



European Union Network for the Implementation
and Enforcement of Environmental Law

Environmental Incident Public Communications

Report of an event held in Glasgow, Scotland, from 30-31 October 2019

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Introduction to IMPEL

The European Union Network for the Implementation and Enforcement of Environmental Law (IMPEL) is an international non-profit association of the environmental authorities of the EU Member States, acceding and candidate countries of the European Union and EEA countries. The association is registered in Belgium and its legal seat is in Brussels, Belgium.

IMPEL was set up in 1992 as an informal Network of European regulators and authorities concerned with the implementation and enforcement of environmental law. The Network's objective is to create the necessary impetus in the European Community to make progress on ensuring a more effective application of environmental legislation. The core of the IMPEL activities concerns awareness raising, capacity building and exchange of information and experiences on implementation, enforcement and international enforcement collaboration as well as promoting and supporting the practicability and enforceability of European environmental legislation.

During the previous years IMPEL has developed into a considerable, widely known organisation, being mentioned in a number of EU legislative and policy documents, e.g. the 7th Environment Action Programme and the Recommendation on Minimum Criteria for Environmental Inspections.

The expertise and experience of the participants within IMPEL make the network uniquely qualified to work on both technical and regulatory aspects of EU environmental legislation.

Information on the IMPEL Network is also available through its website at: www.impel.eu



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Executive Summary <p>The ability to contribute effectively to managing environmental accidents, incidents and emergencies is a key role of environmental regulators. It is essential for protecting the environment, human health, and the economic viability of operators. Regulators play a part in arrangements to prevent, prepare for, detect, respond to, and recover from environmental accidents, incidents and emergencies.</p> <p>An IMPEL project in 2018 set out to determine the effectiveness of current arrangements for incident and emergency management across EU environmental regulators, to identify common gaps and shortcomings, and identify and promote good practice to help close those performance gaps and mitigate shortcomings. One key area of weakness identified was the ability of regulators to deliver 24/7 public communications around incidents. This project, which took the form of an event over two days, aimed to help participants learn from case studies and explore the potential to enhance arrangements for environmental incident public communications within their own organisations.</p> <p>The participants identified more than 50 key findings resulting from their collective experience. These findings are set out in the project report and will be shared with IMPEL members. The participants also identified some further actions that IMPEL could take to help enhance performance in environmental incident public communications, namely:</p> <ol style="list-style-type: none"> 1. Providing guidance on arrangements, approaches and tools. 2. Providing information and guidance on specific communications tools, including: <ol style="list-style-type: none"> a. Digital communications such as Cell Broadcasting and Google Public Alerts b. 24/7 technical availability c. 24/7 contact centre operation d. Public reporting tools e. Social media engagement 	



- f. Media management
- 3. Building capacity in the context of environmental incident management, and public communications.

Disclaimer

This report is the result of a project within the IMPEL network. The content does not necessarily represent the view of the national administrations or the Commission.



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1. Introduction

The ability to contribute effectively to managing environmental accidents, incidents and emergencies is a key role of environmental regulators. It is essential for protecting the environment, human health, and the economic viability of operators. Regulators play a part in arrangements to prevent, prepare for, detect, respond to, and recover from environmental accidents, incidents and emergencies.

A 2018 IMPEL project aimed to determine the effectiveness of current arrangements across EU environmental regulators, identify common gaps and shortcomings, and identify and promote good practice to help close those performance gaps and mitigate shortcomings.

The results were derived from a questionnaire to which 23 organisations from 19 countries responded, and a workshop involving 15 participants from ten Member States. They indicated that around 80% of regulators have a role in inspecting operator sites and preventing incidents. Some 70% have a role in emergency planning, advising emergency responders, and advising Government on incident management. However, regulators also reported weaknesses in their arrangements with regulated operators. Shortcomings were also identified in incident debriefing and lessons learned, assessing the potential impacts of natural hazards on regulated sites, and in recovery planning.

The research also highlighted weaknesses in arrangements within EU environmental regulators themselves to manage incidents and emergencies. For example, only 20% have business continuity plans in place to ensure the continued operation of essential services in the event of disruptive circumstances. Some 35% have guaranteed out-of-hours availability of staff to respond to incidents, only 15% have 24/7 public communications capability in the event of an incident, just one third have staff training arrangements in place, and just 20% are positive about their arrangements to debrief incidents and learn lessons.

The most significant shortcomings regulators report in actually responding to incidents are unclear roles and responsibilities (more than 75% of responses), insufficient information provided by operators about incidents (nearly 55%), delay in early warning of incidents (more than half of responses), lack of technical expertise (more than 55%), and inadequate training and exercising (more than 45%).

Regulators also identified the most incident-prone sites as waste sites, illegal sites, and Seveso sites. The most common causes of incidents were reported as human error or negligence, technology failure, and lack of operator awareness or understanding. The potential link between shortcomings in



regulators ensuring that operators undertake training and exercising, and the key causes of incidents being human error and lack of awareness, is a particularly interesting finding.

Having established the ten most important weaknesses and shortcomings in environmental regulators' arrangements to manage incidents and emergencies effectively, the project considered opportunities to help them close gaps and address shortcomings, setting out ten key actions for improvement. The project report included a wide range of case study examples of regulators demonstrating good practice in incident management and effective learning from experience, from which other regulators may learn. The project also considered what future role IMPEL could play in helping enhance the effectiveness of incident and emergency management by EU environmental regulators.

The 2018 project team set out Terms of Reference for a follow-up IMPEL event in 2019, focusing on arrangements for effective communication by regulators with the public during an environmental incident or emergency. This had been identified as one of the weakest areas in institutional arrangements for incident management.



Survey results on institutional arrangements for incident management

What general arrangements does your organisation have in place for managing incidents and emergencies?	Yes
Local response plans and procedures	65%
Risk assessment (for national-level incidents)	35%
Escalation process (for national-level incidents)	30%
Ensuring resource availability (for national-level incidents)	25%
Engaging emergency responders (for national-level incidents)	30%
Business continuity plans for key services and facilities	20%
Guaranteed 24/7 capability to contact key staff	60%
Guaranteed 24/7 availability of people and services to fulfil response	35%
Communications technology suitable for fulfilling your responsibilities	35%
PPE appropriate to your responsibilities	50%
Guaranteed 24/7 channels/services for public communications	15%
Staff training and exercising programme	35%
Staff training and exercising recorded	25%
Statistics on incidents/accidents, published at least annually	45%
Inventory of incidents/accidents, published at least annually	45%
Provide debrief of all significant incidents	20%
Lessons learned implemented	45%
Arrangements in place to manage transboundary	55%
Procedures in place to implement UNECE Convention on transboundary effects	50%
Formal arrangements with NGOs to support incident response	10%
Arrangements for citizens to report incidents	25%
Formal arrangements with other institutions to support incident response	65%
Other	5%



2. Project Management

The project was managed by Mark Wells of the Scottish Environment Protection Agency (SEPA) in the UK. In addition, two IMPEL members volunteered to participate in the Project Management Team: Andrea Benitez of the Environment Agency, England, UK, and Monica-Mihaela Crisan from the National Environmental Guard, Bihor County Commissariat, Romania. The Project Team met by tele-conference and a pre-event site visit, followed by ongoing communication by telephone and email to organise the event.

The project took the form of an event over two days. It comprised a varied programme including case study presentations, a participatory exercise and specialist workshop sessions, with time allocated for general discussion and networking between participants. Twenty people, from 10 Member States, participated in the event.

3. Summary of key findings by theme

Strategic context
<ol style="list-style-type: none">1. The impacts of natural hazards are becoming an increasingly important consideration for environmental regulators.2. Environmental incidents can no longer be considered simply in an environmental context, but also in relation to social and economic impacts, and the threat of terrorism.3. Regulators should not base communications solely on their duties – expectations and inferred liabilities are also important considerations.4. Regulators should maintain a wide focus on who and what could possibly be impacted by an incident.5. It is useful to understand partner perspectives so that a common basis for communications can be established.6. Incident response must involve the co-ordinated efforts of all functions of the environmental regulator.7. Environmental regulators should consider how best they can address wider environmental pressures such as climate change, resource depletion and biodiversity decline, which could have bigger impacts on more people, as well as managing environmental incidents.8. Public communications are important before, during and after an incident.9. Officers in the regulator should be able to move seamlessly from their day job to their incident response role.10. Cross-border co-operation and interoperability between regulators and other emergency



responders can be very important.

11. If the public wish to help with environmental clean-up, it is important that they are well-informed, trained, managed and protected.
12. Clear roles and responsibilities are vital to effective incident management.

Relationship building

1. Building positive relationships with key audiences in 'peace time' can make them more receptive and responsive to messages during an incident, and help manage expectations.
2. Personalised corporate social media accounts can be beneficial in building positive relationships and demonstrating empathy during incidents.
3. The reputation and credibility of the regulator are central to achieving a positive response to communications.
4. Once sensitised, local communities react quickly to incidents, so it is important that regulators are aware of, and respond to, their concerns.
5. Audiences are not all the same, and react differently to communications.
6. Operators have a responsibility to communicate with the communities that they affect, and are important players in the overall communications mix.
7. Feedback to complainants is very important, but can be time consuming.
8. Face-to-face communications are an important element of incident communications.
9. The public are increasingly demanding in seeking information, reassurance and resolution.
10. Previous negative experiences can affect public perceptions of an incident, the operator, or the regulator.
11. Negative experience and attitudes can lead the public to the wrong conclusions regarding an incident. Providing the public with timely and accurate information is very important.
12. Good communications during an incident can bring real benefits in relation to behaviours after the event.

Training/exercising/debriefing

1. Joint exercising of high-risk events with other emergency responders has real benefits.
2. It can be interesting and informative for regulators to put themselves in the position of the media or the local community.
3. Exercising feels real, and is helpful experience of responding to incidents.
4. Training other emergency responders in environmental protection can help them undertake this role if the environmental regulator is not yet on the scene.
5. It is vital to learn lessons from past experience, positive and negative.

Content management

1. Keeping records of decisions and actions during an incident is essential.
2. There are no wrong decisions, just the decisions made on the best information available at the time.
3. Information provided during an incident has to be readable, useful and presentable.
4. Some EU environmental regulators do not deliver public communications, but generally



communicate with environmental organisations and NGOs. This can cause issues when information is communicated to the public inaccurately.

5. It is important that information provided by the regulator is easily understood, but it is the responsibility of the media to ensure they report accurately.
6. It is a common experience that formal approval for information to be released to the media or the public can take too long and involves too many people.
7. The role of incident communications is to warn, inform, reassure and advise.
8. It is important that the information provided by the regulator is accurate, as this helps build trust.
9. Environmental regulators must be confident in calling for a multi-agency response to incidents, but should retain control over the content of messages in the areas for which they are responsible.
10. Regulators are constrained in what they can say publicly when an incident is the subject of enforcement action or judicial proceedings. This can be difficult for the public to accept, but it is essential that they understand it.

24/7 capability

1. Not all regulators have 24/7 availability of technical staff. Providing examples of how this can be put in place would be helpful.
2. Not all regulators can be contacted 24/7. Examples and guidance on the operation of 24/7 contact systems would be helpful.
3. It is important for regulators to maintain 24/7 response capability.

Media management

1. The media tend to focus on the regulator as a source of information, rather than the operator.
2. Regulatory officers may be expected to carry out media interviews during incidents, and they need to be well-informed and well-trained.
3. Experienced and well-trained media teams are vital, and building good relationships with the media in 'peace-time' can be very helpful in working with the media during and incident.
4. Some regulatory officers are not permitted to speak to the media, with all media contact being through the Government. This takes away some of the pressure from regulatory officers.
5. There should be a single voice to the media during and incident, and members of the public involved in the response should not speak directly to the media.

Social media

1. Some regulators do not have a social media policy and do not monitor social media monitoring. Some officers use personal accounts for corporate messaging.
2. Guidance on appropriate social media policies and the effective use and monitoring of social media around incidents would be helpful.



Digital

1. Dedicated micro-sites on the regulator's website can be useful in providing targeted and up-to-date information on incidents.
2. Some regulators are developing cell broadcasting to get incident information delivered to all devices in an at-risk area. Google Public Alerts is also an emerging tool, increasing reach by using location-based intelligence on the Google search platform.
3. Increasingly sophisticated digital channels are available for public communications. The EU Directive on a European Electronic Communications Code is an important consideration.

4. Summary of next steps

1. Regulators would benefit from some clear, consistent guidance on potential arrangements, approaches and tools to help ensure effective provision of public communications.
2. Detailed information and guidance on specific communications tools would be helpful, for example:
 - a. Digital communications such as Cell Broadcasting and Google Public Alerts
 - b. 24/7 technical availability
 - c. 24/7 contact centre operation
 - d. Public reporting tools
 - e. Social media engagement
 - f. Media management
3. It would be helpful to explore options for building capacity in EU EPAs in the context of environmental incident management, and public communications.

5. Key findings

Setting the scene

IMPEL Incident and Emergency Response project

Environmental Incident Public Communications project

Mark Wells, Project Manager

Mark set out the background to this event, highlighting the findings of last year's IMPEL project on incident and emergency response. That project identified a number of common weaknesses in environmental regulators' arrangements for dealing with incidents. One of the weakest areas was in



the ability of regulators to communicate with the public around incidents. The Environmental Incident Public Communications project sought to help address this weakness by organising an event for IMPEL members to explore and discuss current practice, case studies and options, and consider whether incident communications capability in their own organisations could be enhanced.

Mark also highlighted the recent EC Compliance Assurance Initiative work on complaint handling, which resulted in a Vade Mecum providing principles and examples for handling environmental complaints and administrative procedural complaints.

Key findings:

1. The impacts of natural hazards are becoming an increasingly important consideration for environmental regulators.
2. Environmental incidents can no longer be considered simply in an environmental context, but also in relation to social and economic impacts, and the threat of terrorism.

Toddbrook Reservoir wall collapse

Lee Rawlinson, Area Director, the Environment Agency (England)

Lee described the events around the collapse of the dam wall of the Toddbrook reservoir in England in August 2019, which threatened to inundate the village of Whaley Bridge. The capacity of the reservoir was 1.3 million m³, and threatened over 1000 properties with potential damage estimated at more than £100 million. Local residents had to be evacuated because of the threat to life. Collapse of the dam wall would also have impacted water quality downstream, and affected a number of Control of Major Accident Hazards (COMAH) regulated sites.

The Environment Agency's (EA) public communications needed to:

- Demonstrate the Agency's response capabilities as an emergency responder
- Provide public reassurance
- Provide key flooding warning and informing messages

The EA issued more than 100 tweets during the incident, reaching more than one million people, and the incident became a top media story in the UK for several days, and prompted international coverage.

The multi-agency response prevented the total collapse of the dam wall, and the residents of Whaley Bridge were eventually allowed to return to their homes. Their response to the role the EA played was overwhelmingly positive.



Key findings:

3. Building positive relationships with key audiences in 'peace time' can make them more receptive and responsive to messages during an incident, and help manage expectations.
4. Personalised corporate social media accounts can be beneficial in building positive relationships and demonstrating empathy during incidents.
5. The reputation and credibility of the regulator are central to achieving a positive response to communications.
6. Regulators should not base communications solely on their duties – expectations and inferred liabilities are also important considerations.
7. Keeping records of decisions and actions during an incident is essential.
8. There are no wrong decisions, just the decisions made on the best information available at the time.
9. Joint exercising of high-risk events with other emergency responders has real benefits.
10. Regulators should maintain a wide focus on who and what could possibly be impacted by an incident.
11. It is useful to understand partner perspectives so that a common basis for communications can be established.

Participatory exercise

A role-play exercise was conducted around an environmental incident. Participants were allocated to one of the following groups:

- The environmental regulator
- The site operator
- The media
- The local community

At the close of the exercise, the media group made a short narrative presentation on the incident and how it was managed.





The Rules of the Exercise

- This exercise took one hour.
- It was based on a scenario of an environmental incident at a regulated site.
- Participants were given a role to play in responding to the incident.
- Participants could only work with the information they were given.
- Participants were given additional information as the event developed.
- Requests for information could be made to another group.
- Information could be provided to another group.
- Specific actions could be taken in response to the incident.
- After 55 minutes the Media group prepared a two minute report of the incident.
- At the end of the exercise the Media group present their report.

The Scenario

- At 0700 on Saturday morning, the EZ Waste Company contacts the Environmental Regulator to report a fire in its waste storage facility on the edge of Anytown. The EZ Waste Company holds a Waste Management Permit for the site.
- A plume of black smoke is visible from a distance of several kilometres.
- Photos and reports of the fire and smoke are beginning to appear on social media.
- Two Fire Service vehicles are attending, and are confident they will be able to bring the fire under control quickly.

There was an unexpected explosion at the site. Two firefighters were injured in the explosion. The cause of the explosion was unknown, as there should only have been paper, cardboard and green waste on the site.

The fire increased dramatically. A large plume of black smoke was drifting over Anytown, and touching down in areas of housing. The regulator was not yet able to monitor the content of the smoke.

Local residents were very concerned about the possible health effects of the smoke. They were active on social media, posting photographs, and asking questions about what was in the smoke, and what they should do to protect themselves.

The media were present in the area, with journalists, photographers and television crews.

The regulator set up air quality monitoring in the residential areas downwind of the site, but there was a delay in obtaining reliable information from the monitoring. However, initial monitoring indicated some potentially harmful chemicals present. This would not be expected in smoke from a fire at this site.



Regulatory officers were eventually able to access a safe part of the site, and discovered that other wastes were being stored, for which the operator had no permit. These include used tyres, and containers of unidentified liquids.

Some local residents were admitted to hospital suffering from respiratory complaints. It was not clear how many, or why.

It became apparent that a hospital and two residential facilities for elderly people were in the path of the smoke plume. The residents would need to be evacuated if the fire continued.

There were eventually 20 fire appliances at the site. Large quantities of fire water were running off into a local river, which flows in the opposite direction from the smoke, and passes through a large park popular with children and dog walkers.

There was a lot of speculation and misinformation on social media about the incident and its possible health effects.

The Fire Service eventually began to bring the fire under control. Regulatory officers were able to access the site to assess the environmental impact and collect evidence. It was apparent that wastes were being stored without a permit. The regulator will have to carry out a formal investigation.

Air quality monitoring results indicate that the smoke contained some harmful chemicals. However, the impacts would be minor and short-lived for most people. The effects could be more serious for elderly people and people with existing conditions. Advice is that people should stay indoors and close doors and windows, but if they have any health concerns they should contact a doctor.

The regulator was able to advise the emergency services to divert fire water runoff away from the river and towards to a surface water drain where it could be contained and treated. The water environment was therefore protected. The fire was eventually brought under control.

The Exercise

The objectives were to:

- Ensure that the environment was protected.
- Ensure that the health and well-being of people were protected.
- Ensure the health and safety of Regulatory officers.
- Protect the reputation of the Regulator.
- Hold the Regulator to account.
- Gather/secure evidence for any formal investigation.
- Provide timely and accurate public information.



The Media story:

‘Residents of Anytown were today left confused and scared following an explosion at the nearby EZ Waste facility.

Despite initial claims that only paper and green waste were stored at the site, we uncovered that barrels of toxic chemicals and tyres are in fact stored outside. While we cannot yet confirm what was in fact burned, clouds of billowing smoke were visible for miles around.

The community were “scared and powerless” in the face of conflicting instructions on how to protect themselves. They were advised to evacuate at the same time as being told to stay indoors.

A spokesperson for the regulator alluded to criminal activity at the site by saying “we suspect that there is non-permitted waste on site and a full regulatory investigation will be carried out”. Police and health authorities have been informed.

The operator has admitted that they are confused about what they are allowed to store at their facility. Questions also remain about how the regulator failed to see these toxic chemicals in their annual inspection. Anger is mounting in the community as they have been warning the regulator about the mis-management of the site for some time.

The full impact of this incident has yet to be determined. However, pictures have been emerging of dead fish in a nearby river, casting doubt over the regulator’s claim that there has been “little environmental impact.”

Key findings:

12. It can be interesting and informative for regulators to put themselves in the position of the media or the local community.
13. Exercising feels real, and is helpful experience of responding to incidents.
14. The media tend to focus on the regulator as a source of information, rather than the operator.
15. Information provided during an incident has to be readable, useful and presentable.



Unplanned flaring at a petro-chemical plant

Rob Morris, SEPA

Rob explained the situation regarding unplanned flaring at a petro-chemical plant in Scotland. These incidents have been experienced for some time, range from minor to major impacts, and affect local communities through noise, vibration, light and odour. Flaring is a necessary, but unwelcome, safety measure for the plant. There is a lot of negativity in local communities towards both the operator and the regulator.

The Scottish Environment Protection Agency (SEPA) has made great efforts recently to engage positively with the local community, as well as engaging with the operator to resolve the problem. SEPA works with a range of partners to help ensure consistent information is available and that the community is reassured of its safety and the efforts to address the cause of the flaring. SEPA makes extensive use of the media, social media, public meetings, leaflets and briefings, and also communicates directly with political representatives in the area.

Key findings:

16. Once sensitised, local communities react quickly to incidents, so it is important that regulators are aware of, and respond to, their concerns.
17. Audiences are not all the same, and react differently to communications.
18. Dedicated micro-sites on the regulator's website can be useful in providing targeted and up-to-date information on incidents.
19. Operators have a responsibility to communicate with the communities that they affect, and are important players in the overall communications mix.
20. Feedback to complainants is very important, but can be time consuming.
21. Face to face communications are an important element of incident communications.
22. The public are increasingly demanding in seeking information, reassurance and resolution.

Workshop sessions

Participants chose 3 x 15 minute sessions from:

- 24/7 Contact Centre (*Mark Wells, SEPA*)
- Out of Hours staff availability (*Roberta Alani, Italy*)
- Engaging with the media (*Gayle Howard, SEPA*)
- Engaging with digital/social media (*Ciara Hilliard, Ireland*)
- Incident reporting tools (*Andrea Benitez, Environment Agency, England*)

Key findings:

23. Some EU environmental regulators do not deliver public communications, but generally communicate with environmental organisations and NGOs. This can cause issues when information is communicated to the public inaccurately.



24. It is important that information provided by the regulator is easily understood, but it is the responsibility of the media to ensure they report accurately.
25. Regulatory officers may be expected to carry out media interviews during incidents, and they need to be well-informed and well-trained.
26. Experienced and well-trained media teams are vital, and building good relationships with the media in 'peace-time' can be very helpful in working with the media during and incident.
27. Some regulatory officers are not permitted to speak to the media, with all media contact being through the Government. This takes away some of the pressure from regulatory officers.
28. It is a common experience that formal approval for information to be released to the media or the public can take too long and involves too many people.
29. Some regulators do not have a social media policy and do not monitor social media monitoring. Some officers use personal accounts for corporate messaging.
30. Guidance on appropriate social media policies and the effective use and monitoring of social media around incidents would be helpful.
31. Some regulators are developing cell broadcasting to get incident information delivered to all devices in an at-risk area. Google Public Alerts is also an emerging tool, increasing reach by using location-based intelligence on the Google search platform.
32. Not all regulators have 24/7 availability of technical staff. Providing examples of how this can be put in place would be helpful.
33. Not all regulators can be contacted 24/7. Examples and guidance on the operation of 24/7 contact systems would be helpful.

EVENT DINNER and speaker

Dinner speaker: Terry A'Hearn, Chief Executive, SEPA

Terry reiterated the important responsibility of regulators to protect communities around regulated sites. Meeting face to face with communities helps regulators maintain awareness of their concerns, and to provide information and reassurance effectively. Terry noted examples from his experience in Australia and Northern Ireland, which had been challenging but also provided valuable lessons. He noted also his experiences with SEPA in Scotland, highlighting the important relationship between the regulation of sites and the management of incidents at those sites. He stressed that incident management should not be considered a separate function of the regulator, but that the various functions and specialists within the regulator should work seamlessly together in the event of an incident to ensure the event is managed efficiently and effectively. Finally, Terry noted that regulators need also to consider environmental incidents within the wider perspective of environmental pressures such as climate change, resource depletion and biodiversity decline. Although environmental incidents represent immediate and significant impacts on local communities, the long-term impacts of wider environmental pressures are likely to be much greater and affect larger



numbers of people, and addressing these broader issues is an important role of regulators in the 21st century.

Key findings:

- 34. Incident response must involve the co-ordinated efforts of all functions of the environmental regulator.
- 35. Environmental regulators should consider how best they can address wider environmental pressures such as climate change, resource depletion and biodiversity decline, which could have bigger impacts on more people, as well as managing environmental incidents.

Communicating around major incidents

Caroline Douglass

*Director of Incident Management and Resilience,
The Environment Agency (England)*

Caroline explained the role of the EA as an emergency responder alongside other emergency services under the UK Civil Contingencies Act. The EA is involved in a wide range of incidents, including fires, flood, severe weather, drought air pollution and water pollution. As a result, the EA must maintain 24/7 response capability, engaging before, during and after incidents. The Agency is notified of around 70 000 incidents per year, and attends around 12 000 of these. More than 6000 staff have duty incident response roles (in addition to their day jobs). They participate in joint training and exercising with other emergency responders, and build positive relationships both with emergency responders and local communities in ‘peace-time’.

Flood warning and flood defence are two key EA responsibilities. The Agency delivers flood warnings directly to people at risk, through an ‘opt-out’ service through which the EA is provided with landline and mobile contact details for people in areas at risk of flooding. The Agency has developed a Concept of Operations (ConOps) as a framework for preparing for, responding to, and recovering from incidents. This supports a ‘one business response’ that provides a co-ordinated and integrated approach from all the regulator’s functions.

The EA is increasingly embracing digital communications, and particularly direct digital communications such as Cell Broadcasting and Google Public Alerts to people in areas at risk from an environmental incident. Communications do not stop at the end of an incident, and post-incident communications are very important.

Key findings:

- 36. It is important for regulators to maintain 24/7 response capability.
- 37. Training other emergency responders in environmental protection can help them undertake this role if the environmental regulator is not yet on the scene.



38. Public communications are important before, during and after an incident.
39. Officers in the regulator should be able to move seamlessly from their day job to their incident response role.
40. Cross-border co-operation and interoperability between regulators and other emergency responders can be very important.
41. The role of incident communications is to warn, inform, reassure and advise.
42. It is important that the information provided by the regulator is accurate, as this helps build trust.
43. Increasingly sophisticated digital channels are available for public communications. The EU Directive on a European Electronic Communications Code is an important consideration.
44. Environmental regulators must be confident in calling for a multi-agency response to incidents, but should retain control over the content of messages in the areas for which they are responsible.

POSOW II

Learning from experience in the Mediterranean area

Roberta Alani, ISPRA, Italy

Roberta set out the background to the Preparedness for Oil-polluted Shoreline clean-up and Oil Wildlife interventions (POSOW) project. POSOW was established in response to the failure to learn lessons from the 1967 Torrey Canyon spill and the Amoco Cadiz spill in 1978. It provides hands-on training, and guidance manuals covering the range of oil spill response requirements, all based on lessons learned. Public communication is important in an oil spill incident as people often want to help with the clean-up, but they must be well-informed, well-managed, and protected. The chain of command is also important, with a single person designated as a media contact to prevent potential misinformation from members of the public involved in the clean-up.

Key findings:

45. If the public wish to help with environmental clean-up, it is important that they are well-informed, trained, managed and protected.
46. There should be a single voice to the media during and incident, and members of the public involved in the response should not speak directly to the media.
47. It is vital to learn lessons from past experience, positive and negative.



Oil pollution of a river

*Fredrik Klingstedt, Senior Inspector,
Centre for Economic Development, Transport and the Environment
Southwest Finland*

Fredrik described an incident in 2017, during which 7 km of a river were polluted with oil and then froze, preventing immediate clean-up. Many people and properties were affected. The incident resulted in significant loss of amenity, and a number of previous environmental incidents in the area had negatively affected public attitudes towards a couple of particular operators (large industrial sites close to the river). As a result, blame was directed to these operators in error. Open briefing meetings were held with the local community to ensure they received accurate and timely information. As a result, public negativity decreased, and demands for remediation compensation were limited.

Roles were clearly defined in the response. Once the incident had stopped, the responsibility for clean-up was handed over from the rescue department (regional) to the municipality. Communication around the incident continued after the event, and is continuing still as the incident is now the subject of a court case.

Key findings:

48. Previous negative experiences can affect public perceptions of an incident, the operator, or the regulator.
49. Negative experience and attitudes can lead the public to the wrong conclusions regarding an incident. Providing the public with timely and accurate information is very important.
50. Clear roles and responsibilities are vital to effective incident management.
51. Regulators are constrained in what they can say publicly when an incident is the subject of enforcement action or judicial proceedings. This can be difficult for the public to accept, but it is essential that they understand it.
52. Good communications during an incident can bring real benefits in relation to behaviours after the event.

6. Next steps

The participants recognised that European environmental regulators are all dealing with similar issues and opportunities in relation to public communications. It was recognised that communication is a very important function, but one that is not always given the priority it deserves.

A number of possible next steps were identified that might help enhance regulators' capability to communicate effectively with the public 24/7 before, during and after environmental incidents:



1. Regulators would benefit from some clear, consistent guidance on potential arrangements, approaches and tools to help ensure effective provision of public communications.
2. Detailed information and guidance on specific communications tools would be helpful, for example:
 - a. Digital communications such as Cell Broadcasting and Google Public Alerts
 - b. 24/7 technical availability
 - c. 24/7 contact centre operation
 - d. Public reporting tools
 - e. Social media engagement
 - f. Media management
3. It would be helpful to explore options for building capacity in EU EPAs in the context of environmental incident management, and public communications.



Annexes



Annex 1. Summary Terms of Reference

Why is this work needed?

Although most environmental regulators are not responsible for leading on public communications, or for responding to incidents at sites they do not regulate, there was a general acknowledgement that during an environmental incident, whether or not it was at a regulated site, there would be significant public and media expectation of effective communications from the regulator. This is not reflected either in well-established communications channels and staff availability, or in clear roles and responsibilities between the regulator and other responders. The environmental, human health and reputational risks of this situation are evident. The project has identified enhancing the capability and capacity of EU environmental regulators to communicate effectively with the public during an incident or emergency as a high priority next step for the environmental incident response project.

Desired outcome

To bring together IMPEL practitioners with roles in ensuring adequate arrangements for incident and emergency response, to explore opportunities for improving the effectiveness of communicating with the public during an incident or emergency.

The event will use expert presentations, case studies, and demonstrations and include the following themes:

- The importance of public communications during environmental incidents:
- Regulator duty vs public/media expectation.
- Incidents at regulated sites.
- Incidents at unregulated sites.
- Natural hazard events.
- Proactive and reactive communications.
- Engaging with the media.
- Engaging with social media.
- The use of environmental regulator web presence.
- Coordination with other emergency responders.
- Ensuring the 24/7 availability of trained staff.
- Ensuring the 24/7 availability of public communications channels.
- Devices and systems.
- Citizen Science - incident reporting and feedback.

Describe the activities

A mini conference spanning two days (afternoon/morning). The event is likely to attract around 25 participants and require an additional five presenters.



Annex 2. Event Programme

Day One: Wednesday 30 October

Morning Session

- 09.00 Pick-up from Hotel, Glasgow
- 09.30 Arrival, registration, coffee/soft drinks/pastries
- 10.00 **Welcome**
Introduction and domestic arrangements
Mark Wells, Project Manager, SEPA
- 10.10 **Welcome from SEPA**
Allan Reid, Director of International Services, SEPA
- 10.15 **Introductions**
- 10.25 **Setting the scene**
IMPEL Incident and Emergency Response project
Environmental Incident Public Communications project
Mark Wells, Project Manager
- 10.50 **Question and answer session**
Chaired by Mark Wells
- 11.00 **COFFEE BREAK/networking opportunity**
- 11.30 **Toddbrook Reservoir wall collapse**
Lee Rawlinson, Area Director, the Environment Agency (England)
- 12.15 **Question and answer session**
Chaired by Mark Wells
- 12.30 **LUNCH and networking opportunity**

Afternoon Session

- 13.30 **Participatory exercise**
A role-play exercise around an environmental incident. Participants will be allocated to one of the following groups:
- The environmental regulator
 - The site operator
 - The media
 - The local community
- At the close of the exercise, the media group will make a short narrative presentation on the incident and how it was managed.
- 14.30 **COFFEE BREAK**
- 14.45 **Unplanned flaring at a petro-chemical plant**
Rob Morris, SEPA
- 15.30 **Question and answer session**
Chaired by Mark Wells



15.45 **Café/lab workshop sessions**

Choose 3 x 15 minute sessions from:

- 24/7 Contact Centre (*Mark Wells, SEPA*)
- Out of Hours staff availability (*Roberta Alani, Italy*)
- Engaging with the media (*Gayle Howard, SEPA*)
- Engaging with digital/social media (*Ciara Hilliard, Ireland*)
- Incident reporting tools (*Andrea Benitez, Environment Agency, England*)

16.30 **Discussion**

Review of the day and key learning/action points

17.00 Return to hotel, Glasgow

19.30 **EVENT DINNER and after-dinner speaker**

Dinner speaker: Terry A'Hearn, Chief Executive, SEPA

22.00 **End of day One**

Day Two: Thursday 31 October

09.00 Pick-up from hotel, Glasgow

09.30 Arrival and coffee/pastries

09.45 **Communicating around major incidents**

Caroline Douglass

Director of Incident Management and Resilience,

The Environment Agency (England)

10.30 **Question and answer session**

Chaired by Mark Wells

10.45 **Case Study: Posow II**

Learning from experience in the Mediterranean area

Roberta Alani, ISPRA, Italy

11.00 **Case Study: Oil pollution of a river**

Fredrik Klingstedt, Senior Inspector,

Centre for Economic Development, Transport and the Environment

Southwest Finland

11.15 **Plenary discussion**

Questions, answers, observations, next steps

11.30 **LUNCH**

12.00 **Close of event** and depart by coach

12.30 Coach arrives in Glasgow

13.00 Coach arrives Glasgow airport



Annex 3. Scene-setting presentation



Improving the Incident Response Capability of Environmental Regulators

Mark Wells
SEPA International Services



www.sepa.org.uk



Presentation outline

1. Environmental Incident and Emergency Response
2. Environmental Incident Public Communications
3. Environmental Compliance Assurance

www.sepa.org.uk



1. Environmental Incident and Emergency Response

Aims:

- Determine current arrangements
- Identify gaps and shortcomings
- Share and promote good practice

Ten Key Findings (1)

1. Incident prevention is important
2. Regulators don't think incidents not at regulated sites are their responsibility
3. Waste sites most common source
4. Illegal sites also a common source
5. Permit conditions, and compliance assurance, for prevention and response are weak



Ten Key Findings (2)

- 6. Lack of awareness and human error are key causes
- 7. Impact of natural hazards on regulated sites ignored
- 8. Common weaknesses in institutional arrangements
- 9. Air and water monitoring good, but poor for land
- 10. Key weaknesses prevent effective incident response

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Weak institutional arrangements

What general arrangements does your organisation have in place for managing incidents and emergencies?	
Local response plans and procedures	66%
Risk assessment (for national-level incidents)	36%
Escalation process (for national-level incidents)	30%
Ensuring resource availability (for national-level incidents)	25%
Engaging emergency responders (for national-level incidents)	30%
Business continuity plans for key services and facilities	20%
Guaranteed 24/7 capability to contact key staff	60%
Guaranteed 24/7 availability of people and services to fulfil response	35%
Communications technology suitable for fulfilling your responsibilities	35%
PPE appropriate to your responsibilities	50%
Guaranteed 24/7 channels/services for public communications	15%
Staff training and exercising programme	35%
Staff training and exercising recorded	25%
Statistics on incidents/accidents, published at least annually	45%
Inventory of incidents/accidents, published at least annually	45%
Provide debrief of all significant incidents	20%
Lessons learned implemented	45%
Arrangements in place to manage transboundary	55%
Procedures in place to implement UNECE Convention on transboundary effects	50%
Formal arrangements with NGOs to support incident response	10%
Arrangements for citizens to report incidents	25%
Formal arrangements with other institutions to support incident response	65%
Other	5%

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Ten Key Actions (1)

1. Focus on duties and powers in relation to prevention
2. Prepare for incidents not at regulated locations
3. Prioritise waste sites
4. Be vigilant in relation to illegal operations
5. Develop effective permit conditions for prevention, preparation and response

Permit conditions

- **Prevent:**
 - Design
 - BAT
 - Maintenance
- **Prepare:**
 - Containment
 - Planning
 - Training/exercising/kit
- **Respond:**
 - Capability and equipment
 - Inform the regulator and emergency responders
 - Investigate
 - Learn from experience



Ten Key Actions (2)

6. Inspect and give compliance assurance
7. Prepare for natural hazard impacts on regulated sites
8. Improve organisational arrangements for response and business continuity
9. Ensure comprehensive monitoring capability
10. Engage with emergency planning and response partners

What could IMPEL do?

- Share experience
- Practical examples
- Practical measures
- Skill-sharing/capacity building
- Seveso experience as a model
- Risk assessment methods
- Methods of assessing environmental damage
- Technical guidance



2. Environmental Incident Public Communications

Guaranteed 24/7 availability of people and services to fulfil response	35%
Communications technology suitable for fulfilling your responsibilities	35%
Guaranteed 24/7 channels/services for public communications	15%

www.sepa.org.uk



3. Environmental Compliance Assurance: Complaints Handling

- Environmental complaints
- Maladministration complaints
- Complaint making
- Complaint handling
- Escalation and resolution



www.sepa.org.uk



Status

- Not binding
- Not even guidance
- Vade Mecum



www.sepa.org.uk



Key content

- System, not a single body
- Citizens monitor and report
- Different categories of complainant
- Different complaint content
- Handling:
 - Ways
 - Means
 - Ends
- Core common principles

www.sepa.org.uk



Thank You

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SEPA International Services

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www.sepa.org.uk



Annex 4. Toddbrook reservoir wall collapse presentation



What happened at Toddbrook Reservoir, Whaley Bridge?

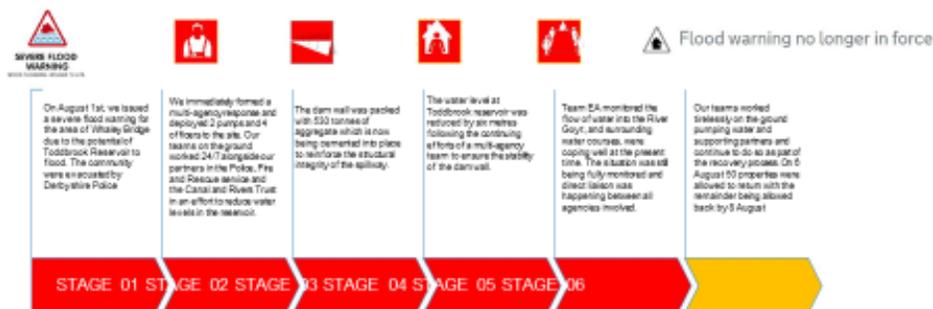
Lee Rawlinson, Environment Agency Area Director for Greater Manchester Merseyside and Cheshire

I

Environment
Agency



What happened at Whaley Bridge?



Key Statistics

- Owner — Canal & River Trust
- Date of construction - 1840
- High-risk — where a breach could endanger lives in a community
- Upstream catchment size: 17.3 km²
- Safety check flood: Probable Maximum Flood (PMF), 173m³/s (this is approximately double the 1 in 10,000-year flood)
- Escapable Capacity 1,288,000m³
- Dam height 23.3m
- Dam construction type — earthfill with a puddle clay core
- Outlet — pipes through the core
- No. of properties at risk of flooding in event of a breach (dry day): 1,005
- Estimated property damage in event of a breach: £100,144,000









Task

Our Business Objectives

- Reinforce the EA's role during an incident.
- Provide reassurance to affected communities, stakeholders groups and businesses impacted by flooding
- Take a multi agency response from the onset
- Deal with the emergency first not the cause or the investigation
- Warn and inform the community at risk of flooding.

Our Communications Objectives

- Showcase the Environment Agency's operational response to instances of flooding and warn and inform people via national and local media coverage.
- Utilise EA owned social media platforms to visually convey the EA's incident response and key flooding messages.
- Secure positive coverage and reassure members of the public and press using our key messaging.

Outcome

- 300 + piece of coverage
- Sentiment: 99%+ positive.



Social media @EnvAgencyNW

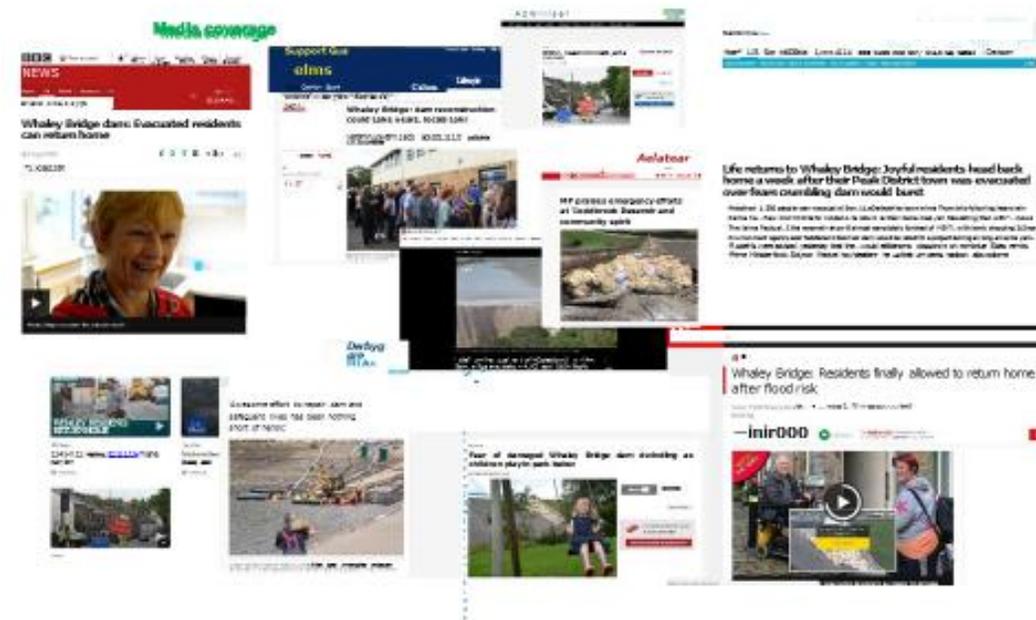
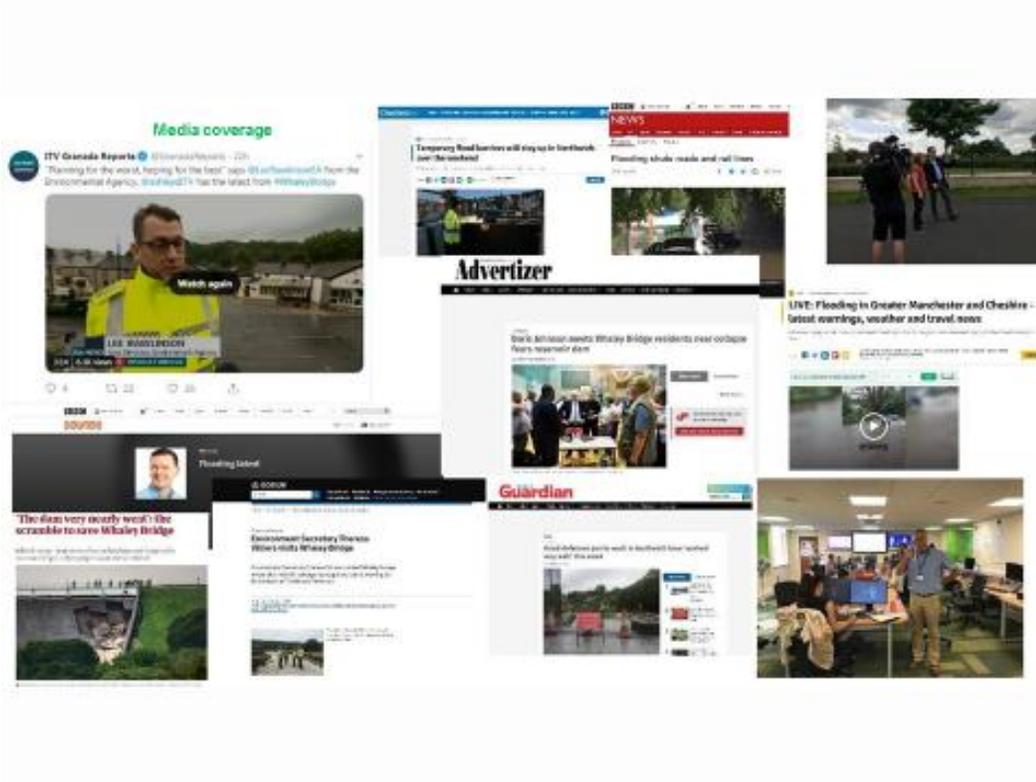
Twitter

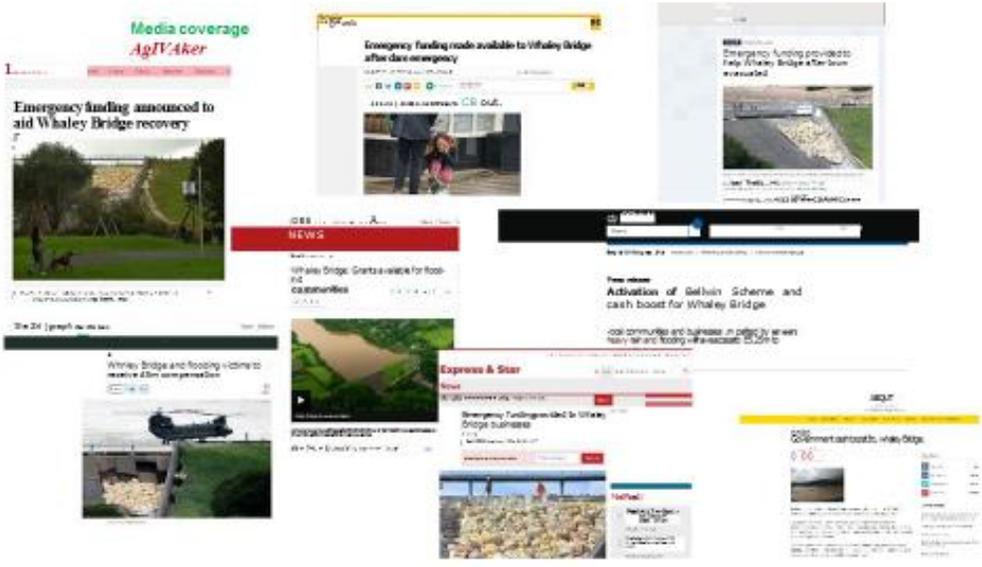


- We issued more than 100 tweets during the incident from our regional twitter feed
- Our tweets reached more than one million people
- More than 132,000 people engaged with our posts

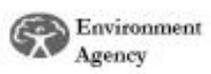
Top tweets







Lee Hamilton's Wildlife Column in the Tameside Reporter focussing on a recovery





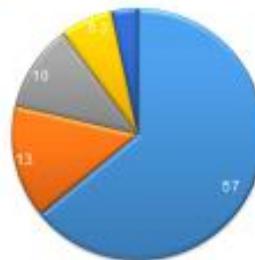
Environment Agency

Reservoirs in Greater Manchester



- Cheshire East Metropolitan District
- Cheshire West and Chester Metropolitan District
- Manchester Metropolitan District
- Tameside Metropolitan District
- Trafford Metropolitan District

- Environment Agency
- Local Authority
- Canal & River Trust





Reservoirs Act Enforcement

The Environment Agency is the enforcement authority under the Reservoirs Act 1975, to do this we:

- make sure that reservoir undertakers comply with the Act, by monitoring compliance and engaging with them at regular intervals
- maintain a register of all reservoirs under the Act
- make sure that undertakers appoint a construction engineer to design and supervise the construction or alteration of large raised reservoirs
- designate reservoirs as 'high-risk', if we think that human life could be endangered in the event of an uncontrolled release of water from the reservoirs
- make sure that undertakers appoint a supervising engineer for their high-risk reservoirs
- make sure that undertakers have their high-risk reservoirs inspected by inspecting engineers



Reservoirs Act Enforcement

- make sure that undertakers carry out any safety measures ('measures to be taken in the interests of safety') recommended by inspecting engineers, including investigations, studies, repairs and improvements
- when an undertaker does not comply with the Act, appoint engineers and commission safety work on their behalf. We charge undertakers for this
- appoint engineers and take any other action necessary in an emergency, to protect people and property against an escape of water from a reservoir
- make sure that undertakers report reservoir incidents and share lessons learnt from them





Any questions?



"How come we never get invited to these extreme weather events?"



Annex 5. Unplanned flaring at a petro-chemical plant presentation

IMPEL ENVIRONMENTAL INCIDENT PUBLIC COMMUNICATIONS EVENT

Rob Morris
Senior Manager, SEPA
30 October 2019





Communicating with local communities during a flaring incident

Challenges:

- Flaring incidents vary in magnitude and duration.
- The reasons for flaring differ from major incidents to minor process changes.
- Communications need to be adapted to the circumstances.
- Communities are diverse – politically, with some for, some neutral and some against industrial activities.
- Social media is playing a significant role – speed of reaction and response demanded.



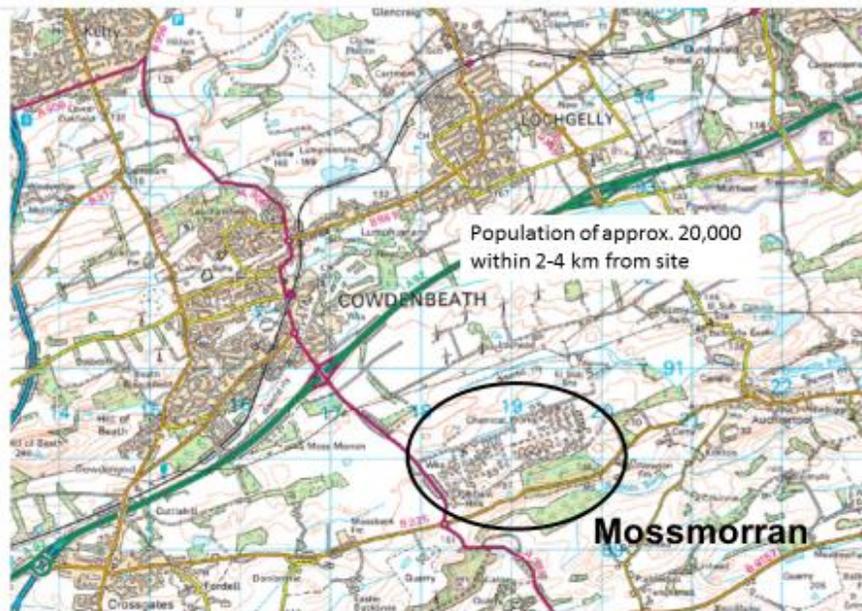


Mossmorran Petrochemical Complex, Fife, Scotland

- Shell U.K. Limited – refine from the North Sea.
- ExxonMobil Chemical Limited – ethylene cracker (fed from Shell U.K. LimNatural Gas Liquids ited and imported ethane).
- Regulated principally by SEPA, the Health & Safety Executive and Fife Council.



WHERE IS MOSSMORRAN?





Impacts of flaring on local communities

- Noise
- Vibration
- Light (not regulated by SEPA)
- Smell / Odour

People also report:

- Anxiety
- Sleepless nights
- Distress to vulnerable groups (elderly, infirm or autistic people)
- Loss of amenity
- Health concerns

Unplanned flaring incident in April 2019

- Easter holidays
- >900 complaints over 6 days



Community Concerns

- Am I safe?
- Should I close my windows to protect myself?
- How long will this go on?
- How do I explain what is happening to my children?
- What is being done?



Communicating with the Local Community during an Emergency

Some areas have predefined emergency messages which are shared in advance with the local community.

GO IN, STAY IN AND TUNE IN

- In Grangemouth, there are sirens that will be activated in the event of a major incident where the public are advised to stay indoors.
- Information will then be communicated by local radio stations.
- The decision to activate the sirens lies with Police Scotland.



SEPA - Informing local communities

Mossmorran and Braefoot Bay complexes



Page contents

- Latest updates
- Briefing documents, including air quality reports
- Mossmorran Complex emergency plans
- Air quality monitoring systems
- Data at Mossmorran - various tables
- Air quality
- Overview
- Air quality and 2019 update statement
- Community issues
- Health, concerns and advice
- Frequently asked questions

Latest updates

SEPA response to flaring at Mossmorran: Air quality data summary

Friday 18 October 2019





Partnership Working



Stakeholder and Technical Groups also provide:

- Expert independent scrutiny – on air quality
- Community representation – on safety and performance issues



Informing communities – the Operators role

Community Statement

Date: Tuesday 13 August 2019 (Issue 2)

Dear Community Member

As an update to last night's communication, we can confirm that we have experienced mechanical failure across two of our three boilers.

With the loss of this steam generation, we cannot continue to operate our normal processes.

As such, we are progressing with the unit shut down to allow us to evaluate the root cause and execute necessary repairs.

Firing will be required while our team take the steps required to safely shut down operations.

We will always work to minimize the timescale, and will update you as these are confirmed.

We, again, apologise if firing is causing any concern but reiterate that the process is safe and poses no risk to communities.

Regards,

MOSSMORRAN FLARE

01 CLOUD REFLECTION
When the flare is firing, it can create a cloud of steam that reflects the sun's rays. This can cause a bright glare that is visible from a distance.

02 STEAM
The flare is a safety device that is used to burn off excess gas. It is a normal part of the process and is designed to be safe.

03 FLARE MORE
The flare is a safety device that is used to burn off excess gas. It is a normal part of the process and is designed to be safe.

04 MONITORING
The flare is a safety device that is used to burn off excess gas. It is a normal part of the process and is designed to be safe.

FLAME BURSTING AT THE TOP OF ONE OF OUR HIGHEST TOWERS

IS AN IMPORTANT PART OF FIFE'S OPERATION

ExxonMobil



RADIO ADVERTS

In parallel, Radio Adverts were undertaken on local stations in Fife.

These carried messaging specifically for those that have been impacted by the unplanned flaring.

Specific reference was made to the ongoing regulatory work, including the timetable for investigations.

The approximate weekly reach of these adverts is approximately 381,000 listeners.



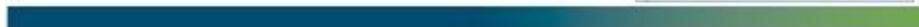
SOCIAL MEDIA

Content developed for SEPA social media channels, including posts on LinkedIn, Facebook and Twitter.

These clearly communicated the regulatory action SEPA is taking.

A supporting video was also hosted on SEPA social media channels.

This offered an opportunity to reach an audience of approximately 46,000 followers.





POLITICAL AND COMMUNITY ENGAGEMENT

- For the last 2 years, SEPA has directly communicated updates to a range of stakeholders, including elected members - MP, MSP's, Local Councillors and key contacts in all 14 local Community Councils.
- These updates have also gone out to the joint leaders and Chief Executive of the Local Authority, Fife Council, and to members of a local pressure group.
- **Personalised communications have been sent on 15 occasions in this period.**
- SEPA also calls back or provided written feedback to members of the public that have reported flaring as being a concern to them and who have request such feedback.



Thank you for listening!

E-mail: rob.morris@sepa.org.uk





Annex 6. Communicating around major incidents presentation

Environment Agency: Who we are and what we do



Environment Agency – Communications during major incidents

Caroline Douglass
Director, Incident Management and Resilience
October 2019





EA's role in incident management – Incident types



EA's role in an incident



Leading public body for protecting and improving the environment



Category 1 responder under the UK's Civil Contingencies Act



24/7 365 response





Preparation

- Duty roles
- Training, exercising and support
- Relationships
- Community engagement



6

Campaign details

- Flood Action has a bespoke website and is promoted via many channels and platforms
 - Including paid-for Facebook ads, social media and print media
- Contents shared by partners (including universities, the Met Office, the AA and Highways England) and by influencers and celebrities

Call to action

1. Check if they are at risk
2. Sign up to flood warnings
3. Know what to do in a flood





Response – Ways of working

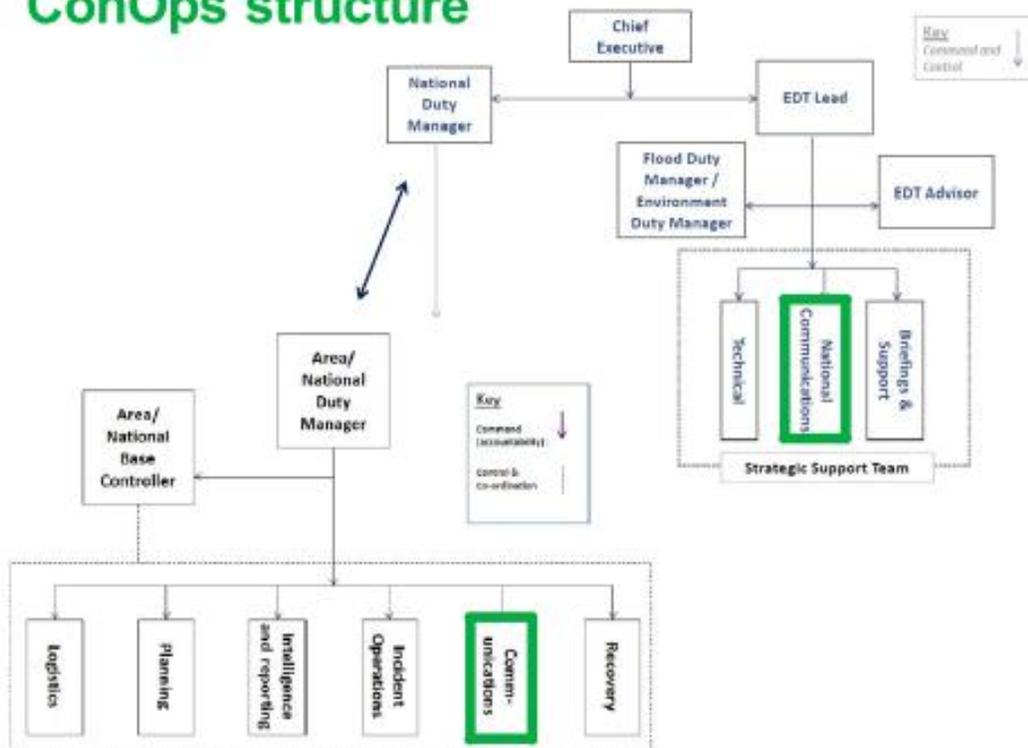
Concept of Operations (ConOps) is the framework for how we prepare for, respond to and recover from incidents.

Main principles:

- Think Big, Act Early, Be Visible
- Clear command and control
- Scalable
- Interoperability
- **Supports a “one business response” to incidents**

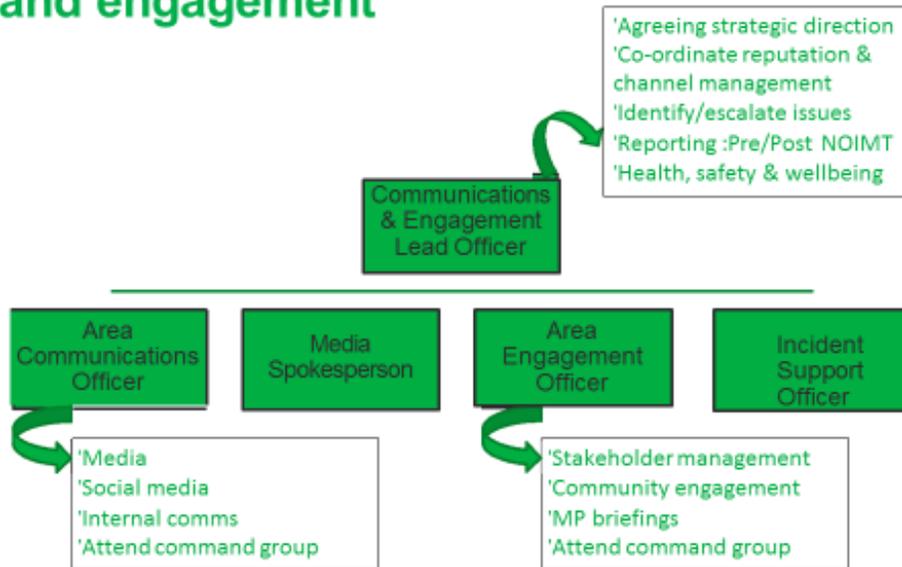


ConOps structure





Local area communications and engagement



10

Flood communications aim to:

- Warn and Inform
- Be Visible
- Give public reassurance
- Keep staff informed
- Promote the EA flood prevention activities
- Promote #floodaware



11



Warning and Informing

Flood warnings - know what to do?

Environment Agency ⁽³⁴⁾

FLOOD
4/11 ALERT

A FLOOD
WARNING

SEVERE
4. FLOOD
WARNING

PREPARE

ACT

SURVIVE

- Prepare a bag that includes medicines and insurance documents
- Visit flood-warning-information.service.gov.uk

- Turn off gas, water and electricity
- Move things upstairs or to safety
- Move family, pets and car to safety

- Call 999 if in immediate danger
- Follow advice from emergency services
- Keep yourself and your family safe

FLOODS

floodsdestroy.campaign.gov.uk

Floodline on 0345 988 1188 #PrepareActSurvive

Environment

Agency

Digital

Live Flood Warnings River & Sea Levels Service 5 Day Flood Forecast

4.5m visits last yr.

2.7m visits last yr.

300k visits last yr.

<https://flood-warning-information.service.gov.uk/warnings>

GOV.UK



Environment Agency



Digital Communications

Digital Services
Incident Management & Resilience

Digital Services – Future Developments

Forecasting Voice & IoT

Sign up to community flood alerts

- Woodhead Lane Floods in Summer 2018
- Cyfe Llaner Nantlle Flood (summer 2018)
- Community flood plan submitted in 2018
- More direct floodplain cover (2018)
- Wentworth Park Flood (car park submerged) 2018
- Delapreys at Bridge Street submerged (2018)

Forecasting for impacts. Enabling users to sign up to forecast impacts.

Flood warning finds its voice

Growth in voice driven leads

Consuming data from the earth's telecoms by

The rising growth in voice

Machine Learning to define, interpret large data sets & inform response.

Dissemination

User led design – SMS or 101 by channel

Cell Broadcast – for most severe incidents

Increased reach through Google Public Alerts

AI, Machine Learning & MAR (Mobile AR)

Greater use of crowd-sourced content

Using MAR to visualise flooding – common barriers, training, response, design.



Digital Communications

Digital Services
Incident Management & Resilience

Cell Broadcasting Trials

Environment Agency together with Fujitsu and EE are trialling Cell Broadcast technology.

- Several countries current use Cell Broadcasting to alert citizens
- Is transmitted from cell towers and received by all handsets located in the area.
- Requires no pre-registrations

Working towards a public trial of the technology in 2020.

Duty Officer
Environment Agency

TRAVELLING





Recovery – Post-incident communications

- Post-incident, we continue to keep audiences (media, communities, Government) proactively updated on recovery efforts.
- Dedicated officers work closely with Government and partners.
- We share lessons learned and use these to inform future incident response.
- Community information officers



18

Case Study – Flooding December 2015



Rainy record breakers



Wettest calendar month on record



Most rainfall in 24- and 48-hours



Largest ever river flow



Communities visited by flood support officers



Properties flooded**



Properties protected during storms Desmond and Eva





Annex 7. POSOW presentation

 **ISPRA**
Istituto Superiore per lo Studio e la Ricerca Ambientale

 **Cooperazione per lo Sviluppo Sostenibile**

IMPEL INCIDENT AND EMERGENCY MANAGEMENT Environmental Incident Public Communications Event Glasgow, Scotland 30 - 31 October 2019

Case Study:
Posow II
"Learning from experience in the Mediterranean area"



Roberta Alani (ISPRA)



 **ISPRA**
Istituto Superiore per lo Studio e la Ricerca Ambientale

 **Cooperazione per lo Sviluppo Sostenibile**

CEDRE- lessons learnt

Cedre was created during the French Cabinet meeting (05/07/1978), based on the observation, during the Amoco Cadiz oil spill (16/03/1978), that the lessons learnt from the Torrey Canyon spill (1967) had been forgotten.



5 km from the coast of Brittany and France
220,880 metric tonnes of oil spill



POSOW PROJECT



The project for Preparedness for Oil-polluted Shoreline Cleanup and Oil Wildlife interventions-(POSOW) was a project co-funded by DG ECHO, to improve the preparedness and response to marine pollution in the Mediterranean region. POSOW I (2012-2013) and II (2015-2016) involved: Croatia, Cyprus, France, Greece, Italy, Malta, Slovenia, Spain, Algeria, Egypt, Lebanon, Libya, Morocco, Tunisia and Turkey.



POSOW PROJECT - aim and partners

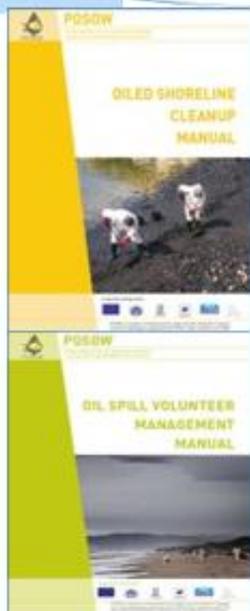
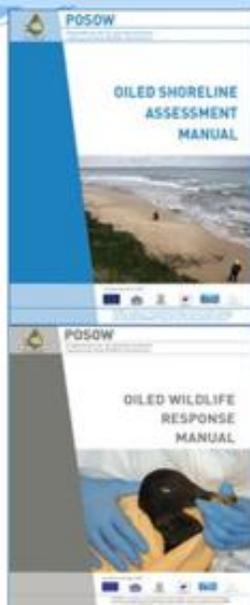


The main aim of the project was to reinforce, throughout Train the Trainers courses, the knowledge and skills of volunteers working in civil protection services, in municipalities and in NGOs and involved in oil spill response.





POSOW 6 MANUALS



MANUALS based on lessons learnt



Two fundamental principles



Limit secondary contamination



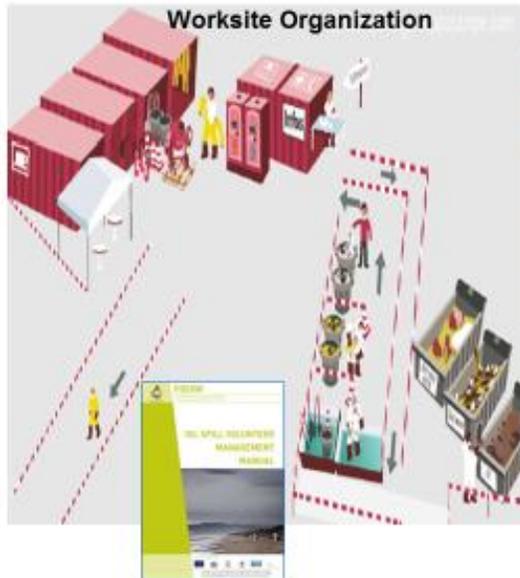
Operators' safety must be guaranteed



MANUALS based on lessons learnt



ISPRA
Istituto Superiore per lo Studio e l'Informazione Ambientale



- Identification and registration
- Keeping records of volunteers
- Provide accommodation/meals
Transport to/from working site
- Health care available onsite
- Avoid random afflux of people on the clean-up sites
- Check the physical aptitude of people volunteering

MANUALS based on lessons learnt



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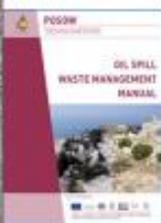
Activities :

- ❖ Adapt to operations;
- ❖ Oil conditions;
- ❖ Working and weather conditions.





MANUALS based on lessons learnt



Photographic guide to oiling thickness and characterisation

- 1. Thick Oil (TO)
- 2. Crude Oil (CO)
- 3. Piles (PL)
- 4. Piles (PL) transparent sheen



Thank you

POSOW material is available :
<http://www.posow.org/>



Annex 8. Oil pollution of a river presentation



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Närings-, trafik- och miljöcentralen
Centre for Economic Development, Transport and the Environment

Oil leakage into the Kokemäki river - successful communication during remediation process

Fredrik Klingstedt
ELY-centre of Southwest Finland
30.-31.10.2019



Elinkeino-, liikenne- ja ympäristökeskus
Närings-, trafik- och miljöcentralen
Centre for Economic Development, Transport and the Environment

The accident took place 21th of December 2017 at a small district heating plant in the city of Harjavalta. Approximately 50 m³ of light fuel oil ended up into the storm water sewer



The oil was discharged via the sewer into the Kokemäki river



The oil was spread out rapidly on the riverbanks of 6 km





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The spreading of oil was stopped in front of the hydro electric power plant dam using a 900 mm sea barrier



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The river froze soon after the accident, which put demands on remediation processes as well as communication with property owners



The river became free from ice in the end of April 2018 after which it was possible to start the main remediation processes



Beach and riverbank remediation started in May 2018. The water level was lowered in order to enable remediation. Recreational use of beaches and properties were hindered during the summer 2018



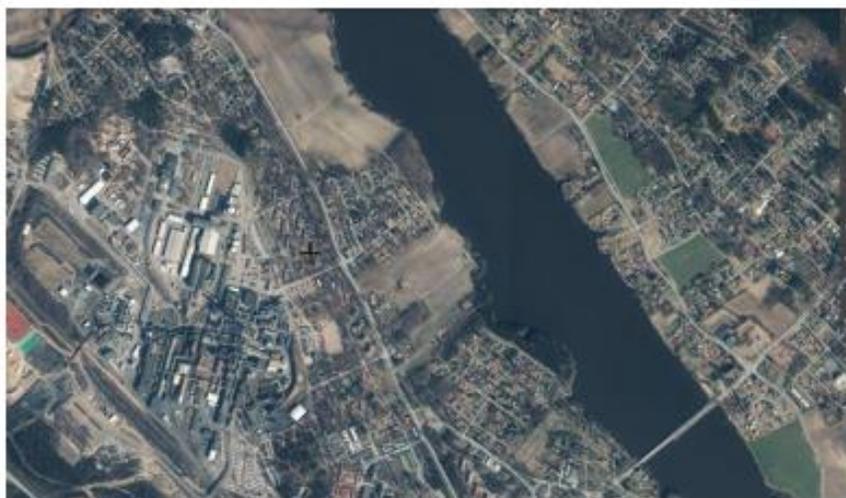


By the end of August 2018 most of the remediation processes were finished on the beaches and in the end of the year the whole riverbank had been "cleaned"



Background reasons for high communication efforts

Earlier environmental incidents (oil and nickel sulphate leakages) in 2006 and 2014 have influenced the attitudes of inhabitants





How was communication arranged after the detection (7.26 am, 21.12.2017) of the leakage?

- Acute retortion processess started immediately by rescue department
- Screening of leak origin in collaboration with industrial operators and municipals
- Main focus was put on hindering the spreading of the leakage
- First press release was given by rescue department at 11.50 am when the scale of the leakage had been clarified
- Informing authorities and collaborating sources

Successfull communication during remediation processess

- **The polluter (energy company) took immediately the responsibility for the accident and for arranging effective remediation**
- The authority role of leading the remediation process was transferred from the rescue department to the municipal authorities when the acute retortion measures had been carried out
- The authority roles were clearly defined and the communication regarding the state of remediation (e.g. regular press releases) was centralised to the polluter, who had professional public relations resources available. Extra effort was put on informing property owners who had suffered from economic and recreational losses
- Environmental impact communication was arranged by state authorities
- Police started to investigate the case



Successful communication during remediation processess

- Open briefing events for public and media were arranged (prior to and after remediations)
- A steering group consisting of authorities, rescue department, municipalities and operators was established. During the steering group meetings the remediation process was planned
- An inspection board was founded in order to investigate impacts of the leakage and evaluate possible reimbursements to property owners
- Debriefing event of authorities and operators was arranged when remediation had been finished

Successful communication during remediation processess

- The public opinioin was quite negative during the first open briefing event. At the open briefing event, which was arranged after the remediation process the opinion had changed to positive. Most of the property owners were satisfied with the "cleaning" result as well as how communication had been carried out during the process
- The inspection board has got only approximately 6 demands on reimbursement from property owners. The recommendations by the board were accepted by the polluter and the requirements has been paid
- Police has finished the preliminary investigations and the issue has been sent to the lower court, where the polluter is charged for environmental crime, First trial meeting will take place in february 2020 => communication is continuing



Thank you



European Union Network for
the Implementation and Enforcement
of Environmental Law