



Regulation Report 2019

Our vision for regulating under One Planet Prosperity	3
1. Introduction.....	3
2. Compliance and Beyond Compliance outcomes	4
3. Sector plan approach and working with external influencers	4
4. Regulatory toolkit	7
Case studies referred to in report	27
Case study 1: National Audit of End-of-Life Vehicle Sites	27
Case study 2: Aquaculture New Regulatory Framework	29
Case study 3: The impact of Scotland’s first Low Emission Zone (LEZ) on air quality.....	32
Case study 4: Battery producer responsibility system enforcement action	34
Case study 5: The Leven Programme	37
Case study 6: Monitoring of Mossmorran in 2019	39
Case study 7: Waste crime investigations targeting part-worn tyre retailers.....	41
Case study 8: Targeting non-compliance through farmer engagement	43
Case study 9: Intensive catchment monitoring	45
Case study 10: Mossmorran regulation	47
Table A: Events data - Regulatory Category 1 and Category 2 by number of events	49
Table B: 2019 Compliance results	51
Table C: Enforcement action in 2019	57

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Our vision for regulating under One Planet Prosperity

As a society we are over-using our planet's resources. If everyone lived as we do in Scotland, we would need three planets to sustain ourselves. In the 21st Century, only those businesses that operate in harmony with our one planet will thrive.

Scientific evidence tells us there are many systemic environmental problems that must be urgently addressed. Originally, EPAs correctly focused on specific environmental issues, (e.g., noise, discharges to water, and air quality, etc). Now, under our [One Planet Prosperity regulatory approach](#), we will continue to focus on these issues, and at the same time, also focus on the bigger systemic environmental issues, such as climate change, biodiversity loss, and plastics pollution.

1. Introduction

2019 was a foundational year in terms of laying the groundwork for taking a more strategic sector-based approach to regulation. It was also foundational in terms of focusing on our key regulatory services of permitting, planning, compliance verification and enforcement to ensure that we are organised as effectively as we can be to improve service delivery and outcomes.

SEPA's regulatory approach aims to bring all Scottish regulated businesses into compliance and to help as many as possible to voluntarily go beyond compliance.

We will seek to achieve this by:

- Organising our work strategically through the sectors that we regulate.
- Using all the regulatory and non-regulatory approaches available to us through an expanded toolkit.
- Working with external influencers on the sectors we regulate.

2. Compliance and Beyond Compliance outcomes

Environmental compliance is non-negotiable. Every Scottish business will comply with the law, and we will work to ensure that as many as possible go even further. We will organise our work strategically through sectors. Using the diagram below (**Figure 1**) we are able to specify what compliance is for a sector and what beyond compliance opportunities exist for the environmental parameters we regulate and those we don't regulate.

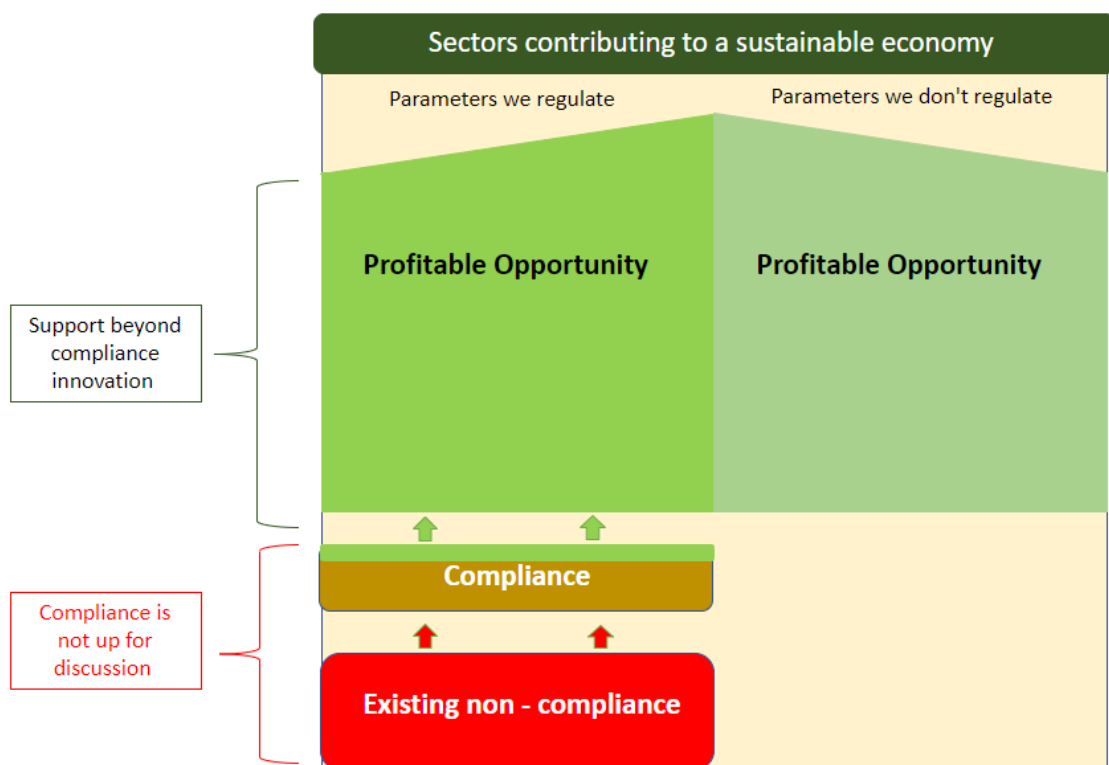


Figure 1: Sector road map - This diagram is used to work out *WHAT* we are aiming to achieve: *Compliance and Beyond Compliance outcomes*.

3. Sector plan approach and working with external influencers

By taking a strategic approach to regulation through sector plans, we can make sure that we use the most effective selection of tools for ensuring a sector achieves these outcomes.

Figure 2 shows how we organise our work through sectors, with external influencers and an expanded toolkit to help decide our actions.

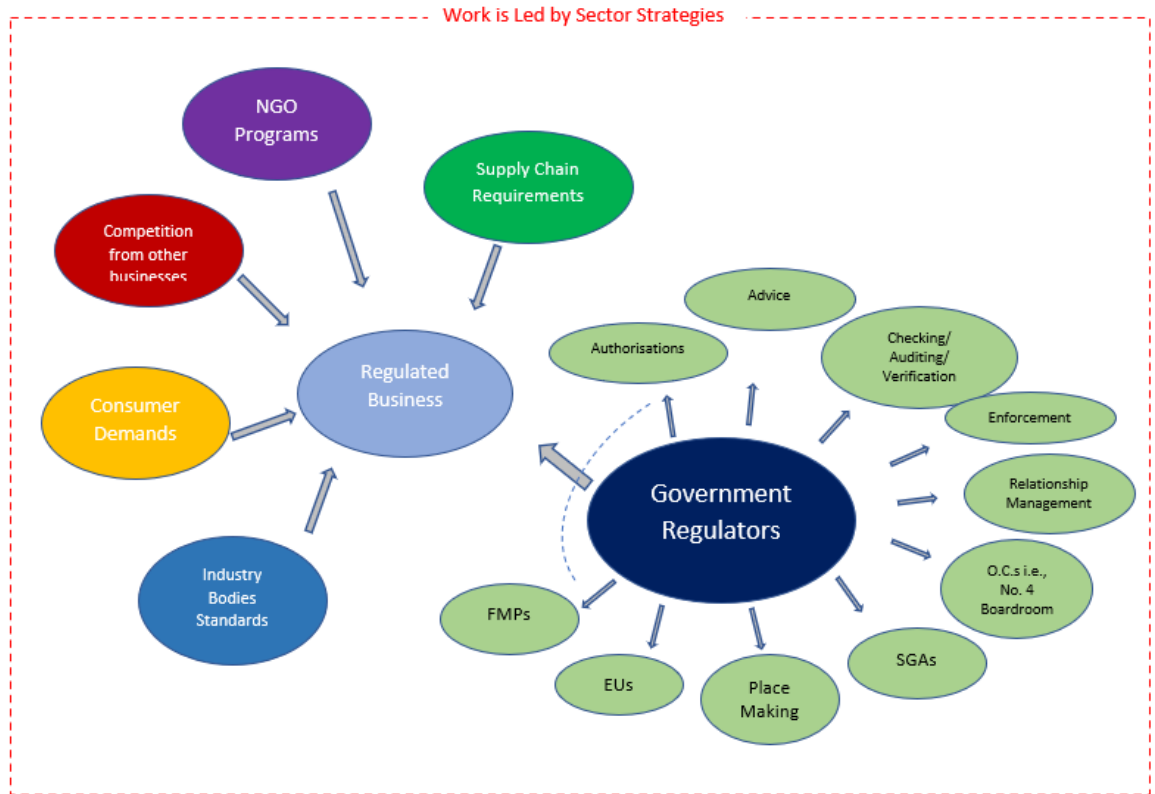


Figure 2: Influencers map & toolkit (2019) - We use this diagram to decide our actions.

Key: FMPs - Fixed Monetary Penalties; SGAs-Sustainable Growth Agreements; OCs no.4 – an Organisational Characteristic adopted by SEPA to routinely interact with regulated businesses through their Boardrooms, Executive teams, and Owners; EU – regulators in the European Union; NGO – Non-Governmental Organisation.

What we did in 2019

SEPA identified 32 sectors that it regulates and is preparing Sector Plans for them all over the next few years. These are aimed at bringing all regulated businesses in a sector into compliance and helping as many as possible go further. During 2018 and 2019 we produced [14 sector plans](#):

Crop production	Tyres
Dairy processing	Landfill
Dairy production	Metals
Finfish aquaculture	Nuclear power generation & decommissioning
Leather	Oil & gas decommissioning
Scotch whisky	Strategic infrastructure (transport and utilities)
Water supply & waste water	Housing

Examples of the work we have been doing to drive forward our sector work include:

- focused assessments of end-of-life-vehicle sites under the Metal Sector Plan [[see case study 1](#)]; and
- transforming our regulatory focus on the marine finfish aquaculture sector by the introduction of the new [regulatory framework](#) under the Finfish Aquaculture Plan [[see case study 2](#)].

4. Regulatory toolkit

We have a large and varied toolkit available to us to achieve behaviour change in terms of compliance and beyond compliance outcomes. This section details how we have used these tools under the headings of **Authorisations**; **Advice & Support**; **Verification**; and **Enforcement**.

4.1 Authorisations

Our aim: Licences and permits will be short, clear and easily enforceable.

We authorise activities which pose a potential risk to the environment or health and wellbeing. These include: waste management; emissions to air from industrial sites; water abstractions and dams; discharges of effluent; and the management of radioactive substances.

Persons responsible for such activities are required to submit applications for an authorisation. This can be a permit (for activities of higher risk) or a registration/exemption (for activities of low risk). We determine whether the risks posed by the activity can be adequately controlled by conditions that we set in the authorisation.

What we did in 2019

Towards the end of 2019, we created a **new Permitting function** which will progressively transform our historic permits into new outcome-based permits. This process will be done sector-by-sector and driven by priorities identified in sector plans. This will ensure that our authorisations are simple, easy to understand and to enforce.

In 2019, the permitting function delivered its first **digital on-line application process** which allowed applicants to register an existing private sewage system, for which we receive 2,000 applications annually. Our previous paper-based system took up to 30 days for applicants to receive their Registration; with the on-line system it now takes

5 minutes.

We also developed **templates** for metals, landfill and marine finfish aquaculture permits and started issuing new permits for marine pen fish farms using this new template. These permits are designed to be easier to understand and more enforceable. They focus on the key controls to prevent adverse harm to the environment.

SEPA issued 5971 authorisations in 2019 (**see Table 1**).

Table 1: Authorisations or variations issued in 2019

Note: This includes authorisations subject to national security designation, applications under the Emissions Trading Scheme (ETS), and waste management licences and waste management exemptions etc.

	Total number
Permits	815
Registrations/exemptions	5156
Total	5971

In this report we use the term ‘environmental authorisations’ to include more complex authorisations such as permits and licences and less complex authorisations, such as exemptions and registrations.

The activities authorised in 2019, together with the existing activities authorised prior to 2019, increased the number of active authorisations to 106,869 (**see Table 2**). We are responsible for ensuring that those undertaking these activities comply with their authorisations and do not cause harm to the environment or the health and wellbeing of people.

Table 2: Total number of active authorisations in existence at the end of 2019

Note: This includes authorisations subject to national security designation, applications under the Emissions Trading System (ETS), and waste management licences and waste management exemptions etc.

	Total number
Permits	14,399
Registrations/exemptions	92,470
Total	106,869

We regulate to protect the environment from harm, protect our climate and support a circular economy.

Environmental Authorisations to protect our climate

On 14 May 2019, the Climate Change Cabinet Secretary [announced](#) in the Scottish Parliament how Scotland would respond to the Global Climate Emergency. SEPA administers regulatory regimes which are designed to reduce/limit the emission of greenhouse gases.

SEPA regulates the [Emissions Trading System](#) (ETS) in Scotland. ETS is a cap and trade system and aims to progressively reduce the emissions of greenhouse gases from relevant installations. The number of active ETS permits in 2019 was 99.

We also check compliance with the [Energy Savings Opportunity Scheme](#) (ESOS) in Scotland. ESOS requires relevant businesses to identify opportunities to save energy through the preparation of energy efficiency assessments. By the deadline (5 December 2019), 309 qualifying Scottish organisations had submitted a notification of compliance.

[Regulations](#) covering fluorinated greenhouse gases (F-gases) and other ozone-depleting substances (ODS), form part of a global effort to reverse the damage to the ozone layer. These regulations also help to address climate change as they are powerful greenhouse gases. We ensure compliance with the F-gases and ODS

regulations through a range of approaches, including through authorisations.

Environmental Authorisations to support a circular economy

SEPA's regulatory functions also support Scotland's move towards a more circular economy - where products and materials are kept in high value use for as long as possible. A key aspect of this is enforcing the "duty of care" where producers and those handling waste have a responsibility to ensure that it is managed safely.

SEPA regulates the movement and management of waste material. We work with industry to drive improvements in the quality of material recovered for recycling and intervene to prevent the market being undermined by criminal activity.

Persons moving waste need to record the movement. Where special waste is moved, a Special Waste Consignment Note (SWCN) should be used. We are currently working with partners to develop a digital UK-wide system that will give those producing, transporting and receiving waste a single simple system for recording. This will give us real-time information on the movement of waste and will transform our ability to intervene where illegal activity threatens to undercut legitimate operators.

In preparation for this work, in 2019 we improved the quality of the information that we receive from SWCNs by: contacting site managers and responsible company directors; hosting workshops for waste producers, carriers and receivers; and providing guidance. From this, we monitored performance and initiated enforcement action where performance was unchanged.

Where waste is moved out of the UK, SEPA is responsible for ensuring that waste exported for recycling will not create environmental problems in other countries. In 2019, under "[transfrontier shipment of waste](#)" we dealt with nearly 6200 Annex VII submissions of "green list" (non-hazardous and mainly single stream) waste and 20 applications of "amber list" (hazardous and/or mixed) waste.

SEPA is also responsible for enforcing the producer responsibility regulations which require obligated producers to finance the cost of collecting and recycling waste. In

2019, we issued 110 authorisations under the [packaging waste regulations](#), 40 under [waste electrical and electronic equipment \(WEEE\)](#) regulations and six under the [waste battery](#) regulations. We undertake audits for all of these activities. For example, we undertook 66 audits under the packaging regulations and where necessary took enforcement action [[see case study 4](#)].

Under the Waste (Recyclate Quality) (Scotland) Regulations 2015 – operators of facilities in scope must comply with the sampling and reporting at materials recovery facilities: code of practice. MRF operators are required to provide accurate information on material contamination levels for input and output waste streams. In 2019, 7,221 samples of recyclable waste were recovered and analysed by 14 Material Recovery Facilities (MRFs) on Outgoing material. We also undertook 18 Code of Practice audits. This work provides information to understand problems of contamination of recycled material which will help Scotland take action to increase the quality of recovered waste materials. The sampling results are published on [Scotland's Environment Web](#).

4.2 Advice and support

Our aim: Advice will be clear and helpful.

Some of our specific support is summarised below.

4.2.1 SEPA's role in land use planning and development

Scotland's planning system plays a key role in delivering high-quality places. Primary responsibility for delivering Scotland's planning service lies with the 32 local authorities and the two National Park authorities. SEPA has specific statutory planning responsibilities, particularly in relation to flood risk, and environmental assessment.

In carrying out these responsibilities, we help to enable developments that:

- do not have a significant probability of being affected by flooding or would not increase the probability of flooding elsewhere;

- are likely to be able to obtain the relevant environmental authorisations;
- achieve the right development in the right place; and
- support climate change mitigation and adaptation.

What we did in 2019

In 2019, against a wider backdrop of ongoing modernisation in Scotland's planning system, SEPA adopted a place-based and outcomes-led approach in specific places, providing greater clarity and certainty upfront to the development industry.

We responded to 5,430 planning applications and other development-related consultations, including 581 instances of pre-application advice, one third in relation to housing developments.

During 2019, we continued to work on the River Leven catchment to create a partnership project with Fife Council and others, attracting £800,000 to support deprived communities using the sustainable transport and recreation opportunities provided by the River Leven [[see case study 5](#)].

4.2.2 NetRegs

[NetRegs](#) provides free web-based, sector specific environmental guidance for businesses located in Scotland and Northern Ireland. Managed by SEPA, and run in partnership with the Northern Ireland Environment Agency (NIEA), the website provides information and guidance on environmental legislation and good practice. It was set up to help smaller businesses understand their environmental obligations and to encourage actions to improve their environmental performance.

What we did in 2019

During 2019 we upgraded the website's content management system and restructured parts of the website. Over the 12-month period we recorded 412,513 page views.

Over the year we also added new topics to the website, including guidance for “new start” businesses and information relating to engineering and the water environment aimed at improving the environmental performance of the construction sector.

As well as website content, NetRegs provides advice and guidance via other methods. In 2019, 1,548 users completed e-learning courses, we had 7,200 views of our good practice videos, 950 businesses used our Environmental Compliance self-assessment tool, and we had over 5,000 subscribers to the email newsletter.

4.2.3 VIBES - Scottish Environment Business Awards

[VIBES](#) rewards and recognises businesses whose management, processes and/or products have demonstrated a reduced impact on the environment alongside positive economic and social outcomes.

VIBES is a strategic partnership between SEPA, Scottish Government, Scottish Enterprise, Scottish Water, Highlands and Islands Enterprise, Zero Waste Scotland, Energy Saving Trust, and Scotland’s 2020 Climate Group. The Awards are further supported by CBI Scotland, the Institute of Directors, the Federation of Small Businesses, Bright Green Business, Scottish Council for Development and Industry and Quality Scotland.

Note that the 2019 partners and supporters are listed here and have changed since 2019; partners in 2021 now include NatureScot and South of Scotland Enterprise.

What we did in 2019

In 2019 we provided guidance to over 200 applicants via feedback on their entries. This highlighted their positive actions and areas for improvement, signposting to free support from Government agencies to assist them on their journey to environmental excellence. We visited, along with at least one representative from a partner organisation, around 50 businesses as part of the robust judging process. This allowed us to see innovations and improvements to processes on-site and to gather additional information to improve assessment, feedback and case study production.

We produced video case studies for 30 business to help demonstrate the financial and social benefits of good environmental practice.

We had face to face engagement with over 600 businesses through a number of events to disseminate information on different themes of environmental improvement such as circular economy, adaptation, innovation and transport.

4.2.4 Regulation to protect air quality

SEPA is responsible for enforcing the preparation of reports by local authorities on progress in improving air quality in designated Air Quality Management Areas (AQMAs), of which there are 36 in Scotland. In 2019: no warning letters were required; no new AQMAs were declared; and work progressed to amend or revoke some AQMAs that had shown improvements in air quality.

We continued development of models on the sources of pollution from traffic and their impact on air quality which has allowed local authorities to develop proposals for Low Emission Zones in city centres [[see case study 3](#)].

4.3 Verification

Our aim: Verification will be powerful and targeted.

4.3.1 Verifying compliance

We use a range of approaches to assess an operator's compliance with their obligations. We also receive valuable information from the public about the operation of sites, such as unusual behaviour or incidents that cause harm to the environment or affect people's health or wellbeing. These incidents are recorded as environmental events (see Section 4.3.3).

Together, this information forms the basis for the regulatory interactions we have with operators about their performance (see below for "data from operators"). In most cases, operators are able to address problems often supported by advice from our staff, however, where the consequences of non-compliance are serious, or the operator does not take remedial action, we will take enforcement action (see Section 4.4).

We also use our site visits to support operators to move beyond what is required by law.

Site visits in 2019

We undertook visits to higher risk sites to make sure that the operator's legal obligations were being met.

We undertook a programme of visits to sites across Scotland and sectors. The focus of this work was on the higher risk sites including those with the greatest potential for harm and those with the poorest historical performance.

At the same time, we focussed our resources on addressing the most significant non-compliance. We expect this trend to continue with more resources directed on such

complex problems [[see case study 6](#)]. Our approach is of particular importance in investigating incidents or criminal activity [[see case study 7](#)].

Data from operators in 2019

Operators provide data returns which help us understand how sites are operating. This data allows us to understand what is happening both at individual sites and cumulatively to develop a sectoral and national picture. In 2019 we received returns which included:

- emissions data from 1,300 sites;
- waste management data from 3,834 sites; and
- water abstraction data from 3,521 sites.

These data returns help us check compliance at a site/company and sector level and compile information at a national scale, including:

- [Scottish Pollutant Release Inventory](#) (SPRI) - SPRI is an official statistic and used to inform the public, to support policy decisions, and compile the UK's greenhouse gas emissions inventory.
- [Waste data](#) - this provides information on the generation and management of Scotland's waste. It is used to calculate household recycling rates (and the carbon impact of that waste), waste landfilled and landfill capacity, and inform policy decision making.

We must have confidence that the data operators supply is accurate and robust. Throughout 2019 we have undertaken quality checks on the data and undertaken development work to improve the mechanisms for ensuring this, including:

- Using analytical tools that help validate the information submitted and compare it to past history and similar sites.
- Undertaking data audits comparing an operators data returns with other company data.
- The development of forensic analytical tools, derived from the finance industry, that can identify if numbers deviate from natural patterns which suggest that returns may not be authentic.

This area of our regulation is rapidly changing as enhanced analytics and allow us to understand changes, trends, outliers, and potential fraud.

SEPA Scientific monitoring / sampling

Operators of many types of processes are required to undertake scientific monitoring of emissions from their activities. In order to ensure that we have confidence in this monitoring we undertake audits. This includes SEPA undertaking monitoring at operator sites as well as commissioning contractors to monitor on our behalf. For example, in 2019, we undertook gas monitoring at a number of landfill sites and commissioned our contractors to undertake stack emission monitoring at a range of industrial sites on our behalf.

4.3.2 Environmental monitoring

In order to understand the impact of the 138,000 low risk sites we regulate we monitor the environment to ensure that, cumulatively, these sites are not causing problems.

Water monitoring

In 2019, we took 32,000 samples from rivers, lochs, marine waters and ground water (21,000 chemical, 3,800 biological and 6,500 microbiology samples). We target this sampling towards the most significant causes of damage to the water environment, the most vulnerable locations and to maintain our baseline monitoring programme (see **Table 3**).

Table 3: How we target our sampling to help us address environmental problems

Regulatory categories	Percentage of samples taken
Land management	38%
Water supply and waste water	25%
Baseline monitoring	14%
Food & drink	10%
Construction & development	8%
Energy	3%

We do this to understand where environmental harm is being caused by pollution or abstractions. The information drives a wide range of actions: investment in new sewerage requirements; campaigns to reduce abstractions during period of drought; and identification of priority catchments affected by the loss of soils, manure and slurries and nutrients [[see case study 8](#)].

We take microbiological samples to ensure that we can act to protect water quality in designated bathing waters. It also allows us to issue warnings against bathing when there is poor water quality following rainfall events. During 2019, we undertook three intensive surveys of river catchments (River Leven, River Almond, and highland lochs). The survey of the River Leven is a good example where we found new impacts associated with sewerage overflows [[link to case study 9](#)].

Air monitoring

There are 99 air pollution monitoring stations within the Scottish Air Quality network. Most of these stations are situated in urban areas and operated by local authorities. SEPA extracts the data from the network to assist in our environmental monitoring, industrial regulation, and air quality modelling activities.

SEPA also operates four monitoring stations in the north and northwest of Scotland. These complement the Scottish network, with the aim of early detection of volcanic

plumes from Icelandic eruptions. SEPA can utilise the Scottish network data during Air Hazard Emergency Response (AHERS events), allowing targeted deployment of our mobile equipment in areas not covered by the monitoring stations to protect people.

Soil monitoring

Operators who apply organic wastes to land report to us chemical analysis of the waste and the soil to which the waste is applied. In 2019, we sampled 24 fields at six farms receiving distillery waste applications and 48 fields at 12 farms receiving sewage sludge applications. We do this to ensure that soil quality which underpins agricultural production is not contaminated by the application of inappropriate material to land.

4.3.3 Environmental events

We want the public to notify us if they see something that is affecting the environment. SEPA's pollution hotline (0800 80 70 60) and our [webform](#) are both available 24/7.

We also identify environmental events as a result of our environmental monitoring. During 2019, we confirmed 2,310 pollution events, including: 20 major events; 89 significant events and 2,201 minor events.

The causes of environmental events in 2019 were varied and many of them were not associated with activities we authorise. This included illegal activity such as dumping of waste or spillages of pollutants from industrial estates or farms. Our response to these events is dependent upon the severity of the consequences and the attitude of those responsible. In most cases following advice from SEPA operators took action to prevent the problem reoccurring, however, we also took enforcement action where the attitude of the operator or the severity demanded it (see Section 4.4).

In 2019, one of the largest causes of complaint was flaring at the Mossmorran complex. In response SEPA has engaged extensively with the community, worked with partners, undertaken investigations and taken enforcement action. [[see case study 10](#)].

Table 4 shows the number and severity of environmental events in 2019. There are significantly more minor events, and from 2015 to 2019, the number of confirmed environmental events has not changed significantly.

Major and significant events typically involve widespread serious harm to the environment and/or risk to health and wellbeing. Minor events cover a wide range of issues reported to us typically causing nuisance or small-scale and short-term environmental harm.

Table 4: Number and severity of environmental events

	Associated with SEPA authorisation	Not authorised	Total
events	4	16	20
Significant events	29	60	89
Minor events	737	1,464	2,201
Total	770	1,540	2,310

Table 5 shows reported major, significant and minor environmental events ranked according to regulatory categories. These represent 94% of all environmental events.

Table 5: Regulatory categories ranked according to the number of confirmed major, significant and minor events

	Regulatory Categories	Total number of events
1	Waste Management	877
2	Water and Wastewater Treatment and Supply	722
3	Land Management	220
4	Construction and Development	133
5	Food and Drink	103
6	Manufacturing, other Industry and Services	101
7	Other	154

Notes: Water and wastewater treatment covers drinking water supply, sewage treatment and surface water discharges by public and private bodies. Land management covers agriculture, forestry and activities like golf courses. Food and Drink includes whisky, dairy products and fish farming.

More detailed statistics on environmental events is available in [Table A](#).

4.3.4 Assessing compliance

Due to the cyber-attack, it has been more challenging to produce our detailed assessment of compliance.

The Compliance Assessment Scheme applies to our four principal regulatory regimes namely:

- Pollution Prevention and Control Regulations (PPC) - Part A and Part B
- Waste management licensing (WML)
- Controlled Activity Regulations (CAR) - Point source and water resources
- Radioactive Substances Act (RSA)

These regulatory regimes cover industrial processes; waste treatment and disposal; emissions to air; discharges to water, abstraction and impoundment of water and radioactive substances.

This categorises an operator’s compliance within the conditions in their permit into six categories: excellent; good; broadly compliant; at risk; poor; and very poor. Environmental authorisations that fall into the first three categories are described as satisfactory. Those that fall into the bottom three categories are described as unsatisfactory.

In 2019, we assessed 4,924 environmental authorisations and 91% were satisfactory (see **Table 6**). This maintains the high level of compliance found over the five years, 2015-2019.

Table 6: Compliance results for 2019

Compliance Band	Number of Environmental Authorisations assessed 2019	2019 %
Excellent	3848	91% Satisfactory
Good	593	
Broadly Compliant	39	
At Risk	155	9% Unsatisfactory
Poor	246	
Very Poor	43	
Overall	4924	

Of the total number of authorisations assessed by SEPA, the percentage of those which are unsatisfactory has reduced by a small amount, from 9.6% in 2015 to 9.1% in 2019.

Table 7: Regulatory categories ranked according to the number of non-compliant authorisations

	Regulatory Categories*	Number of Environmental Authorisations assessed	Number of unsatisfactory Environmental Authorisations	% of Environmental Authorisations satisfactory
1	Water and Wastewater Treatment and Supply	1341	140	89.6%
2	Waste Management	1003	83	91.7%
3	Food and Drink	676	67	90.1%
4	Land Management	824	55	93.3%
5	Manufacturing, Other Industry and Services	585	49	91.6%
6	Energy	357	30	91.6%
7	Construction and Development	60	15	75.0%

Further information is available on compliance statistics and the [compliance results](#) for each assessed Environmental Authorisation [see Table B](#).

4.4 Enforcement

Our aim: Enforcement will be targeted, powerful and quick.

Where appropriate, guided by our [enforcement policy and guidance](#), we take action against those responsible for environmental events, those carrying out illegal/unauthorised activities, and where operators do not comply with their environmental authorisation conditions.

We publish enforcement data to ensure that the public and operators understand that failure to comply with environmental legislation is unacceptable.

Environmental crime has evolved in the years since SEPA was formed, and whilst we still see instances of isolated polluting events, increasingly, many environmental offences are more complex in origin and in some cases deliberately orchestrated by criminals seeking profit.

Towards the end of 2019, SEPA created a **new dedicated Enforcement function** to ensure that enforcement actions were intelligence-led and strategically driven to deliver sustainable interventions and disruption strategies across Scotland, with the aim of reducing instances and impact of illegal and non-compliant activity, and to deter criminal behaviours. Having a dedicated function allowed us to develop our skills and experience and provide a focal point of support within SEPA and with relevant partners when taking enforcement actions. Enforcement action encompasses a wide range of measures, including working with partners on proactive intervention and disruption strategies, alongside more traditional enforcement options such as the issue of financial penalties and referrals for prosecution.

SEPA will bring swift resolution to instances of non-compliance and illegality and will help prevent such non-compliance from re-occurring. We aim to provide a level playing field which will allow legitimate businesses to thrive and innovate, thus reducing future environmental risk and instances of environmental crime.

In 2019, SEPA became a founding member of the **Joint Unit for Waste Crime** which was officially launched in January 2020. This Unit brings together law enforcement agencies including SEPA, the Environment Agency, the National Crime Agency and HMRC, amongst others, to tackle waste crime across the UK. SEPA's Regulatory Strategy our [One Planet Prosperity](#) makes it clear that 'compliance is non-negotiable' and being a partner on the Joint Unit for Waste Crime is a clear step forward in

enabling us to work with our partner agencies to disrupt and prevent waste criminals from operating particularly when this involves cross border crime.

Enforcement action taken in 2019 includes:

- 92 final warning letters issued;
- 56 enforcement/work notices served;
- 28 fixed monetary penalties issued; 2 enforcement undertakings accepted; and
- 8 reports submitted to the Crown Office and Procurator Fiscal Service (COPFS).

Other action taken in 2019 includes 13 civil penalties under the Emissions Trading System.

The following in 2019 are outcomes from reports submitted to COPFS in previous years:

- Two convictions, resulting in a total of £2,412.81 in fines and a confiscation order of £90,000; and
- One report resulted in the PF deciding not to raise proceedings.

The largest number of enforcement actions were taken against waste management activities, agriculture and infrastructure projects (see **Table 8**). These six categories include 94% of all enforcement action taken by SEPA.

Table 8: Regulatory categories ranked according to the number of enforcement actions

Rank	Regulatory Category	Enforcement actions
1	Waste Management	78
2	Land Management	49

3	Construction and Development	22
4	Manufacturing, Other Industry and Services	17
5	Water and Wastewater Treatment and Supply	14
6	Food and Drink	7

More detailed statistics on enforcement is available in [Table C.](#)

Case studies referred to in report

Case study 1: National Audit of End-of-Life Vehicle Sites

Purpose

End-of-Life-Vehicle (ELV) sites (car breakers) handle highly polluting material that can cause harm to human health and the environment. They have highly varied environmental performance. At one end, there are responsible operators who have a good track record of compliance and are seeking new business opportunities whilst solving environmental challenges. At the other end, there are those who undertake activities illegally, 'outside the system', creating environmental risks and undermining legitimate operators.

This project represented a national audit of performance to identify priority action to improve the compliance of these sites with their environmental obligations.

Action

There are 212 metal sites in Scotland. Of these, 133 are Authorised Treatment Facilities (ATFs), (i.e., those actively depolluting ELVs), and these were the sites SEPA focussed on as a priority, as they pose the highest risk to the environment.

As of December 2020, SEPA had completed 98 baseline inspections which had started during 2019. Normally when we visit such sites, we tend to focus on assessing compliance with environmental authorisation conditions, e.g., site infrastructure. The audit programme (i.e. baseline inspections) had a wider scope looking at the bigger sector picture, as SEPA also wanted to understand the source of vehicles and destination of the material leaving for recycling and disposal.

The key site-specific issues identified by the visits were; site surfaces, drainage and storage.

Outcome

We now have information which will allow us to inform the review of relevant environmental authorisations and work with other agencies to support good operators and drive improvements in poor performance.

The baseline inspections confirmed that poor site infrastructure was still a key issue at a significant number of sites. Appropriate enforcement action will be taken to ensure necessary remedial action is undertaken.

Bringing infrastructure up to a required standard often requires significant investment by legitimate operators. This has been increasingly challenging due to few legitimate outlets for waste tyres and increasing confidence and scale of illegal operators.

The inspections have also meant that we have focused more on how we define and measure compliance at these sites. Having a national overview of this will help us address and improve this moving forward.

Case study 2: Aquaculture New Regulatory Framework

Purpose

The aquaculture sector is a demanding area of regulation. The industry is innovating in order to expand, producing an important source of animal protein, providing employment in rural areas and is an important socio-economic sector for Scotland. On the other hand, there is a strong NGO/community concern regarding what they consider to be an unacceptable level of environmental impact and damage to the interests of other sectors who also depend on the water environment for their business or leisure.

In 2018, SEPA produced a Finfish Sector Plan which set out our vision for transforming our approach to regulating the industry. In 2019, we developed and brought into effect a new framework for regulation of Marine Pen fish farms. Our intention was to ensure that the regulatory framework responded to and enhanced the way we protect the marine environment and other users of the marine environment as the sector grows. We also wanted to design the regime so that it would drive environmental improvements.

Action

Both industry and NGO's / Community Groups were frustrated with the regulatory framework.

One of the main complaints from the industry was that SEPA did not permit the construction of farms larger than 2,500 tonnes biomass. Other complaints from industry were that environmental authorisations were too complicated and restrictive, and that regulation was spread across too many agencies of Government. SEPA therefore developed a new simpler and outcome focussed environmental authorisation which reduces bureaucracy, and Government started discussions on simplifying the regulatory landscape by bringing the discharge of medicine residues from wellboats at fish farm premises within the scope of SEPA's environmental authorisations. This was done in a way which maintained levels of protection of the

environment.

Complaints from NGO and community groups included:

- The application process only allowed engagement after the investigation and preparation work for submitting a licence had been completed.
- SEPA assessment process for farm applications did not adequately consider wider-scale cumulative impacts.
- SEPA allowed the waste (fish faeces and waste food) to fall from the cages smothering the bed around the farm especially in sheltered locations.
- They also had serious concerns about the medicines used in farms to control sea lice which they feared would affect non-target animals when discharged from farms.

We changed the application process so that engagement with communities and interested parties is recommended to take place at the beginning of the application preparation process when the investigations that would provide the information to support an application are yet to be decided. We also introduced new modelling processes for assessing both the local impacts from a proposed farm, and the larger scale impacts, including cumulative interactions with other farms. We expect that this approach will encourage innovative approaches and the development of technologies to capture and treat organic waste and medicine residues.

We introduced a much clearer way of describing the area of seabed which may be impacted by a new fish farm and more rigorous monitoring requirements in licence conditions to demonstrate that the impacts of the farm are kept within this allowed area. This so that the area of the seabed impacted by the farm operation could be clearly defined in licence conditions, allowing communities to better understand the scale of impact around a farm and for SEPA to be able to take action should this footprint exceed that permitted.

In 2019, SEPA also engaged actively in a Government initiative to regulate sea lice so as to protect native fish populations. SEPA's expectation is that this will address a key

concern of NGOs, communities and freshwater fishing over this wider-scale impact.

Outcome

Industry was concerned about the restrictions in developing farms in sheltered waters and the NGOs and communities were dissatisfied because SEPA was not addressing their concerns or requiring farmers to collect the waste generated by farms. We consider that we have set the right balance requiring reasonable and practical action, whilst improving the protection of the environment.

The new framework matches scale of activity to environmental capacity and farmers are now able to locate new larger farms (>2500t) in faster flowing more dynamic waters. Where operators seek to develop in more sheltered areas, the new framework requires additional mitigation, in either additional information to support the application and/or the use of innovative technology to mitigate impact.

Case study 3: The impact of Scotland's first Low Emission Zone (LEZ) on air quality

Purpose

Every year, air pollution contributes to an estimated 36,000 deaths in the UK and is regarded as the single largest environmental health risk we face today. This is primarily a problem caused by traffic in our urban areas.

Scottish Government released the Cleaner Air for Scotland – The Road to a Healthier Future Strategy (CAFS) in 2015. In 2016, Scottish Government committed to work with local authorities in identifying the need for LEZs across the four big cities (Aberdeen, Dundee, Edinburgh and Glasgow). SEPA worked in partnership with Transport Scotland to begin the early process of building relationships and presenting the evidence for LEZs.

SEPA's role was to provide the evidence that allows councils to set LEZs on the basis of objective information on the sources of pollution and the air quality consequences of traffic control measures.

Action

The Scottish Government's Programme for Government (2017) ensured that the first LEZ came into effect in Glasgow city centre on 31 December 2018. This first phase for Glasgow's LEZ only applied to local service buses (with Phase 2 applying to all other vehicles). SEPA provided the data to local bus operators to allow them to identify where to direct their investment, i.e. which bus routes.

Throughout 2019, SEPA assessed the performance of Glasgow's LEZ. We worked closely with Transport Scotland and the bus operators to direct funding and operator fleet investment to Euro VI vehicles (including retrofit of existing fleet to Euro VI equivalent).

Specific bus operator tools were developed by SEPA, providing a visualisation of journey frequencies within the LEZ, based on bus Euro Class (i.e. an emission-based

approach) along the most polluted streets. The tools were used by operators to focus investment and optimise routing of Euro VI buses to increase compliance, thus reducing NO₂ concentrations.

Monitoring data collected at the automatic monitor on Hope Street showed that the creation of the LEZ was having a positive effect on NO₂ concentrations. During 2019, there was a clear reduction in the number of hours where NO₂ concentrations exceeded 100 µgm³, with the greatest reduction in the second half of 2019. This coincided with the progressive changes to bus operator fleets, with an increase in Euro VI vehicles being used on services through Glasgow's LEZ and, in particular, along Hope Street at that time.

Outcome

Our experience of working on the Glasgow LEZ provided us with the knowledge we could then apply to the other three cities, and create the evidence base for their LEZs and the implementation process.

We are now looking forward to helping the councils develop sustainable travel strategies to move LEZs towards zero-carbon zones.

Case study 4: Battery producer responsibility system enforcement action

Purpose

The Waste Batteries and Accumulators Regulations 2009 aim to reduce the impact on the environment of the manufacture, distribution, use, disposal and recovery of UK generated waste batteries.

The regulations detail requirements for waste battery collection, treatment, recycling and disposal for all waste industrial, automotive and portable battery types, and affect battery producers and distributors and waste battery collectors, recyclers and exporters.

Waste portable, industrial and automotive batteries are required to be:

- treated and recycled by an Approved Battery Treatment Operator (ABTO);
- delivered to an ABTO, then treated and recycled by another facility on behalf of the ABTO;
- exported for treatment and/or recycling by an Approved Battery Exporter (ABE).

The batteries producer responsibility system is a UK system where obligated batteries producers must finance the end of life management of the batteries by procuring evidence from recyclers. Any treatment facilities in Scotland must apply to SEPA in order to operate as an ABTO or ABE. An approved ABTO or ABE can then issue Evidence notes as proof of treatment, recycling or export of portable waste batteries. ABTOs and ABEs charge money to provide the evidence notes for treating, recycling or exporting waste batteries.

Action

In 2019, after reviewing the mandatory data submissions by a SEPA registered ABTO and ABE, SEPA contacted the operator to request supporting records for evidence issued on batteries received by the ABTO during Quarters 3 and 4 of 2018. The operator provided documents which indicated that two of the loads of waste batteries

were shipped from a batteries treatment facility in Sweden, i.e., that batteries on which evidence had been issued arose as waste outside the UK. SEPA subsequently visited the haulier responsible for transporting the batteries from Sweden to the UK and obtained records which indicated that another six loads received by the ABTO during Q3/Q4 2018 were non-UK waste batteries. All eight loads were consigned to the ABTO by the same UK customer.

SEPA established that evidence notes had been issued against the eight loads concerned, equating to approximately 166 tonnes of waste batteries. This evidence likely generated substantial income as batteries evidence on portable batteries can range from £1,000 - £1,500 per tonne.

SEPA worked closely with colleagues in the Environment Agency in England, and Swedish police and Environment Protection Agency to fully understand the flows of waste to help establish the origin of the waste batteries. This was key to understanding whether offences had been committed.

Outcome

Following a lengthy investigation which involved all of the batteries supply chain, SEPA was satisfied that the company, who was a SEPA registered ABTO and ABE, had not complied with their conditions of approval, in that they had issued evidence notes on non-UK waste batteries.

SEPA issued a Statutory Notice on the company, suspending their approval as an ABTO and ABE until the end of the 2019 compliance year. The notice came into force upon service on the company and prevented any further evidence notes being generated. The notices were not appealed by the company and the company did not submit any subsequent applications to SEPA to be approved as an ABTO or ABE in the following compliance years.

Following the suspension of the approvals, SEPA continued to liaise with the Swedish Police regarding their investigation into the site which was the source of imported

waste batteries. The Swedish Police discovered that wastes from batteries (black mass) had been illegally buried at rural sites in Sweden, and they prosecuted the facility operator which ultimately resulted in a custodial sentence.

Case study 5: The Leven Programme

Purpose

The River Leven, once the industrialised powerhouse of Fife, now acts as a barrier to communities and is difficult to access.

The Leven Programme was established in 2018 to bring together those public bodies, businesses and community representatives who want to make a positive difference to the River Leven in Fife and its surrounding communities by:

- improving the physical and ecological conditions of the river;
- creating better access to the river and between communities; as well as
- creating opportunities to improve people's health, well-being and economic prospects.

All partners realised that more can be achieved working together than can be achieved working in isolation

Action

In July 2019, the first Sustainable Growth Agreement (SGA) involving multiple organisations working in partnership to achieve shared outcomes across a river catchment was signed. It focused on six strategic outcomes for a “living, breathing example of inclusive growth”.

1. The area will have a natural environment that will support a diverse ecology and celebrate its social history.
2. The area will support a network of paths and sustainable travel routes that will connect people, communities and business to each other and the environment.
3. The area will become a ‘go to’ destination and sustainable tourism will become one of the area's key economic attractions, whilst also being Net Zero Plus and delivering net biodiversity gain.
4. The area will be a dynamic hub for social enterprise, youth, and education.
5. The area will be able to attract and support business and industry and become a

hub between the cities of Dundee and Edinburgh.

6. Registered vacant and derelict land will be made productive for the benefit of communities in the region and in support of inclusive economic regeneration

The flagship Connectivity Project was developed: an Inclusive growth project focused on the final 5km of the River Leven. This project will deliver environmental river improvements, develop a series of paths (about 20km) to connect the isolated communities to and along the river, and unlock opportunities on the vacant and derelict land. Feasibility, scoping and community engagement all took place in 2019. This will be the partnership's priority deliverable over the next three years.

Outcome

Taking new approaches and working in this way has opened up many opportunities. In February 2019, one of the Programme's first initiatives, The Connectivity Project, was awarded £250,000 through Sustrans Scotland's Community Links scheme and £65,000 from SEPA's Water Environment Fund, with a further £514,000 awarded in July 2019 through the Sustrans Places for Everyone programme, funded through Transport Scotland. These grants enabled the project to undertake feasibility work on active travel routes along the river, produce concept designs, and undertake wide ranging community consultation and engagement.

Case study 6: Monitoring of Mossmorran in 2019

Purpose

The Mossmorran complex in Fife consists of Shell UK Ltd's Fife Natural Gas Liquids Plant and ExxonMobil Chemical's Fife Ethylene Plant.

Disruptions to processes at either of these plants can lead to flaring, where excess gas is flared off as a safety mechanism. Common complaints around the flaring relate to noise, light and air pollution. SEPA carries out monitoring to provide information on the condition of the environment to inform regulation, partner agencies, and the public.

Action

During 2019, SEPA carried out several monitoring campaigns to assess both noise and emissions to air pollution. Light emissions do not fall under SEPA's remit.

The amount of air quality monitoring that we have undertaken in the vicinity of the Mossmorran Complex has been steadily increasing since Jan 2019 and we have published regular reports on air quality in the vicinity of the complex since Aug 2019.

Monitoring undertaken between Jan-April 2019 was developed in consultation with both the Mossmorran and Braefoot Bay Independent Air Quality Review Group and the Community Safety Liaison Group, which contains air quality experts from the council and academia, local community members, and health professionals from NHS Fife. During this period, particulates, oxides of nitrogen, sulphur dioxide, carbon monoxide and Volatile Organic Compounds (VOCs) were monitored continuously at various locations around the facility.

The regular reports include the prolonged period of flaring when ExxonMobil was temporarily shutdown for an extended period in 2019.

Monitoring undertaken between Oct 2019-Feb 2020 used the same approach to the Jan-April 2019 study to allow us to produce comparable results, however, was

supplemented with additional particulate analysers giving greater coverage for these pollutants.

For the periods where monitoring was undertaken, which included periods of elevated and ground flaring, there were no breaches of any of the air quality objectives for the pollutants measured. The noise data informed compliance assessment and the development of SEPA's enforcement action.

Outcome

Over 2019, we progressively improved our capabilities for monitoring this complex industrial site. We expect to develop these capabilities and use them at other sites as required.

1. <https://www.sepa.org.uk/media/475334/air-quality-monitoring-mossmorran-january-april-2019.pdf>
2. <https://www.sepa.org.uk/media/430250/sepa-monitoring-report-for-april-2019-flaring-event-at-the-mossmorran-complex.pdf>
3. <https://www.sepa.org.uk/media/447563/sepa-mossmorran-monitoring-report-for-june-2019-event-final.pdf>
4. <https://www.sepa.org.uk/regulations/air/air-quality/mossmorran-and-braefoot-bay-complexes/#documents>
5. <https://www.sepa.org.uk/media/457589/sepa-mossmorran-air-quality-data-summary-july-2019.pdf>

Case study 7: Waste crime investigations targeting part-worn tyre retailers

Purpose

Criminal activity in the tyre sector ranges from small scale fly tipping to large scale illegal dumping of waste tyres, with the clean-up costs for both falling to public bodies and landowners. Previous multi-agency activity and intelligence sharing revealed a direct connection with some part worn proprietors and organised crime, which increased the probability of unlicensed disposal and environmental damage.

A key element of the sector plan for the tyre industry, SEPA is keen to ensure that waste is being recycled and disposed of responsibly and not being reused unsuitably, or in a way that results in a danger to road users and pedestrians alike.

Action

In 2019, we ran a campaign to pro-actively target retailers thought to be illegally selling unsuitable and unsafe waste tyres as suitable for road use. Criminal behaviour involving the re-sale or stockpiling of waste tyres can result in harm to human health from tyre fires or road traffic accidents and undermines legitimate business. This campaign supported the Sector Plan outcome that “Scotland has no stockpiles of illegal or abandoned tyres”.

SEPA worked with Police Scotland, North Lanarkshire Council, South Lanarkshire Council, Renfrewshire Council and UK tyre safety charity, TyreSafe.

On 18-19 March 2019, SEPA officers and partner representatives completed unannounced site visits at 14 part worn retailer premises across North Lanarkshire, South Lanarkshire and Renfrewshire Council areas. All but one were confirmed as offering part-worn tyres for sale.

On site SEPA officers were looking for information relating to the:

- source of tyres being offered for sale;
- disposal routes used for waste tyres; and
- completion of the required part-worn tyre safety assessment.

We also ran a publicity campaign which highlighted the action that we were taking – warning retailers of the legal sanctions which would be taken against those who acted illegally.

50% of tyres being offered for sale were waste tyres not suitable for reuse. The retailers were provided with clear information on when tyres at their sites are waste, meaning that tyres must now be tested at point of receipt and unsafe tyres are less likely to be sold. Improved testing reduces the number of waste tyres being accepted and stored at site and decreases the likelihood of subsequent illegal disposal.

Outcome

Part worn tyre retailers have not been registering with SEPA and as such do not receive regular visits by SEPA officers. This campaign has confirmed that these sites frequently store waste without authorisation and provided the basis for undertaking periodic and targeted intelligence led inspections.

Case study 8: Targeting non-compliance through farmer engagement

Purpose

SEPA works directly, and with partner organisations, to tackle rural diffuse pollution to improve the quality of Scotland's water environments. SEPA identified 57 priority catchments which were impacting on protected areas such as bathing and shellfish waters, SACs (Special Areas of Conservation) and SSSI (Sites of Special Scientific Interest). In 2011, these catchments were targeted for farmer engagement aimed at improving farmland practices, encouraging behavioural change, and addressing compliance issues and beyond compliance opportunities.

Action

By the end of 2019, nearly 6,000 farms had been visited by SEPA in 44 priority catchments. The average compliance of farms within these catchments, at SEPA's initial visit, was 56% . Through further engagement and offering guidance to farmers and agricultural contractors on best practice, over 90% of the 2,600 units had become compliant or had taken significant steps to become compliant within 12 months.

This progress is underpinned by farmers adopting practices and spending significant sums of money on improved facilities, e.g. for new or additional slurry storage facilities, fencing of entire stretches of watercourses to exclude livestock, and installing alternative means of livestock watering. Some farmers willingly went further than is legally required, by planting riparian zones which move their farming activities further away from the water's edge, thereby reducing the risks of pollution.

Since 2010 only four Fixed Monetary Penalties have been served on farmers who did not cooperate and failed to comply. This helps to demonstrate the excellent levels of cooperation and value of using advice and guidance as ways to drive behaviour change.

Importance of partnership approach

We continue to work closely with NFUS, Scotland's Rural College (SRUC), rural consultants, and the Scottish Government to promote best practice on how to deal with diffuse pollution on farms, farm pollution incidents, and improve compliance.

The development of the Farm and Water Scotland website, Facebook and Twitter pages with SRUC, SEPA and the Scottish Government has increased farmer awareness of agricultural pollution and what best practice looks like. Videos, podcasts, guidance and case studies have been produced to support the sector.

Outcome

SEPA has been successful at driving improvements in compliance with the legal requirements to comply with General Binding Rules to protect the water environment. We are now developing proposals (draft River Basin Management Plan 2020) which will further develop this approach to support the delivery of more sustainable land management practices.

Case study 9: Intensive catchment monitoring

Purpose

SEPA has maintained a network of sites for monitoring the condition of the environment. This network allows us to report on how the condition of our rivers, lochs, groundwater and tidal water changes. Over 2018 and 2019 we developed new programmes of monitoring which focused on particular catchments to identify previously unknown environmental problems.

Action

During 2018 and 2019, we undertook an intensive survey of the River Leven catchment in Fife. This work was intended to support an initiative to develop the Leven Catchment so that it can be enjoyed by residents and visitors alike.

As part of its contribution to the partnership, SEPA has worked across science and regulatory functions to review current knowledge of the catchment and determine where there might be areas where this could be improved or supplemented by extra targeted monitoring and assessments. This led to a programme of rapid “blitz” monitoring.

One of the areas looked at within the monitoring and assessment work was the Bighty Burn, a small tributary of the River Leven, which drains a significant part of Glenrothes. This had not been investigated before, but it was noted from a study of the Glenrothes sewer network that there could be polluting discharges to it from housing, other development, as well as from the Eastfield industrial estate.

The blitz monitoring found evidence of misconnections in private properties, where pipework which should carry waste water to the local sewage treatment works had instead been connected to the surface water drainage system which discharges to local water courses. Examples of the impact of these misconnection issues included thick growths of sewage fungus in the water course and obvious sewage debris, resulting in environmental harm and a significant loss of amenity value. Evidence from

the assessment was used by SEPA's local regulatory staff and Scottish Water, who subsequently investigated and resolved the misconnection issues.

Outcome

As a result, an improvement to the Bighty has been achieved. SEPA intends to follow this up with additional environmental monitoring to ensure that the improvements are maintained in the long term.

Case study 10: Mossmorran regulation

Purpose

Action to prevent industrial processes from impacting upon the lives of local people.

Action

In response to “unacceptable flaring” and over 1200 community complaints about the Mossmorran complex, we worked with the operating companies to understand the issues and in 2019 served a series of permit variations to lock in compliance at Mossmorran and reduce flaring impacts. The variations require both operators to achieve ‘Best Available Techniques’ in the shortest timeframe possible which may include the installation of noise reducing flare tips-and new ground flares.

During 2019 we engaged closely with the community to understand their concerns and continue to do so. We carried out enhanced monitoring around the Mossmorran complex and worked closely with public partners to provide information and reassurance to communities impacted by the flaring. This includes developing a [Mossmorran hub](#) providing regular updates on SEPA’s work and on-site activities.

Flaring at the Mossmorran complex during April 2019 led to over 900 complaints being received by our Pollution Hotline. Following an extensive regulatory investigation over 2019 and 2020, SEPA submitted a report to the Crown Office and Procurator Fiscal Service for consideration of prosecution in relation to this flaring.

Outcome

The companies are taking steps to make flaring, an important safety feature of industrial facilities, become the “exception rather than routine” and investing in infrastructure to reduce the impact of flaring on local communities when flaring is necessary. This includes a noise reducing flare tip and a new totally enclosed ground flare.

Table A: Events data - Regulatory Category 1 and Category 2 by number of events

Regulatory category 1	Regulatory category 2 *	Total
Land Management	Agriculture	192
	Forestry and Timber	28
Land Management total		220
Food and Drink	Food and Drink Manufacturing & Processing	75
	Aquaculture	10
	Whisky, Distilling & Brewing	18
	Food and Drink total	
Energy	Renewable Energy	18
	Non Renewable Energy	9
Energy Total		27
Construction and Development	Major Projects and Infrastructure	97
	Engineering Activities	36
Construction and Development total		133
Manufacturing, Other Industry and Services	Minerals	55
	Chemicals	38
	Other: Manufacturing or Industry	7
	Metals	1
Manufacturing, Other Industry and Services total		101
Waste Management	Other Waste Management	644
	Storage and Treatment of Waste	184
	Landfill	47
	Incineration and Co Incineration	2
Waste Management total		877

Water and Wastewater Treatment and Supply	Public (Water and Wastewater)	273
	Other Water Activities	202
	Private (Water and Wastewater)	197
	Public Wastewater - Actions of Third Party (other)	50
Water and Wastewater Treatment and Supply total		722
OTHER total		72
Unsubstantiated/Natural total		55
Grand total		2310

** including events not categorised under Regulatory Category - shown as OTHER or Unsubstantiated/Natural*

Table B: 2019 Compliance results

Regulatory category 1	Regulatory category 2	Compliance Band	Total	
Land Management	Agriculture	Excellent	670	
		Good	29	
		Broadly Compliant	1	
		At Risk	34	
		Poor	3	
		Total	737	
	Estates and Grounds Management	Excellent	41	
		Good	3	
		At Risk	8	
		Poor	3	
		Very Poor	1	
		Total	56	
	Forestry and Timber	Excellent	20	
		Good	5	
		At Risk	6	
		Total	31	
	Land Management Total			824
	Food and Drink	Aquaculture	Excellent	299
Good			66	
Broadly Compliant			2	
At Risk			9	
Poor			35	
Very Poor			3	
Total			414	
Food and Drink Manufacturing and Processing		Excellent	66	
		Good	17	
		Broadly Compliant	1	

		At Risk	4
		Poor	4
		Very Poor	1
		Total	93
	Whisky, Distilling & Brewing	Excellent	142
		Good	15
		Broadly Compliant	1
		At Risk	7
		Poor	4
		Total	169
Food and Drink Total			676
Radioactive Substances (Non-Nuclear)	Non-Nuclear	Excellent	61
		Good	3
		At Risk	1
		Poor	1
		Total	66
Radioactive Substances (Non-Nuclear) Total			66
Energy	Non-Renewable Energy	Excellent	47
		Good	12
		Broadly Compliant	1
		At Risk	4
		Poor	1
		Very Poor	1
		Total	66
	Renewable Energy	Excellent	257
		Good	10
		At Risk	20
		Poor	3
		Very Poor	1
Total	291		

Energy Total			357
Construction and Development	Major Projects and Infrastructure	Excellent	29
		Good	14
		Broadly Compliant	2
		At Risk	2
		Poor	11
		Very Poor	2
		Total	60
Construction and Development Total			60
Manufacturing, Other Industry and Services	Chemicals	Excellent	35
		Good	6
		Broadly Compliant	4
		Poor	3
		Very Poor	1
		Total	49
	Coating	Excellent	50
		Good	10
		Broadly Compliant	1
		At Risk	3
		Poor	3
		Total	67
	Medical, scientific and other services	Excellent	144
		Good	28
		Broadly Compliant	1
		At Risk	6
		Poor	4
		Very Poor	1
		Total	184
	Metals	Excellent	17
		Good	5

		Poor	1
		Total	23
	Minerals	Excellent	182
		Good	28
		Broadly Compliant	1
		At Risk	19
		Poor	4
		Total	234
	Other: Manufacturing or Industry	Excellent	19
		Good	5
		At Risk	2
		Poor	2
		Total	28
	Manufacturing, Other Industry and Services Total		585
Waste Management	Incineration and Co Incineration	Excellent	16
		Good	6
		Broadly Compliant	2
		Poor	1
		Very Poor	1
		Total	26
	Landfill	Excellent	137
		Good	23
		Broadly Compliant	3
		At Risk	3
		Poor	11
		Very Poor	5
		Total	182
	Storage and Treatment of Waste	Excellent	524
		Good	191
		Broadly Compliant	18

		At Risk	10
		Poor	43
		Very Poor	9
		Total	795
Waste Management Total			1003
Water and Wastewater Treatment and Supply	Private (Water and Wastewater)	Excellent	163
		Good	28
		At Risk	6
		Poor	43
		Very Poor	4
		Total	244
		Public (Water and Wastewater)	Excellent
	Good		87
	Broadly Compliant		1
	At Risk		9
	Poor		66
	Very Poor		12
	Total		1097
	Water and Wastewater Treatment and Supply Total		
All others	All Others	Excellent	7
		Good	2
		At Risk	2
		Very Poor	1
		Total	12
All others Total			12
Grand Total			4924

Table C: Enforcement action in 2019

Regulatory Category 1	Regulatory Category 2	Statutory Notice	Final Warning Letter	Fixed Monetary Penalty	Civil Penalty	Enforcement Undertaking accepted	Case submitted to Procurator Fiscal	Total
Land Management		12	32	5	0	0	0	49
	Agriculture	12	30	5				47
	Estates & Grounds Management		1					1
	Forestry & Timber		1					1
Food and Drink		1	4	0	1	1	0	7
	Aquaculture		1					1
	Food and Drink Manufacturing & Processing	1	2					3

	Whisky, Distilling & Brewing		1		1	1		3
Energy		3	2	0	0	0	1	6
	Non Renewable Energy	3	2				1	6
Construction and Development		5	13	4	0	0	0	22
	Engineering Activities	1	2					3
	Major Projects & Infrastructure	4	11	4				19
Manufacturing, Other Industry and Services		1	1	3	12	0	0	17
	Chemicals	1			2			3
	Medical, scientific and other services			2	7			9

	Minerals		1		1			2
	Other Manufacturing or Industry			1	2			3
Waste Management		28	33	13	0	0	4	78
	Incineration and Co Incineration	1						1
	Landfill	5	2	9				16
	Other Waste Management	14	16	4			1	35
	Storage and Treatment of Waste	8	15				3	26
Water and Wastewater Treatment and Supply		4	5	3	0	1	1	14
	Other Water Activities		1	2				3

	Private (Water and Wastewater)	1	1				1	3
	Public (Water and Wastewater)	3	3	1		1		8
All Others	(no sub-categories)	2	2	0	0	0	2	6
Total		56	92	28	13	2	8	199