RISK COMMUNICATION

BOOKLET

Communicating understanding of contaminated land risks



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SNIFFER risk communication booklet

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1

INTRODUCTION

This booklet and the guidance are available for download from the SNIFFER website (http://www.sniffer.org.uk; enter "UKLQ13" in the Project Search field).

Purpose

This SNIFFER risk communication booklet is designed to be a convenient and easy-to-use reference that complements the Communicating Understanding of Contaminated Land Risks revised guidance (SNIFFER, 2010). It provides a comprehensive distillation of the ideas and tips contained within the guidance in a format that is more conducive to quick referencing.

This booklet is <u>not</u> a substitute for the guidance, which contains very detailed discussion on the multitude of complexities inherent in communicating about land contamination and its associated risks. These complexities must be considered and addressed in order to communicate successfully. Therefore, it is strongly recommended that you read the guidance <u>after</u> reading this booklet, and then use this booklet as a reminder of, and quick reference to key concepts, points and tips.

While recognising that differences in legislative arrangements apply in different

This guidance may assist local authorities with updating the communications section of their Contaminated Land Regime Inspection Strategy.

Additionally, the communications information documented in your Contaminated Land Regime Inspection Strategy can provide an excellent starting point for developing a site-specific risk communication strategy.

You are encouraged to increase process transparency by providing your inspection strategy to stakeholders. This will help them understand the framework in which you are working.

parts of the United Kingdom (UK), this booklet (as well as the guidance) is relevant and applicable to the whole of the country.

However, the concepts and tips are universal and this booklet and the guidance will be valuable resources for comparable audiences farther afield.

The SNIFFER risk communication booklet is divided into three sections:

- Hallmarks of an effective communication strategy;
- Recommendations on how to develop an effective, robust communication strategy; and
- Practical advice on how to deliver your message effectively.

These sections do not correlate directly to those within the guidance. The reason for the difference is to facilitate use of this booklet as a quick reference. The section headings in the guidance are much more distinct.

As with the guidance, this booklet does not present definitive risk communication solutions. Nor does it include advice on evaluating land contamination to determine the risks to health or the wider environment. References are provided at the end of the guidance that point to general sources of additional information on these topics.

Background

This booklet provides a distillation of the Communicating Understanding of Contaminated Land Risks guidance (SNIFFER, 2010) developed for SNIFFER by ArupScotland and Ray Kemp Consulting Ltd. under project UKLQ13. Together, this booklet and the guidance replace the previous Communicating Understanding of Contaminated Land Risks (SNIFFER, 1999).

Target audience

This booklet (as well as the supporting guidance) is designed for anyone who wishes to communicate about land contamination risks (existing and potential). This will include:

- Local authority officers
- Environment agencies' staff
- Environmental consultants
- Communications professionals
- Health professionals
- Developers
- Landowners
- Other stakeholder groups including residents, community leaders and councillors

Exposure to contamination is involuntary and often unseen. The lack of control people may feel and a lack of knowledge about the issues may amplify concerns and fears.

A proactive, effective risk communication strategy will provide stakeholders with sufficient understanding to have constructive input in developing a solution and thereby allow them to regain an element of control over the situation.



What risk communication aims to achieve

The goal of risk communication is to help people understand the contamination issues and the importance and benefits of taking action. Risk communication is necessary where there may be concerns about land contamination, or if the risk posed by contamination is poorly understood.

Risk communication is not just about coming to a technical conclusion on risk and then announcing this to affected parties. Rather, it must be a two-way process that achieves mutual understanding.

2.

AN EFFECTIVE COMMUNICATION STRATEGY

These requirements refer to the building blocks listed in the guidance on pages 13-21, where detailed descriptions and illustrative case studies are provided.

Two of the ten building blocks in the guidance are not included here. Instead, they are provided as practical tips for effective message delivery on page 18 of this booklet. An effective communication strategy must:

...Build and maintain trust

Trust can affect the public's responses to information about land contamination risks. Demonstrating the qualities of openness, transparency, responsiveness and willingness to consult can help build trust.

Key pointers:

- Build your relationships with key stakeholders at the very beginning of the risk communication process.
- Be aware of any historical or underlying issues (including cultural and neighbourhood disagreements).
- Be honest. If you do not know the answer to a question, say so; and then find and provide the answer quickly.
- Be helpful. If you cannot help, find someone else who can.
- Be empathetic. Listen to and acknowledge people's concerns.
- Set achievable goals and deadlines, and then meet them. Honour your commitments and manage expectations.
- Be responsive. Inform people quickly if anything changes.
- Be transparent. Provide all available information; never hide information.
 Except for in rare instances, you should never provide information or documentation that is in draft form.
 Only provide final, signed off information or data. However, in some situations, it may be appropriate to request comments from stakeholders on draft material to refine the final versions.

REMEMBER!

Trust is slow to gain and quick to lose. Work hard to maintain it.

...Take account of public perceptions of risk

It may not be possible to predict accurately how people will respond to an issue every time. However, by improving your understanding of what motivates public reactions, you will be better able to understand and anticipate their views and reactions to new information and proposals as they arise.

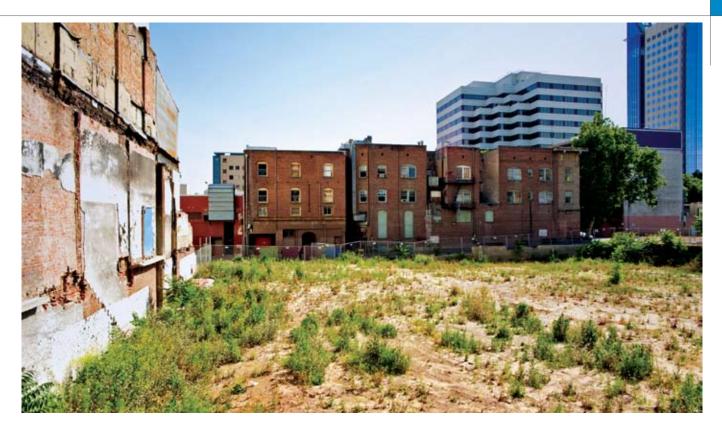
You need to work to understand their views in much the same way as you are asking them to work to understand your "technical" view of the risks.

You should avoid making direct comparisons with other risks, because people will react to and accept different types of

Perceptions are the filter through which people view everything and they are often emotionally driven.

People's perceptions are their reality, and this is the reality in which the communicating person or organisation must operate.

Factual information alone will not satisfy.



risks in different ways. However, in some circumstances it may be difficult to avoid this. If you must make comparisons, then be very careful with how you do it.

...Be timed carefully

Carefully and appropriately time your communication within your strategy. It is vital that the communication process is started as soon as the potential for contamination has been identified, and continues throughout the lifespan of these activities.

As a rule, it is better to err on the side of caution and communicate earlier and more widely, than to communicate late and to a restricted number of stakeholders.

...Improve dialogue

Stakeholders need to feel that their opinions are being taken into consideration and that they are being treated as a partner in the process. Give them the opportunity to express their opinions and ensure that their views are heard and taken into account (see page 16 of the guidance for more information).

2

AN EFFECTIVE COMMUNICATION STRATEGY (continued)



...Involve affected parties

Investigation, remediation and development activities can be severely hampered and delayed as a result of local protests. Give communities or their representatives the opportunity to feed into decision making. This will help smooth the process for conducting these activities. Develop a liaison group and provide a single point of contact for local residents. Keep all stakeholders fully informed and do so in a timely manner.

...Allocate sufficient budget and resources

Communication should be an integral part of the overall risk management strategy for the site and resources should be allocated appropriately. The amount of time and resources required should not be underestimated.

Adequate contingency resources should be budgeted for to ensure that further investigation and/or remediation can be completed in cases where the scale of the contamination was underestimated. If an adequate contingency is not sufficiently resourced, the subsequent lack of action will increase stakeholder anxiety and will likely trigger the need for a more complex (and costly) communication strategy.

A poorly thought out and insufficiently resourced communication strategy can easily end up costing more than a well-managed and well-resourced one – and result in delays!

...Work with the media

The media can play an important role in the communication process. The difference between positive and negative media coverage is often down to the management of the communication strategy.

The media can be an effective means of communicating information about potential health risks to the wider community, as well as what is being done (or will be done) to address the issue.

Key pointers:

- The media is particularly useful in cases where a site may be used by people from across a large region (e.g. an area of publically accessible open space or conservation area).
- Where the media is informed about a contaminated site, it is important to ensure that press releases are well timed – ideally occurring after all major stakeholders have been notified.
- A lack of response to a media enquiry can be interpreted by the media as reluctance to share information, whereas a proactive approach and constructive responses to the media are more likely to result in balanced coverage of the issues.

In some cases, stakeholders may approach the media themselves – particularly if they feel frustrated that their opinions and needs are not being taken into consideration, or if their level of trust in the communicating organisation (or the organisation making the investigation and remediation decisions) is low. Such situations are usually indicative of a breakdown in, or a lack of communication between, the affected parties and the communicating organisation. This needs to be tackled with the stakeholders themselves, rather than via the media.

...Utilise communications/public relations team(s)

You may have a corporate communications team within your organisation with relevant skills that can be utilised through the whole communication process. If your organisation has a communications team, they should be brought into the project as early as possible. At the very least, they should be made aware of the site in question and what is being done.

The level of assistance you might require from a professional communications or public relations team will depend on the complexity of the communication involved. (Detailed information on assessing communication need is provided on pages 22-26 of the guidance.)

It is important to adopt a **proactive** approach towards the media wherever possible. However, there may be cases when information should not be given to the media (e. g. when people's homes or livelihoods are affected) or should be withheld until the relevant groups have been fully informed and consulted.



HOW TO DESIGN YOUR COMMUNICATION STRATEGY

Every site is different and the organisation responsible for communicating risk does not have endless resources. Therefore, *the strategy must be specific and bespoke to the site, community and stakeholders involved.*

Questions to consider when designing your strategy

In all cases, the following four questions should be considered and answered before, and kept in mind during, the design of your risk communication strategy.¹

Q1. What are the local community issues? What are the important factors (environmentally and non-environmentally related) at work? Include all easily available information from site visits, stakeholder input, media records and local authorities. (See pages 6-8 in the guidance.)

Q2. Who are your stakeholders? Identify those individuals and/or organisations who will be affected by, or who could affect, the outcome. (See pages 9-12 in the guidance.)

Q3. What is the communication need for your site or issue? Based on the nature of the identified potential land contamination hazard and likely degree of local public concern, how complex will your communication strategy have to be? (See pages 22-26 in the guidance.)

Q4. What are the most appropriate communication methods? No single communication method will suffice. Use a combination of communication methods that best fit the profile for each stakeholder group, the known or potential risks, and the identified communication need as identified. (See pages 26-31 in the guidance.)

Once you have (1) defined what the local community issues are concerning your particular site (2) identified who the key stakeholders are, and (3) assessed what the risk communication needs are for your site, then – and only then – can you decide on the type(s) of communication methods and the extent of communication that you will employ.

Q1. WHAT ARE THE LOCAL COMMUNITY ISSUES?

This section discusses how land contamination issues come to light, associated public concerns, and what effective risk communication hopes to achieve.

How land contamination issues come to light

Land contamination issues can become public knowledge in a variety of ways, but principally through the results of assessments and investigations carried out either by land owners, local authorities, or developers. Other ways that the presence of contamination may become known is through unexpected exposure in excavations; visual or olfactory evidence at the surface, in watercourses or abstraction boreholes; spillages or leaks of hazardous substances (accidental or as the result of fires); research of publicly-available sources of information; assertions (current or historic) of unusual pockets of illness or negative health effects in the local population; and local knowledge. (It should be noted that local historical knowledge may be helpful, but it may also be inaccurate. Ideally, any local knowledge gleaned will be supported by objective sources.)

¹ These questions have complex answers and are discussed in depth in the guidance. Please ensure you understand these complexities fully before trying to answer these questions.

Public concerns over land contamination and its risks

The response of people to land contamination issues is difficult to predict, as it can be driven by many different concerns or fears. It is important to identify and understand stakeholder concerns and needs before and during communication, and to address them throughout the process. The better you understand the stakeholders' values and motivations, the better you will be able to address their concerns, gain their trust and find a way forward. These fears and concerns generally fall into the following categories:

- Health of self and family
- Property values
- Amenity
- Liability
- Level of confidence in government's ability to protect
- Damage to the environment

More information on the types or categories of concerns commonly held by the public are discussed on pages 7-8 of the guidance.

Contamination issues can act as a '**lightning conductor**' within the planning process, and dissatisfied neighbours may mount objections to proposed brownfield redevelopments.

In addition to these common and easily anticipated concerns about health and property, some individuals or groups may have less obvious concerns and needs related to the (1) timing and means of communication and the (2) timing of disruptive investigation and remediation activities. These timing-related concerns and needs can be grouped into two categories and require special consideration:

- The timing and means of communication throughout the project lifecycle: Some stakeholders may need more time to process information if it is very novel to them, or if they find it difficult accessing or understanding it (e.g. language barrier, vision, hearing, physical or mental impairment). Special communications may need to be created for these individuals, or interpreters used during meetings.
- During any disruptive investigation and remediation activities: Some individuals will be more affected by investigation and remediation activities than others. For instance, people who are housebound may experience more disruption and inconvenience from any planned investigation or remediation works than those who are at work all day. The same holds true for schools (e.g. noise, access and loss of play space), care facilities and other such places. Consider what can be done to mitigate this increased disruption, nuisance and inconvenience: and work with the affected parties to find workable solutions.

Understanding and addressing all these factors requires active listening, responsiveness, problem solving, and clear, two-way communication on an ongoing basis.

Different routes to remediation: Do they require different approaches to risk communication?

The underlying principles that create a good risk communication strategy will be similar for all sites being investigated and remediated. However, the route to remediation (primarily via the contaminated land regulatory regimes or the Town and Country Planning System) will have a big impact on your communication strategy. Using a residential scenario as an example, a site being inspected through the relevant contaminated land regime may have residents living on site who could be affected currently by contamination. However, remediation to make a development site suitable for its proposed use will aim to protect **future** residents (those who will move in or use the site once the development is complete). Clearly this difference will affect the types of concerns people will have, the groups of stakeholders that will need to be included, and the timing of the communications.

See Appendix A on pages 49-51 of the guidance for a detailed overview of the legislative regimes and the planning process under which land contamination is investigated, determined, and remediated.



HOW TO DESIGN YOUR COMMUNICATION STRATEGY (continued)

Q2. WHO ARE YOUR STAKEHOLDERS?

Ensuring you are communicating with the correct people is a crucial aspect to get right in any land contamination communication issue. It affects how complex your strategy needs to be and the methods you will use.

Stakeholders are those individuals or organisations who are likely to experience an impact, either directly or indirectly, as a result of the land contamination issue. Stakeholders are also those people who are able to influence whether or not a project will proceed.

For your communication strategy to be as effective as possible, you should ensure that all appropriate stakeholders are included.

It is also important to ensure that the decision makers within your organisation have an understanding of contaminated land risks if they are responsible for securing funding for investigative or remedial works, or making decisions on broad local community issues related to or that impact land contamination.

Some individuals or groups will volunteer their time or information, and will be easy to identify. Communication with these groups can be undertaken according to the needs presented and resources available.

However, some stakeholders may not put themselves forward and may be difficult to identify. In some instances, the very individuals that are most at risk from the hazards posed by an incidence of land contamination may, in fact, be the people with whom it is hardest to establish any formal communication. Careful consideration needs to be given to the means of communication with such groups or individuals within the communication strategy.

Key groups of stakeholders

- People directly affected
- Local community representatives

Types of stakeholders

- Occupier and past occupiers of an affected site or area (e.g. residents or workers)
- Landowners
- Entity responsible for causing (intentionally or inadvertently) or knowingly permitting the contamination
- Local businesses, schools, nursing homes, etc.
- Local leaders, councillors and local MPs
- Local authority and regulatory agency contacts, including contaminated land officers, planning officers and community relations staff
- Decision makers and financial staff within the local authority or government

- Decision makers
- · Relevant interest groups
- Developers
- Other regulatory agencies
- Site investigation personnel including environmental, health and safety consultants
- Community groups and business associations
- Activist groups
- Conservation bodies
- · Legal and insurance advisors
- Local health trust(s) or equivalent, and the local public health agency
- Local media

Key questions to ask yourself when identifying your stakeholders

- Who is the current land owner (or owners) of the site in question?
- Who was the owner/operator of the site when the activities which caused the contamination took place?
- Who may be affected by contamination from the site in question?
- Who are the local councillors and other local politicians?
- Who lives in a home from which work on site might be visible (this includes gardens)?
- Who works in the vicinity?
- Are any schools, colleges, or nursery facilities in the vicinity?
- Are there any religious or sacred buildings in the vicinity?
- Are there any healthcare facilities (e.g. GP surgeries, hospitals) in the vicinity?
- Are there any care facilities or residential facilities for sensitive groups located in the area?
- Are there any landmarks or local cultural features nearby from which any proposed works would be visible?
- Are there existing community groups in the area who should be involved in the consultation process?
- Have there been any instances of public concern about other local issues recently?
 If so, then local action groups or local media may be existing stakeholders.
- Are there nature or leisure parks and playgrounds nearby? Who uses them?
- Are the local properties lived in by owner occupiers or tenants? Remote landlords may need to be considered.
- Who are the appropriate regulatory bodies for both human health and environmental considerations?

 Are there any sensitive landmarks, cultural features, designated sites or protected species in the area?

Key factors to consider before contacting stakeholders

The following list of factors should be considered when deciding how best to make contact with a local community and your identified key stakeholders:

- Age: Are pensioners or young families involved?
- Mobility: Can people get to public meetings?
- Do people have access to email and the internet?
- Do people have access to a phone?
- Are there likely to be any language barriers?
- Be aware of possible new residents moving in part way through the investigation and remediation processes.
- Gender: consider whether you need to take extra care when approaching single women. Is it more appropriate to use a female communications officer?
- Be aware of the health and safety of your communications staff (e.g. undertake "door knocks" (i.e. house visits) in pairs).
- Consider working hours of residents especially if you need to visit at night or weekends.
- Consider when it is best to hold meetings: during the week or at the weekend, during the day or evening? Take note of bank holidays and religious festivals relevant to the area
- Give people time to respond, but do not allow so much time to pass that momentum is lost and information is forgotten.

Advice on selecting appropriate communication approaches for key audiences or stakeholders is provided on pages 26-27 and 29-31 of the guidance.

3.

HOW TO DESIGN YOUR COMMUNICATION STRATEGY (continued)

Q3. WHAT IS THE COMMUNICATION NEED FOR YOUR SITE OR ISSUE?

The complexity and scope of your strategy will depend on the complexity of your communication need – that is, the types and number of stakeholders that need to be included and the number and relative sophistication of communication methods that need to be utilised.

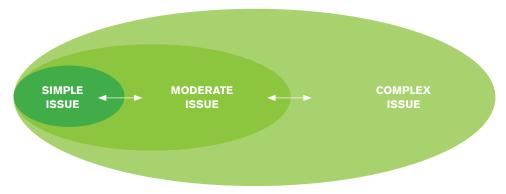
You will need to conduct an assessment to determine the current level of communication need required for your site or issue, as well as how the need for communication will likely change throughout any planned investigative and remedial activities.

You can picture the communication need as a net – with the size of the net directly related to the complexity and scale of communication required for the site as determined through your assessment. A complex issue with a large number of stakeholders across several stakeholder types with varied interests/concerns will require numerous and more sophisticated methods of communication (i.e. a wide net).

Conversely, for a straightforward landcontamination site where a limited number of stakeholders need to be involved, one or two

FIGURE 1. Assessment of Level of Communication Need – The Communication Net

Increased complexity means greater communication need (i.e. a larger net)...



- » Smaller number of stakeholders
- » Limited types of stakeholders

SMALLER NET ◀

- » Simple methods of communications
- » Lower costs & time resources required
- » Larger number of stakeholders
- » Varied types of stakeholders
- » More sophisticated methods of communications
- » Greater costs & time resources required

The resultant communication strategy...

SIMPLE

A simple notification strategy may be sufficient

MODERATE

A moderately complex communication straegy will be required involving consulation with affected parties

COMPLEX

LARGER NET

A sophisticated strategy will be required covering a wide range of stakeholdeers and employing a number of commincation methods relatively simple, straightforward methods could be utilised (i.e. a relatively narrow net). A pictorial guide showing assessment levels within the communication net is provided in Figure 1. (See pages 22-26 of the guidance for more information.)

The size of the communication net is fluid and responsive to changes in communication need throughout the entire risk communication process. You must be aware of and responsive to this fluidity.

There are many things that can trigger the need for a larger or smaller communication net. Often these "triggers" may not exist or become apparent until the communication process is well under way. When this happens, the scope and complexity of your risk communication need/net and, subsequently, your risk communication strategy, for the site will increase or decrease in response. These "triggers" can work in isolation or in tandem with at least one other.

One major factor that will affect the size of your net or communication need is the level of public concern. This is illustrated in Figure 2 (and in greater detail on page 25 of the guidance).

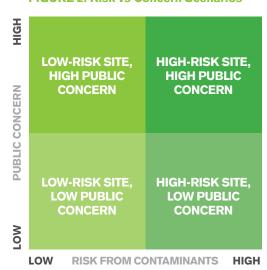
Where there is the potential for or the existence of heightened public concern, a simple communication strategy may only

exacerbate these concerns and put you on the defensive. Similarly, where there may be an element of community apathy towards high-risk historic contamination, a strategy built on notification methods will be insufficient. Under both of these circumstances, a more complex approach will be appropriate and necessary.

Once you have determined your level of communication need, you are in a position to determine the appropriate scope and complexity of your risk communication strategy. Keep in mind that your communication net will need to expand and contract depending on how the relationship between relative risk and relative concern changes throughout the communication process.

The overall scenario that applies to your site will help you determine your approach to risk communication and how detailed and involved your strategy will need to be. In reality, your strategy will need to evolve over time in response to changing needs and circumstances.

FIGURE 2. Risk vs Concern Scenarios



The higher the public concern or greater the contamination issue the more complex a communication stratagy you need.

HOW TO DESIGN YOUR COMMUNICATION STRATEGY (continued)





Q4. WHAT ARE THE MOST APPROPRIATE COMMUNICATION METHODS?

Communication methods

The final step in designing your landcontamination risk communication strategy is to select the most appropriate communication methods given your site's assessed communication need/net (i.e. the mix of identified stakeholders/ stakeholder groups and the local/community context).

The communication methods available to you are wide-ranging and can be grouped loosely into three categories that represent a continuum of communication methods. Each category exhibits increasingly complex/involved communication methods:

- Notification
- Consultation
- Community dialogue

Notification methods:

- Notification methods are simple ways of conveying basic information that, for the most part, require no direct engagement with affected parties or the wider public.
- A notification-based strategy will generally suit a site with relatively simple communication needs (i.e. requires a relatively simple net).
- This may be limited to landowners or directly affected residents.
- Notification also forms a critical first step in the risk communication process for sites with a more complex communication need.

Consultation methods:

- This group of methods involves direct engagement with stakeholders. Who these stakeholders are is likely to be determined by the nature of the site and the level of community involvement in the issue.
- A consultation-based strategy will generally be appropriate for a site with moderately complex communication needs (i.e. requires a moderately complex net).
- The objective of using consultation methods is to involve all interested parties in reaching an appropriate resolution.

Community dialogue methods:

- A community dialogue-based strategy may need to be adopted for a site identified as having complex communication needs (i.e. requires a complex net).
- This group of methods requires a significant level of direct engagement with a wide range of stakeholders and stakeholder groups.
- These methods may also be necessary where there is an apparent indifference to the risk within the community.

Available Communication Methods		
Notification	Consultation	Community dialogue
Press releases	Door knock (house visit)	Community drop-in session
Community newsletters	Information road show	Presence at a local community event
Letter notification Public meeting	Direct correspondence by letter, email or telephone call	Stakeholder forum / Roundtable workshop
. asia meeting	Issue formal consultation documents	Telephone hotline
	Presentation	Web-based consultation
	Meetings supported with information provision	
	Targeted correspondence	

These methods are covered in detail on pages 29-31 in the guidance. For each method, the following is provided: the appropriate audience(s), the objective(s), a summary of method, the advantages and the limitations.

An effective risk communication strategy will select methods from each of the three categories as appropriate, and adapt them to the unique circumstances of the identified communication needs. Your strategy is not a static document and the methods utilised will likely change over time in response to changing needs and circumstances.

REVIEWING YOUR RISK COMMUNICATION STRATEGY

It is advisable to review your site risk communication strategy on a regular basis, as circumstances will change throughout the various stages of the land contamination investigation and remediation process.

You may want to coordinate your review with your progression from one communications stage to the next:

- 1. Identify the issue;
- Develop an understanding of the nature and extent of the land contamination:
- 3. Identify and investigate available options for addressing the contamination;
- 4. Select an option(s); and, finally,
- 5. Remediate the contamination.

Keep in mind that it is very difficult to move from more complex communication methods to less complex ones, as your stakeholders will have come to expect that level of communication. You must be clear to stakeholders on your reasoning behind a decrease in communication.

Alternatively, your original perception of the site as being a "hot potato" communication wise may not be borne out and it may be possible to scale back communications. Throughout the project there will need to be an ebb and flow during times of peak activity and less so at other times.



HOW TO DELIVER AN EFFECTIVE MESSAGE

This section provides detailed tips and guidance on the practicalities of communicating effectively about land contamination. It concludes with some useful questions and prompts to think about before communicating with local communities or developers, and a plain English glossary to help you communicate successfully – whatever your selected means of communication.

As with an effective, proactive communication strategy, **effective**, **proactive communication** will:

- Build and maintain trust
- Be timed carefully
- Involve affected parties
- Work with the media

- Take account of public perceptions of risk
- Improve dialogue
- Allocate sufficient budget and resources
- Utilise communications/public relations team(s)

(See pages 4-7 of this booklet for a summary of these building blocks, and pages 13-21 of the guidance for detailed information on and illustrative case studies of these essential building blocks.)

The Means, the Message and the Messenger

When planning to communicate, it often helps to break down the communication process into the following three components: the Means, Message, and Messenger.

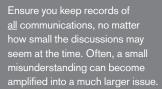
The Means: *How* the information will be communicated.

The best means (methods) of communication will have already been selected based on an assessment of your unique situation and communication needs during the development of your site-specific

communication strategy. (See pages 14-15 in this booklet for a summary of, and pages 26-31 in the guidance for detailed information on how to select the most appropriate communication methods.)

The Message: What information will be communicated.

- Limit your communication to a maximum
 of three primary messages to avoid
 overloading your audience with too
 much information/data. This primary
 message technique is applicable
 to all types of communication (e.g.
 conversations, presentations, fact
 sheets, brochures, display materials,
 and videos).
- Each message should comprise a statement, backed up with supporting evidence or third-party authorisation, and should lead the audience to a conclusion.
- Your communication should always be simple and concise, and your primary messages should be provided early and repeated for emphasis.
- Your key (or primary) messages can be supported by a range of other forms of communication materials, which should either re-emphasise the same key points or provide verification or independent opinion on the matter.
- Leaflets, handouts, diagrams, posters, and web sites (all with as much good visual detail as possible) should be used as much as possible.
- If you do not know the answer to a question, say so; but give a realistic timescale for when the answer(s) will be available. Then ensure you communicate the answer in a timely manner.



The Messenger: *Who* will communicate the information.

- The messenger ideally should remain the same for a particular community (or group of stakeholders) throughout the entire communication process.
 However, appointing a single person as a point of contact could potentially lead to problems with harassment or delays in relaying information due to a lack of availability – which could damage trust.
- Ensure that all personnel working on a project are briefed on how to respond if they are asked questions. Ensure that a clear, consistent message is available to give out (or a point of contact for more information) to avoid misleading or incorrect information being provided. Often, the types of questions which may be asked can be pre-empted, allowing consistent responses to be generated in advance (see the list of example questions that you should anticipate being asked on page 21 of this booklet).

REMEMBER!

People's perceptions are their reality, and this is the reality in which the communicating person/organisation must operate.

TIPS FOR EFFECTIVE MESSAGE DELIVERY

The following 11 practical tips will help you, whether you are communicating risk to stakeholders or briefing a specialist communications team.² These pointers relate to all forms of written and oral communication.



- 1. Be aware of the concerns and varying perceptions, as well as other characteristics, of your stakeholders.
- During the development of your strategy you will have considered the level of concern and varying perceptions of your stakeholders (see pages 22-23 of the guidance for more information). While it may not be possible to predict accurately how people will respond to an issue every time, by improving your understanding of what motivates public reactions, you will be better able to understand and anticipate their views and reactions to new information and proposals as they arise.
- Remember: You need to work to understand their views in much the same way as you are asking them to work to understand your technical view of the risks.

² Eleven tips are provided in this booklet; whereas ten are listed in the guidance on pages 33-37. The differences in this section (and all others) of the booklet are intentional and facilitate its use as a valuable, accessible reference. No key information has been excluded from this booklet.

4.

HOW TO DELIVER AN EFFECTIVE MESSAGE (continued)

RECOGNISE UNCERTAINTY

Explain uncertainties as clearly as possible, including your strategy for dealing with them.

2. Ensure people are able to get involved.

 Engage actively with people and give them an opportunity and sufficient time to voice their views and concerns. They may have valuable suggestions on, for example, improving the organisation and timing of work.

3. Explain the science as simply as possible.

- Be open and honest about the facts. This is essential.
- Demonstrate that every step is being taken safely – and with the safety of all directly affected stakeholders in mind. This is essential.
- Provide extremely clear and simple explanations of actual or potential contamination in the environment and what is being done (or will be done) about it.
- Ensure plain language is used; avoid jargon. When the use of more technical terms is unavoidable, make sure you explain what is meant by each term. (A list of plain English equivalents and definitions for common technical terms associated with land contamination is provided on pages 22-24 of this booklet, as well as on pages 44-47 of the guidance.)
- Use diagrams and pictures as much as possible. Aerial photographs and overlays of historical plans superimposed onto current layouts can help put the scale of the issue into context.
- Ensure you communicate all the relevant information in a format tailored to your audience.
- Ensure that people correctly understand the advice and information that are provided to them. Seek confirmation that information is understood. If they do not understand, try another way of explaining it.

4. Use pictures and diagrams.

- People are able to process and retain more information if illustrative materials (e.g. graphs, charts, images) are provided
- Pictures and diagrams are useful to communicate general information as well as explaining the scientific aspects as outlined above.

Provide sources of reliable information.

- Direct people to reliable sources of printed or electronic information. It is helpful to explain what credible sources of information are (e.g. peer-reviewed articles). If possible, you could even provide a detailed list of credible sources and where they can be found. To the extent possible, this should include suggestions of reputable websites.
- Refer people to independent, official sources of information (e.g. their local health trust (or equivalent) or public health agency). However, ensure that those sources are made aware beforehand and are prepared to respond.
- Identify any local expertise that may be able to aid communication or dialogue.
 People are usually more likely to believe a person they know over someone they do not.
- Make reports and detailed information available, be it online via a website, at the local library, or from your organisation.

6. Address the desire for a guarantee.

 Ensure that any "guarantees" you make are entirely appropriate and justifiable before using them.
 (Examples of potentially appropriate guarantees you can give are provided on page 34 of the guidance.) Only promise or guarantee that on which you can reasonably deliver (e.g. the site will be operated to meet all relevant safety guidelines; assessments will be carried out in accordance with current good practice guidelines; the people employed to work on the project are qualified to do so).

7. Time your messages properly.

- Keep people informed and up to date.
- Consider how the timing of your communications is linked in with the overall risk management strategy for the site.
- If you are responsible for organising a meeting, think about the most convenient time for your audience.
- Meetings should always be attended promptly.

8. Be prepared.

- Ensure you are fully briefed and prepared when meeting key stakeholders and members of the public.
- Have the appropriate files and other information to hand.
- Take time to think in advance about the kinds of issues or questions that are likely to arise and how you will address them (see page 21 of this booklet for example questions).
- Failing to prepare is preparing to fail; so take time to prepare for the expected and the unexpected.

9. Empathise with your stakeholders (imagine yourself in their shoes).

- Express yourself in a way that shows you care about people's concerns.
- Ensure you fully understand the essence of their concerns.

- Demonstrate that you care by listening actively, responding to their concerns, and using open body language.
- Use case studies of similar projects when you can to demonstrate that those affected are not alone, and that such problems can be resolved successfully.

10. Listen to your stakeholders – and respond!

- Provide people with plenty of time to tell you what they think. Do not interrupt or try to give them a response until they have had time to get everything off their chest.
- Demonstrate that you are listening with your body language and by taking notes.
- Most important of all, if you say you are going to do something (e.g. you will provide more information or get a third party to make contact with stakeholders) make sure you do it.

11. Ensure your appearance is appropriate for your audience.

- Think about how you present yourself when you first encounter a stakeholder – whether on the telephone, at a meeting, or on site. The first contact is very important in showing people that you are committed to working in an open, honest way.
- Be polite.
- Body language accounts for a very large part of effective communication.
- The key is to "know" your audience and ensure your appearance and demeanour are appropriate for that audience (while maintaining your professionalism).





HOW TO DELIVER AN EFFECTIVE MESSAGE (continued)

TIPS FOR EFFECTIVE MESSAGE DELIVERY TO LARGE GROUPS

In addition to the general tips above, the following advice is specific to communicating risk effectively to larger groups of people. The two primary mechanisms for communicating with large groups are: a drop-in centre and a public meeting.

Drop-in centre

The preferred approach for communicating to large groups of people is to create and sufficiently resource a drop-in centre where people can read information and talk to staff on a one-to-one basis.

- Greet people and lead them through the display(s) or allow them to walk through the material themselves if they wish. Above all, listen to what they have to say.
- Do not try to "hard sell" any proposed solution; rather, emphasise that it is a carefully planned and considered approach.
- Point out the merits and know which alternatives were considered (including any residents' proposals), and be able to explain in detail why they were not viable or had a less favourable impact.
- Explain you are not a health expert, but all work and facilities will comply with or meet national standards. Provide advice on how to seek further information or support on health issues.
- Drop-in sessions require between 4-8 staff representing a range of different specialities.
- It is essential to have good posters supported by handouts that can be taken away. Remember that a picture is worth a thousand words.

- Try to focus on one-to-one or small-group discussions around a display or poster. This is a really effective way of communicating.
- Ask questions. This ensures that you gain a fuller understanding of stakeholder issues and also demonstrates that you are actively listening to and interested in what people think.
- Be aware that drop-in sessions can quickly turn into an impromptu public meeting. Try to be firm about how many people gather together and direct people into smaller discussion groups.

Public meeting

When emotions are running high, public meetings are generally the least effective arena for communicating with people. This is because when people are upset, they mainly come to such meetings to "get things off their chest" and are not inclined to listen to other points of view. At the same time, we know that many people feel shy and intimidated in a public setting and will be disinclined to express their opinions in public if they feel they may be embarrassed. Such meetings can deteriorate into "shouting matches" where the views of a noisy minority can dominate proceedings. In the worst cases, public meetings have even been known to degenerate into physical confrontation.

However, many organisations opt for holding public meetings. If you opt to hold a public meeting, you are encouraged to take on board the following advice.

 Think carefully about when and where the meeting will be held to make it as easy as possible for people to attend, and give plenty of warning of the details.

If you have to attend or organise a public meeting, you must not rely upon it as an effective, stand-alone communication method.

You will need to consider it as just

You will need to consider it as just one method within your carefully thought out communication strategy.

- Set a time limit and agenda. Find a good chairperson for the meeting who will ensure things run to time and will provide an opportunity for everyone to express their viewpoint.
- Be prepared. Think about issues that will likely arise and consider how you will answer them. Plan three (and only three) key messages you want to get across.
- Keep your presentation short. Key messages should be delivered in the first part of the speech.
- Ensure that visual presentations are not cluttered, cramped, or overpowering.
- Supplement your presentation with other materials (e.g. fact sheets or information packs) that can be taken away.
- Ensure that the information provided is straightforward, jargon free, and concise.
 Graphs should be as simple as possible and explained in layman's terms.
- To help things run smoothly, ensure that all members of the speaking panel have met each other in advance and can operate effectively as a team.
- Remember that the purpose of the meeting is to seek a cooperative approach, not a conflict.
- Allow time for questions and encourage the audience to participate in constructive dialogue.
- Ask questions. This will ensure that you gain a fuller understanding of stakeholder issues, and will also demonstrate that you are actively listening to and are interested in what people think.
- Write down all the main points raised and make sure any promised actions are addressed.

QUESTIONS YOU SHOULD ANTICIPATE AND BE PREPARED TO ANSWER

When planning a communications exercise, it is useful to anticipate the types of questions which may be asked. This will allow for balanced, consistent responses to be provided and help avoid the promotion of issues that are not "real".

The following questions may be asked by any stakeholders involved in a landcontamination communications exercise. The context could be for a contaminated site which is being developed, or a site which has already been developed.

Starting points for developers

- What are the financial risks/long-term liabilities involved in developing a site affected by contamination?
- What are the implications of this contamination in developing this site?
- How can I ensure that I will get sound advice?
- How do I know if this site is contaminated?
- What do I need to do to develop this contaminated site?
- If there is contamination on this site, what will it cost to remediate it to be suitable for its proposed new use?

Starting points for local communities

- Why is the site contaminated?
- What has been found by the ground investigation?
- Who is responsible?
- How has this happened?
- What are the roles and responsibilities?
- How do you know you will not miss anything?

- Can I get a second opinion?
- How can I get a second opinion?
- What are/will be the health effects for me, my children, my pregnant wife, or my pets?
- Is it safe to stay in this house?
- Will this affect the value of my property?
- Will I still be able to sell my house?
- Who will pay for this?
- Will I be compensated?
- How long will this take to resolve?
- Who do I ask, or where do I go for further information?
- Is there a need to organise a community action group?
- What action will be taken?
- Will all the risks be removed?
- Will all the contamination be dealt with/removed?
- What if you find more contamination or it is worse than you anticipated?
- What is the process by which the land will be investigated/remediated?
- Have the regulatory bodies followed due process?

PLAIN ENGLISH GLOSSARY OF TERMS FOR COMMUNICATING WITH STAKEHOLDERS

This glossary of terms is provided to help you communicate potentially relevant terms and concepts to the public in a way that is easy for them to understand. Remember that you should avoid using technical or regulatory "jargon" or acronyms in your communications – particularly verbal communications. However, you need to be able to explain what these terms mean in instances when they are used in printed communications (e.g. data analysis, regulatory standards that must be met).

Aquifer Underground layer of water-permeable rock or soil (e.g. gravel) from which water can be extracted. (3)

Brownfield land Land which is currently, or has previously been, developed by man's activities (but excluding agricultural land). It is the opposite of greenfield land.

Borehole A hole that is drilled into the ground in order to determine the ground conditions; investigate the presence of contamination; obtain samples of soil for analysis; and allow monitoring of groundwater and ground gas.

Contaminated land exposure assessment (CLEA)

A package of guidance and software, developed by the Environment Agency. It provides a government supported methodology that can be used to help estimate the risks to people from contaminants in soil on a given site over a long duration of exposure. (5)

Conceptual site model (CSM) A representation of the characteristics of the site in diagrammatic or written form that shows the possible pollutant linkages between contaminants, pathways and receptors. (1)

Contaminant A substance that is in, on or under the land and that has the potential to cause harm or to cause pollution the water environment. (1)

Contaminated land Land which, due to substances in, on or under the ground, could cause harm to human health, or the wider environment. See Appendix A for further information.

Controlled waters A term used to describe the water environment that also has legal definitions within UK legislation. This includes groundwater, surface water (e.g. rivers, streams and lakes), estuarine and coastal waters. See also *Water environment*.

Desk study A desk-based exercise involving the study of historical and current information such as mapping and environmental data, to establish areas or zones where contamination may be expected to occur as a result of past or present activities, and to understand the environmental setting of the site in terms of pathways and receptors. A desk study does not involve the collection of samples. (1)

Detailed quantitative risk assessment (DQRA) Numerical risk assessment carried out using site-specific information to estimate risk or develop site-specific assessment criteria against which the concentrations of contaminants found at a site can be compared. (1)

Environment Agency (EA) The environment agency (primary environmental regulator) for England and Wales.

Environment agencies The main environmental regulators within the UK. The Environment Agency (EA) serves England and Wales; the Scottish Environment Protection Agency (SEPA) serves Scotland; and the Northern Ireland Environment Agency (NIEA) serves Northern Ireland.

Ex-situ remediation When contaminated material is removed from the ground prior to treatment. (1)

Generic assessment criteria (GAC) Numeric criteria derived using generic assumptions about the characteristics and behaviour of sources, pathways and receptors. These assumptions will be protective in a range of defined conditions. The assessment criteria are compared against the concentrations of contaminants found at a site. (1)

Generic quantitative risk assessment (GQRA) Risk assessment carried out using generic assumptions to estimate risk or to develop generic assessment criteria. (1)

Greenfield land A term used to describe land which has not previously been subject to development. (3)

Ground investigation (GI) See Site investigation.

Groundwater Water beneath the ground's surface. (3)

Harm This means harm to the health of living organisms or other interference with the ecological systems of which they form a part and, in the case of man, includes harm to his property. (4)

Hazard A property or situation that in particular circumstances could lead to harm or pollution. (1)

Health criteria value (HCV) Benchmark criteria used in risk assessment that represents an assessment of levels of exposure that pose a risk to human health. (1) health criteria values are typically derived from laboratory studies of animal responses to contamination, or occupational health data.

Health Protection Agency (HPA)/Health Protection Scotland/Northern Ireland Public Health Agency

Organisations which protect public health by providing support and advice to bodies such as the National Health Service and local authorities.

In-situ remediation Where contaminated material is treated without prior excavation (of solids) or abstraction (of liquids) from the ground. (1)

Land affected by contamination Land that might have contamination present which may, or may not, meet the statutory definition of contaminated land (see Appendix A). (1)

Local authority The body responsible for considering planning applications for development and are the lead regulator under the contaminated land regimes.

Monitoring A continuous or regular check of environmental conditions, such as for the presence of ground gas.

Northern Ireland Environment Agency (NIEA) The environment agency (primary environmental regulator) for Northern Ireland.

Pathway A route or means by which a receptor could be, or is exposed to, or affected by a contaminant. (1)

Planning Service (in Northern Ireland) An executive agency within the Department of Environment, Northern Ireland, which fulfils the Department's responsibilities as planning authority.

Pollutant linkage The relationship between a contaminant, pathway and receptor, which is identified by developing the conceptual site model (CSM). See also *source-pathway-receptor linkage*.

Preliminary risk assessment First level of risk assessment that develops the initial conceptual site model and establishes whether or not there are any potential pollutant linkages.

Receptor In general terms, something that could be adversely affected by contamination (e.g. people, an ecological system, property or a water body). (1)

Remediation An action taken to prevent or minimise, or remedy or mitigate the effects of any identified, unacceptable risks. (1)

Remediation strategy A plan that involves one or more remediation options to reduce or control the risks from all the relevant pollutant linkages associated with the site. (1)

Risk A combination of the probability, or frequency of occurrence of a defined hazard and the magnitude of the consequences of the occurrence. (1)

Risk assessment The formal process of identifying, assessing and evaluating the health and environmental risks that may be associated with a hazard. (1)

Risk communication policy Sets out general principles on how the organisation will relate to their stakeholders, including the public and the media, and how they will communicate information on risk. (2)

Risk communication strategy Approach developed specifically in response to a defined public health issue or health protection incident. (2)

PLAIN ENGLISH GLOSSARY OF TERMS FOR COMMUNICATING WITH STAKEHOLDERS (continued)

Scottish Environment Protection Agency (SEPA) The environment agency (primary environmental regulator) for Scotland.

Site investigation (SI) Involves the collection and analysis of soil, surface water, groundwater, soil gas and other media as a means of further understanding the condition of the site and to inform the risk assessment. This investigation may be undertaken in a single stage, or a number of successive stages. (1)

Site-specific assessment criteria (SSAC) Values for concentrations of contaminants that have been derived by a detailed quantitative risk assessment. The resulting assessment criteria are compared against the concentrations of contaminants found at the site.

Source-pathway-receptor linkage The relationship between a contaminant, pathway and receptor, which is identified by developing the conceptual site model (CSM). See also *Pollutant linkage*.

Stakeholders Individuals or organisations with an interest in the scope, conduct and outcome of a risk management project. (1)

Standpipe A long plastic pipe, slotted for some of its length, which is installed within a borehole to allow the monitoring of groundwater levels, ground gases or vapours and the collection of groundwater and gas samples for analysis.

Trial pit A hole that is excavated into the ground (usually using a mechanical digger) in order to determine the ground conditions, investigate contamination and obtain samples of soil for analysis.

Uncertainty A lack of knowledge about specific factors in a risk or exposure assessment, including parameter uncertainty, model uncertainty and scenario uncertainty. (1)

Water environment Includes groundwater, surface water (e.g. rivers, streams and lakes), estuarine and coastal waters. Has legal definitions within UK legislation. See also *Controlled waters*.

Sources used to compile this glossary

- (1) Environment Agency (2004) Model procedures for the management of land contamination. Publication CLR11. Published by the Environment Agency, Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol BS32 4UD. First published September 2004 © Environment Agency.
- (2) Health Protection Network (2008) Communicating with the Public About Health Risks. Health Protection Network Guidance 1. Health Protection Scotland, Glasgow.
 - © Published by Health Protection Scotland, Clifton House, Clifton Place, Glasgow G3 7LN. Health Protection Scotland is a division of NHS National Services Scotland. First published September 2008 © Health Protection Network 2008.
- (3) Health Protection Agency (2008) Land Contamination and Public Health: An Introduction to Land Contamination for Public Health Professionals (2008). Published by the Chemical Hazards and Poisons Division (Cardiff), Health Protection Agency, University of Wales Institute Cardiff, Colchester Avenue, Cardiff. Version 1. 2, Published April 2009. © Health Protection Agency.
- (4) Section 78 A (4) of the Environmental Protection Act 1990 [c. 43] inserted by Part IIA of the Environmental Act 1995. Published by the Office of Public Sector Information.
- (5) Provided by the Environment Agency during the consultation period for the document: Health Protection Agency (2008) Land Contamination and Public Health: An Introduction to Land Contamination for Public Health Professionals. References are presented as requested by source organisations.

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SUMMARY OF KEY CONSIDERATIONS

This guidance emphasises the need to communicate as effectively as possible when dealing with land contamination issues.

In summary, the key considerations for effective risk communication of land contamination are:

- Remember that risk communication is not solely a one-way process of telling people the
 facts. It is also about engagement with affected parties and key stakeholders so that they
 become part of the solution.
- 2. You need to understand what drives people's key concerns; think carefully about the factors that are most likely to influence those concerns and how the issue is likely to develop.
- 3. People's concerns may be related to family, health of children and pets, house prices, as well as a variety of past and present local issues.
- 4. Think about the context or scenario you are dealing with and prepare an appropriate communication strategy. Do you need to raise people's awareness of a possible hazard or respond to their concerns about a perceived risk? While every issue and situation will be different, you will need to implement an overall strategy to guide your communication activities.
- **5.** You do not need to treat every case of land contamination as a major communication challenge. You should assess the communication need for your case and decide whether a process of notification, consultation, community dialogue, or a combination of these is most appropriate. Then choose which communication techniques are the most relevant to your overall strategy and the context of the issue.
- **6.** Identify your key stakeholders based on the identified communication need for your site. Use your internal communications staff. If appropriate, consider how best to work with the media and what the impact(s) of this will be.
- 7. Early action, good preparation, transparency and openness are essential for creating trust in the process. Work with those who are trusted locally to build bridges when public and stakeholder confidence is low.
- **8.** Being a good communicator and being "good with people" requires skill and training. Take the best advice available and work with people who provide different, complementary skills to improve the communication process.
- Review progress and remember that risk communication is a process. Your strategy should adapt to changing circumstances and it must work in parallel with the risk-management process for the site.
- 10. Finally, try to keep your messages simple. Risk assessments of land contamination involve many complexities and uncertainties. Yet stakeholders and members of the public will need clear, succinct, easily understood information and advice.

SNIFFER RISK COMMUNICATION BOOKLET

The SNIFFER risk communication booklet is a convenient and easy-to-use reference that complements the Communicating understanding of contaminated land risks revised guidance (SNIFFER, 2010). This booklet provides comprehensive, summarised guidance, tips and tools for developing and delivering an effective risk communication strategy for contaminated land.

This booklet will be valuable for anyone who needs or wishes to communicate about land contamination risks (real or potential).

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