (upwards of 98%) will be recycled. While this is excellent, more could be done to drive reuse and remanufacturing. The potential value inherent in reuse of equipment has been shown to be significantly higher than recycling.

Key to sustainable resource management is developing detailed material inventories and that the downstream supply chain is prepared to process, reuse and recycle as much of the materials as possible. Improving the quality and reducing contamination from waste materials increases the opportunity for higher value uses.

#### SEPA will:

- work with OPRED to ensure that both oil and gas operators and waste operators at decommissioning facilities maintain a Materials Management Plan throughout the life of the decommissioning project through the whole waste supply chain from recovery to disposal. This forms the basis of a duty of care approach without which the operators cannot identify the destination of the materials.
- work with Marine Alliance for Science and Technology Scotland (MASTS) and The Scottish Association for Marine Science (SAMS) to identify opportunities to reuse concrete mattresses due to the large volumes which will be removed from the seabed as the decommissioning process progresses.

- work with research establishments to identify uses and treatment processes for marine growth.
- promote the efficient recovery of high value metals which can be difficult to extract from other materials.
- encourage the reuse of domestic materials by charities for social benefit, for example, the reuse of gym equipment, beds and electrical
- work with partners to help to establish a forum for opportunities to trade materials from decommissioning activities for suitable remanufacturing, reuse and recycling.
- encourage secondary materials recovery in place of virgin materials production.



## 6. What actions are we going to take?

We will undertake the following actions to ensure compliance as this emerging sector develops, and help businesses to take opportunities to go beyond compliance.

Outcome sought	Action
There will be no harm to the environment or human health caused by illegal exports or disposal of decommissioning waste originating in Scotland.	We will undertake a targeted campaign to ensure that the producers of waste and their waste management chains are clear on their obligations to meet duty of care requirements. This will be supported by a focused review of both the oil and gas and waste operators Active Waste Management Plans, and the close out reports as required to be submitted to OPRED.
The processing of decommissioned infrastructure at Scottish facilities does not cause environmental harm.	We will ensure that operators have the correct authorisations with supporting guidance and inspections. SEPA's aspiration is that operators need to make sure they meet the authorisation conditions, to continually monitor and wherever possible improve their own performance. We will ensure our guidance provides clarity on the options for licencing within the sector and proactively promote the guidance through a series of external workshops and existing forums. We will initiate early engagement with operators to ensure they are fully aware of their environmental requirements and beyond compliance opportunities are identified at the development stage.
A successful, highly compliant and innovative sector which sets a high standard globally.	We will continue to work with the relevant agencies, the industry and trade bodies to take a proactive approach to the challenges faced by the industry. SEPA will continue to run workshops, attend conferences and meetings with industry and regulatory partners to share knowledge, aspirations for the sector and best practice.
Waste crime within the sector is prevented.	We will collect and develop intelligence to identify the potential involvement of serious and organised crime and the opportunities for criminality within the sector. SEPA will work alongside partner agencies to further our intelligence and take an active part in supporting operations aimed at targeting crime if identified within the sector.
Ensure that no waste is sent for illegal recovery and disposal outside the UKCS.	We will continue to work with UK and other environment agencies, OGA and OPRED to enhance strategic partnerships to ensure waste is correctly disposed of. SEPA will also work at boardroom level with operators and brokers to ensure TFS obligations are fully complied with.
Maximum value is derived from the equipment, materials and wastes brought ashore.	We will encourage and support best practice within the sector to share knowledge and experience of using innovative solutions for reusing, remanufacturing and recycling of waste.
Ensure early engagement and continued involvement with the DP to embed environmental performance in all decommissioning plans.	We will invest in our staff to ensure they are well informed and knowledgeable of the sector, and can provide support, advice and guidance through the Decommissioning Programme consultation process. Meet with directors and boards of operators, brokers and other regulators to raise awareness about the objectives of this sector plan.
Sector is well informed about SEPA's legal requirements and beyond compliance opportunities for the sector.	We will provide a dedicated oil and gas decommissioning webpage on SEPA's website to provide information, guidance, contacts, best practice, case studies and signposting to other agencies and trade bodies. This provides a one stop shop for essential information.
Consistency with other relevant sector plans.	We will hold regular meetings with other leads to discuss cross cutting issues to support mutual outcomes. Working with operators and OPRED at the earliest stage.

## 7. Outcomes

If we achieve the vision we have set out in this plan, we anticipate that we will help to deliver positive outcomes that protect and improve the environment in ways that also protect communities and enable businesses to operate effectively and successfully in their markets.

> Operators are good neighbours, actively involved in supporting the local communities around the authorised facilities.

Strong environmental performance of operators and supply chain.

## **Protected** communities

Reduced greenhouse gas emissions through efficiency and innovation.

Sites are operated with the appropriate infrastructure and management in place.

## **One Planet Prosperity** Oil and gas decommissioning sector

## Better environment

Protected coastal water environment.

Scottish businesses benefit from the flow of valuable materials in the circular economy.

> Scotland benefits from a highly successful sector, with experience and knowledge that can be transferred worldwide.

Embedding duty of care obligations into all operations throughout the supply chain has prevented illegal operators from operating within the sector, whilst supporting the economic viability of the supply chain.

Stronger **business** 

## 8. Priority Actions

- Work with the OGA to develop a live register of information regarding decommissioning activities ongoing in the UKCS, to ensure that SEPA can take a proactive approach in ensuring that all operators understand their obligations with respect to the Transfrontier Shipment of Waste Regulations: that waste is not sent out with the UKCS without notification to SEPA. SEPA Chief Executive Officer (CEO) to meet with the directors of brokers and waste contractors to ensure top level commitment to compliance.
- A duty of care campaign will be undertaken to increase awareness of duty of care obligations for oil and gas operators and waste contractors handling decommissioning waste. This will include holding workshops and external events to ensure that not only will waste be dealt with correctly throughout the supply chain, but that dangerous wastes, such as those with hazardous properties, are going to sites equipped and licensed to manage them.
- Develop and implement a programme of information events and training for SEPA staff (including planners, site officers, scientists etc.) who will be involved in the implementation of the Oil and Gas Decommissioning Sector Plan to build their knowledge of the sector, its supply chain, our guidance (including licences and duty of care), the compliance issues and to share beyond compliance opportunities.
- Work with OPRED and other regulatory agencies (e.g. Environment Agency and Health and Safety Executive) to ensure a level playing field for the decommissioning activities within the UK. Guidance, Active Waste Management Plans, duty of care obligations, radioactive substances, licences and permits must be applied consistently throughout the UK. SEPA's CEO to engage with other relevant CEOs, to ensure a commitment to cooperation between the agencies and legislative consistency.

- Continue to build relationships and share information and best practice with the sector through workshops, meetings, conferences and events.
- Work with OPRED and Decom North Sea to develop, improve and ensure Active Waste Management Plans are being completed by the relevant operators. This will help the operators and waste contractors throughout the supply chain, to create innovation in the supply chain (waste treatment options) and effective means of pushing waste higher up in the waste hierarchy to achieve maximum value and reuse.
- Work with partner agencies such as Zero Waste Scotland, Scottish Enterprise and Highland and Islands Enterprise (HIE) and universities, to develop innovation in the supply chain, identify opportunities for research and development to improve reuse, recycling and recovery within the supply chain.
- Conduct a study into existing sites earmarked for decommissioning to ensure that an environmental assessment has been carried out that considers the impact of processing the decommissioning waste.
- SEPA will work with the relevant agencies to agree which licencing regime will govern the decommissioning activities over water i.e. at quaysides, and harbours.
- Create an easily accessible one page intranet page where all relevant information will be held or signposted to. This will also include company contact information, key lead information and information about the sector.

# 9. Glossary of terms

Marine growth	Organic matter (alive or dead) that is attached to any part of the installation or associated infrastructure		
BEIS	Department for Business, Energy and Industrial Strategy		
CAS	Compliance Assessment Scheme		
СоР	Cessation of production		
DNS	Decom North Sea		
DP	Decommissioning Plan		
EA	Environment Agency		
HIE	Highlands and Islands Enterprise		
OGA	Oil and Gas Authority		
OGUK	Oil and Gas UK		
OIM	Offshore Installation Manager which is the most senior manager of an offshore platform operating on the UKCS		
OPRED	Offshore Petroleum Regulator for Environment and Decommissioning		
TFS	Transfrontier Shipment of Waste		
R&D	Research and Development		
RSA	Radioactive Substances Act 1993		
NORM	Naturally occurring radioactive materials		
HSE	Health and Safety Executive		
MCA	Maritime and Coastguard Agency		
HMRC	Her Majesty's Revenue & Customs		
IMPEL	European Network for the Implementation and Enforcement of Environmental Law		
SNH	Scottish Natural Heritage		
JNCC	Joint Nature Conservation Committee (Provision of advice on nature conservation issues offshore)		
BMRA	British Metals Recycling Association		
SE	Scottish Enterprise		
OSPAR	Oslo and Paris Conventions		
UKCS	United Kingdom Continental Shelf		
MER	Maximum Economic Recovery		
MASTS	Marine Alliance for Science and Technology for Scotland		
SAMS	Scottish Association of Marine Science		
OECD	Organisation for Economic Cooperation and Development		
Installations	All fixed and floating platforms, oil exploration rigs, floating production storage and offloading (FPSO) vessels, including subsea structures (e.g. pipelines)		

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