National Environment Protection (Assessment of Site Contamination) Measure 1999 National Environment Protection (Assessment of Site Contamination) Measure 1999 National Environment Protection (Assessment of Site Contamination) Measure 1999 National Environment Protection (Assessment of Site Contamination) Measure 1999 National Environment Protection (Assessment of Site Contamination) Measure 1999 National Environment Protection (Assessment of Site Contamination) Measure 1999 National Environment Protection (Assessment of Site Contamination) Measure 1999 National Environment Protection (Assessment of Site Contamination) Measure 1999 National Environment Protection (Assessment of Site Contamination) Measure 1999 National Environment Protection (Assessment of

Schedule B8

GUIDELINE ON

Community Engagement and Risk Communication

Federal Register of Legislative Instruments F2013L00768

Explanatory note
The following guideline provides general guidance in relation to investigation levels for soil, soil vapour and groundwater in the assessment of site contamination.

This Schedule forms part of the National Environment Protection (Assessment of Site Contamination) Measure 1999 and should be read in conjunction with that document, which includes a policy framework and assessment of site contamination flowchart.

The original Schedule B8 to the National Environment Protection (Assessment of Site Contamination) Measure 1999 has been repealed and replaced by this document.

The National Environment Protection Council (NEPC) acknowledges the contribution of the Commonwealth Department of Health and Ageing, enHealth, South Australian Department of Health and the Western Australian Department of Environment and Conservation to the development of this Schedule.

Contents
Community engagement and risk communication

1 Purpose and application

This Schedule provides a systematic approach to effective community engagement and risk communication in relation to the assessment of site contamination. It is not intended to be prescriptive but is intended to be used as a tool for effective engagement by consultants and regulators and should also provide a useful reference for all stakeholders including industry, government, landholders and the wider community. It should be noted that, in addition to this Schedule, each state or territory has its own regulatory requirements regarding notification of contamination/pollution to the appropriate regulatory agency.

There are three principles to the approach taken in the preparation of this Schedule:

- that an evaluation regarding the probable need, nature and extent of community engagement for a project should be carried out by site managers with expertise in risk communication at an early stage in the preliminary assessment of site contamination, and should detailed investigations identify contamination that has the potential (or the perceived potential) to have an impact on any stakeholder
- that interaction with the community cannot simply be a technical process; it requires skills in listening and communicating and should be a two-way process
- that for sites with contentious issues, engagement with the community is considered to be essential. This is particularly the case when the contamination at the site has the potential (or the perceived potential) to have an impact on any stakeholder and where impacts are known to extend outside the boundaries of the site.

As an indication, engagement with the community is likely to be particularly beneficial in the following situations:

amenity/nuisance – when the assessment or decisions on and implementation of remediation strategies informed by the assessment of the site may affect the amenity of the locality, for example, by way of temporary noise, odour, emissions or dust

significant contamination – where a high level of contamination has the potential to affect the adjacent community, or where the contaminant types are controversial

site proximity – where the site is near to residential areas or particularly sensitive receptors and/or vulnerable sub-populations, such as childcare centres, schools or nursing homes, and sensitive ecological receptors

controversial sites – where the site or locality has a controversial history that may be related to the site contamination, or the development of the site is controversial for political, economic or social reasons, or where the characteristics or toxicity of the contamination may be controversial, or where contamination has moved outside the site boundaries, or a remediation method may be proposed that is perceived as controversial or that is likely to affect the amenity of the locality or give rise to nuisance conditions.

2 Benefits of community engagement and risk communication

When managed well, community engagement and risk communication can benefit the assessment and management of site contamination by helping site managers to:

- understand public perceptions and concerns, and more accurately anticipate community response to actions and decisions
- increase the effectiveness of risk management decisions and empower the community by involving them
- improve communication and trust and reduce unwarranted tension between the wider community and decision-makers
- explain risk more effectively, to ensure that the community gains a more accurate understanding of the risks.

Simply distributing information without regard for the complexities and uncertainties of the issues does not ensure effective engagement and risk communication. A well-developed community engagement plan will help ensure that messages and actions are constructively formulated, communicated and received.

Two-way engagement, which effectively conveys information and enables community participation in the decision-making process, can provide significant cost savings and improve credibility for organisations involved in site assessment. The community also benefits by contributing to: improved risk assessment inputs, increased ownership of negotiated decision processes, and more acceptable site-management options.

3 Key principles of community engagement and risk communication

The United States Environmental Protection Agency (US EPA) has identified seven overarching principles which should guide risk communication as part of community engagement (US EPA 2007). Corvello et al. (1989) have adapted these seven principles, as follows:

Accept and involve the community as a legitimate partner

- Involve the community early.
- Involve all groups that have an interest in or are potentially affected by the issue.
- Focus on informing the public to enable their participation.
- Never underestimate the level of technical knowledge of community members.
- Invite the public to become involved in the design and evaluation of the public engagement process.

Plan carefully

- Clearly define the objectives of the communication strategy.
- Identify and address the particular concerns of specific groups and stakeholders.
- Educate staff in risk communication.
- Develop a timeline that allows sufficient time for the engagement process,
- Include allowance for new developments or changes — be flexible and responsive.

Listen to the community's specific concerns

- Do not make assumptions about what people know, think or feel — take time to find out.
- Allow all interested parties the opportunity to be heard.
- Be empathetic; put yourself in the place of the community and try to understand their concerns.
- Trust, credibility, competence, fairness and empathy can be of as equal or greater importance to the community as facts and figures.
- Develop a community engagement plan that has the involvement and support of the community.

Be honest, frank and open at all times

- Do not expect to be trusted, and remember that once trust is lost, it is very difficult to regain.
- Acknowledge when you do not have all the answers, and commit to getting back to people with the answers in a given timeframe.
- Disclose information, including 'bad news', as soon as it comes to hand.
- Do not exaggerate or minimise the level of risk; be honest.
- Share more, not less, information.

Coordinate and collaborate with other credible sources

- Build bridges with other organisations and groups that can provide reliable, credible information and advice.
- Try to issue communications jointly with other credible sources – conflict and disagreement between organisations makes communication difficult and results in loss of credibility.

Meet the needs of the community

- Consider opportunities to assist the community in participating in the engagement process, e.g. by providing assistance with travel to meetings, access to office facilities, free methods to respond to published material (e.g. free phone numbers, return envelopes), information in other languages if appropriate.
- Be aware of and sensitive to different cultural behaviours and preferred methods of communication.
- Ensure that information is readable, credible and publicly accessible, and written in a style and format (including site maps and diagrams) that encourages the community to comment about general and specific issues, especially where technical detail is involved.

Meet the needs of the media

- Be accessible to the media, be open with information and respect deadlines.
- Provide information tailored to the needs of each type of media.
- Prepare in advance and provide background information to issues.
- Provide feedback (praise or criticism) to the media when appropriate.
- Where possible, establish a good working relationship with media personnel.
- Nominate one person within the organisation to liaise with the media and provide the main point of contact; this helps to avoid conflicting or confused messages.
- Remember that the media will want to report danger rather than safety, simplicity rather than complexity, and politics rather than risk.

Speak clearly and with compassion, kindness and respect

- Always use clear, plain language.
- Simplify language, not content.
- Acknowledge and respond to emotions expressed by the community including anger, fear, outrage and helplessness.
- Do not be patronising or condescending; show respect for the community's intelligence.
- Respectfully restate a person's questions or statements in your own words to make sure you understand their question before answering it.
- Discuss what you can do and what you will do.
- It is essential to do what you promise.
- Remember to tell people what you can't do, and why.
- People can understand risk information, but they may not agree with you; some people will not be satisfied.

Evaluate effectiveness

- Monitor and evaluate the effectiveness of the risk communication and community engagement program during and at the end of each stage of the process.
- Record accurately and comprehensively the nature and detail of community contributions and responses made throughout the engagement program.
- Establish feedback processes and monitor and review the effectiveness of the engagement.
- Learn from your mistakes.

4 A step-by-step guide to community engagement and risk communication

4.1 Planning and preparation

A community engagement and risk communication plan is an integral part of the wider goal of successful assessment and management of site contamination. Effective communication relies on a commitment to planning, focusing the response to address community concerns and ongoing evaluation with the aim of continuous improvement. Engagement and communication goals should be quite specific, must be well understood by the consultant and should be communicated to the wider community at the beginning of, and during, any engagement plan.

A good plan should help you to:

- integrate the engagement and communication efforts with the risk assessment and management process
- increase the effectiveness of the engagement and communication
- allocate appropriate resources to engagement and communication efforts
- increase dialogue and mutual understanding, and reduce unwarranted tension with the wider community.

Engagement should start as early as possible and continue throughout the site assessment. The community should be informed of possible risks as soon as an issue is identified that may pose a risk to health or the environment or raise public concern. This can mean starting the engagement process before all the information is known and before all options for managing the risk have been identified and considered.

The early initiation of the engagement process is often difficult for those responsible for the site, as they may be unused and unwilling to publicise possible risks associated with the site until they are sure what those risks may be and how they will be managed. However, by consulting early, the community is allowed to actively participate in the decision-making process and members will feel that they have some control over and involvement in the risk assessment and management process. When the community participates in a risk management decision, it is more likely to accept it.

For more complex or contentious sites, a better outcome is often achieved if the engagement and communication role is undertaken by a third party such as a consultant or professional facilitator. This can help to ensure a more open exchange of information and reduce tension if the community is already mistrustful of those responsible for the site assessment.

Open and honest information exchange between organisations (including government agencies) and the community is vital in the management of site contamination. Community members have a right to information about environmental factors that affect their lives and they can contribute valuable local knowledge to the decision-making processes. However, when engaging with the community, there are some legislative issues to consider that may limit or modify the information provided.

For example:

- Commercial-in-confidence materials should not be disclosed.
- Privacy legislation restrains the giving out of personal information to any other person without the permission of the person named.
- Freedom of information (FOI) legislation means that written material can be requested and viewed by any citizen with an interest in it. FOI covers all forms of 'writing', including emails and sticky notes.

- Coroners' courts will investigate incidents where there has been a fire or a death. The court will review information that has been provided.

In planning communication, the first contact should be with the assessor's organisational communication or liaison officer. Planning should also involve government agencies and emergency services (if necessary) to ensure that procedures are understood and that everyone involved agrees on roles and procedures.

A communication plan starts by answering the following questions:

- **Why** do you need to communicate? (purpose of communication)
- **Who** do you need to communicate with? (target audience/s)
- **What** is your message? (what you need to say or what information you need to gather)
- **How** will you communicate? (communication methods and tools)
- **How** will you use the information you gather? (evaluate and review).

4.1.1 Identify the purpose of communication

It is essential to have a clear understanding of the purpose of communicating. Is it:

- to simply inform (the decision has already been made)?
- to consult with the community (obtain their input for consideration)?
- to involve the community in the final decision-making process?

In order to manage expectations, the purpose of the communication activity should be made clear to the community, including the elements that have already been decided upon and are non-negotiable, and what aspects are open for discussion and decision.

4.1.2 Identify your target audience and undertake audience analysis

Once the purpose of the communication has been identified, it is important to identify and analyse the target audience including for cultural and religious sensitivities. If communication efforts are aimed too broadly, the message may not reach key persons. The more tailored messages are to specific audiences, the more effective they will be. Audience analysis will also provide an insight as to what communication methods and tools will best reach each target audience. The communication plan should identify all of the stakeholders—including those beyond the affected community. This includes local and state officials and politicians, other agencies and organisations and, if relevant, emergency and health services.

Establish the project's area of impact. Determining how far interest in the project extends, and determining the location of geographic boundaries and communities of interest will help identify who should be engaged in the engagement process.

Contact key community leaders. Crises tend to push forward local community leaders and groups who become active in voicing community concerns. Identify those people and groups and involve them early on in communication and decision-making activities. Also include council staff and local politicians to brief them about the impending project if appropriate. The longer a delay in involving community representatives and groups, the harder it can be to gain their support and trust. It might also be useful to obtain expert advice about the local community and any outstanding issues that may have an impact on the plan.

It is vital to consider community languages when planning communication activities. Where required, provide printed information in languages other than English. Translators may also be required for verbal communication activities.

There are also a number of protocols for effectively engaging Aboriginal and Torres Strait Islander people. These should be considered prior to initiating communication activities. It is, for example, essential to have an appreciation of cultural difference, to use accurate and non-offensive language, and to show respect when communicating with Aboriginal and Torres Strait Islander people and organisations. Most jurisdictions have guidelines or principles for building good communication skills and channels with Aboriginal and Torres Strait Islander people, communities and organisations. For further information, contact the relevant state or territory health and indigenous affairs departments.

In planning particular sessions or modes of communication, it is important to consider matters of wheelchair accessibility and the possible need for services for people with vision or hearing impairment.

4.1.2.1 Audience analysis

There are a number of resources and sources of information available which are useful in audience analysis. The Australian Bureau of Statistics (ABS) website (www.abs.gov.au) has tools that enable the extracting and viewing of census data for specific geographical areas. This data can be used to build a demographic profile of the local community, including information about male-to-female ratios, number of children and elderly people, socio-economic status, level of educational attainment, minority groups and languages spoken at home. These factors should be carefully considered when planning any communication activity, and may also influence the audience's perception of risk.

Other sources of information that may be helpful in building a profile of a community include:

- internet research — many communities and community or interest groups have websites, usually written in the language and style preferred in the area
- local newspapers — articles and letters to the editor in local newspapers and/or magazines may give you an indication of what issues are of most concern to the community and which groups are most vocal
- local political groups
- local media advertising profiles — local newspapers, magazines and television and radio stations may be willing to share this information (they may charge a fee to do this)
- environmental impact statements (EISs) — many EISs contain information about the local communities and economy, and can often be viewed online.

4.1.3 Identify stakeholders

The area of relevance to assessment of site contamination typically contains a variety of stakeholders, all of whom should be taken into consideration when planning communication activities. A general outline of the various stakeholders that may typically be involved in risk communication and engagement in relation to site contamination and assessment is discussed below. However, it should be remembered that even within these groups there may be a diverse range of perspectives, expectations and concerns, and each group may also be comprised of people of different cultural and socio-economic backgrounds.

Stakeholders include:

- industry — industry's aim is to improve community confidence in its operations. Some companies are successful in achieving this and are good environmental citizens, adopting an 'open door' approach to the scrutiny of their operations, such as holding open days and inviting complainants to visit the site to attempt to pinpoint particular problems. Conversely, some companies may view the community as 'the enemy' and will avoid interaction with the community at all costs, commonly holding the view that, as their activities have not impacted on the community, they have no need to consult. It should also be noted that companies can be constrained by commercial confidentiality in terms of undertaking engagement and risk communication, or may not be able to fund or meet all the expectations of the community. In general, industry is moving towards a more open stance in regard to communicating with the wider community and it is likely that this trend will continue.
- government agencies and departments — the actions of government agencies and departments are dictated primarily by their statutory responsibilities, with different agencies having different roles and functions. For example, some will have responsibility for overall management of an assessment and remediation program, while others will have responsibility for a specific aspect of assessment such as public health or occupational health and safety. However, most are also involved in balancing a range of expectations from the wider community.
- local government — conscious of the increasing environmental awareness of communities, local government has been instrumental in responding to the need for more community participation, greater accountability and better communication between all stakeholders. Both local and state government organisations are coming under increased pressure from reduced budgets and may find it difficult to fully resource the range of expertise and involvement required to manage a wide range of site-assessment responsibilities.
- residents — no residential community of any size is a homogeneous entity. It is not possible to generalise about the role or attitude of the residential community. For example, not all the residents will be involved, even though they may be concerned, or want to be involved in community engagement; others will have an intense interest and some residents who are not involved initially may change their minds later. Moreover, some act and think autonomously, while others represent the views of an organisation or group. For this reason, audience analysis is an important aspect of planning engagement and communication activities
- non-government organisations — non-government organisations include environment groups, special interest groups, and committees and associations that comprise various representatives from industry, council, non-government agencies and departments, and residents. To those managing the site contamination assessment, the 'activists' (who may either support or oppose the situation) within the non-government organisations are often seen as a threat because of the scientific skills couched within the agenda of a pseudo-political organisation. However, to local residents, the advice and assistance from such organisations can be instrumental in understanding the issues and learning how to frame their concerns.
- employees, unions and associations — employees, unions and associations are generally concerned that, in undertaking a site assessment or site remediation, adequate health protection measures are in place. Accordingly, health risks associated with site contamination should be communicated to employees and all other persons working on the site. Briefing on risk management and safety precautions is essential and should form part of the engagement plan.

- media — media coverage can focus either on the negative or positive aspects of the issues involved, which can then determine whether the community feels threatened and defensive or confident and cooperative. Accordingly, it is important to ensure that the material available to the media is framed in a rational, consistent and non-inflammatory manner. A good working relationship with media personnel can provide the opportunity for information dissemination outlets to the community. For consultants who deal with the media, it is sensible to nominate one person within the organisation to liaise with the media and act as the main point of contact (this helps to avoid conflicting or confused messages being disseminated).

4.1.4 Risk perception

The term 'risk perception' generally refers to the perceptions of that part of the community that is outside the regulatory, scientific research and risk assessment spheres. In engaging with the community, it is important to remember that perception of risk can be influenced by numerous factors beyond just the scientific data. It is for this reason that what may scientifically constitute a 'negligible risk' can still give rise to anger and resentment within the community. People see risk as multidimensional and not as being represented by a numerical value alone, judging risk according to its characteristics and context. For example, trauma and death as the result of an involuntary catastrophic reaction is likely to be dreaded more than as the result of a situation where the risk is assumed voluntarily and the person feels some degree of control over it (for example, motor vehicle crashes).

A study by the Centre for Population Studies in Epidemiology, (**Starr & Taylor** 2000), investigated health risk perception in a national sample population. Major findings indicated that risk perception is largely influenced by age, gender and education, and that certain kinds of risks tend to arouse heightened levels of concern.

Concerns about risk tend to be heightened where risks are:

- involuntary or imposed on the community
- man-made rather than natural
- inescapable
- controlled by parties outside the community
- likely to have little or no benefit to the community
- subject to media attention
- unfairly distributed
- related to a distrusted source
- exotic or unfamiliar
- likely to affect children or pregnant women
- likely to affect identifiable rather than anonymous people
- the cause of insidious and irreversible damage
- the cause of dreaded health effects such as cancer
- poorly understood by science
- subject to contradictory statements from responsible sources (or, even worse, from the same source)
- related to situations where the risk makers are not the risk takers.

While medical doctors were viewed with greater trust, nearly 40% of study participants identified the media (including newspapers, magazines, television and radio) as their primary source of information.

4.1.5 Develop the message

It is often helpful to develop key messages as part of the risk communication planning process. This can help to focus communication activities on the most important information and, by helping to ensure that messages are consistent, can also assist in building trust with communities.

It is important to remember that message development is not 'spin' and is not manipulative, and nor is it a substitute for two-way communication. The key to good message development is to avoid bombarding the audience with too much information or with information that does not address their needs. This can be achieved by understanding community concerns and focusing messages on answering those concerns in a clear and concise manner.

In developing key messages, it is helpful to collate maps, diagrams and reports relevant to the project and identify data which may be useful in providing information, explaining decisions, and so on.

The most important part of message development is focusing on what information the community wants. In general, people are interested in receiving information on the following subjects:

- description of the risk – people want more than just technical descriptions of risk. Risk should also be conveyed in ways that are accessible and relatable for people with non-technical backgrounds. It may be helpful for risk communicators to provide familiar analogies that assist an understanding of the risk.
- risk consequences – this includes effects and the level of danger associated with the risk.
- level of control about the risk and its consequences – people want to know the answers to questions such as "what should I do?" and "what are agencies doing?"
- exposure information – this includes risk intensity, duration, acceptable risk levels and how they are measured, how long the exposing agent is dangerous, how long it persists, and how it accumulates in the body.

As part of an engagement process, the following kinds of questions may be asked, relating to numerous types of concerns.

Note: these are generalisations and these questions are NOT provided as a substitute for identifying the community concerns through two-way communication.

Health and lifestyle concerns

- What is the danger to my health and that of my family?
- Can I drink the water, eat vegetables from my garden, etc.?
- What can I do to find out if my health has already been affected?
- What can I do to reduce the damage already done?
- What can I do to prevent further damage?
- What about my children?
- We are already at risk because of X. Will Y increase our risk?
- How will this affect our quality of life/property values?
- How will we be affected by the stigma of X being attached to our community?
- How will we be protected in an accident?

- How will we be compensated for the loss of value of our homes?

Data and information concerns

- How sure are you?
- What is the worst-case scenario?
- What do these numbers mean and how did you get them?
- How do we know your studies are correct?
- What about other opinions on this issue?
- How do our exposures compare to the standards?
- You say X can't happen, why not?

Process concerns

- How will we be involved in the decision-making?
- How will you communicate with us?
- Why should we trust you?
- How and when can we reach you?
- Who else are you talking to?
- When will we hear from you?

Risk management concerns

- When will the problem be corrected?
- Why did you let this happen and what are you going to do about it?
- What are the other opinions? Why do you favour option X?
- Why are you moving so slowly to correct the problem?
- What other agencies are involved and in what roles?
- What kind of oversight will we have?

In formulating key messages, it is often useful to convey information in more than one way, for example, to use visual representations of information in addition to just words. If you need to communicate numerical risk information it is also useful to consider the following techniques:

- highlight the most important information
- pre-test symbols and graphics
- align data with general thinking (e.g. in a choice of one to five, the highest number would be the best)
- if you state probabilities as '1 chance in X', keep 'X' as a constant
- give visual clues as to the importance of information (e.g. use larger fonts or bold items).

Consider expressing risks in terms of absolute risk (1 in 10) rather than relative risk (10%), and do not use decimals.

4.1.6 Determine requirements for engagement

Following audience analysis and identification of stakeholders, requirements should be determined for engagement and stakeholder involvement including:

- what stage(s) of the project will require engagement
- the role the community and its representatives will have in the engagement process
- appropriate notices about the project and the engagement process (include media and public involvement techniques and existing communication avenues such as council newsletters and local newspapers).

4.1.7 Incorporate an evaluation process

Plan to involve all parties in evaluation and feedback on the effectiveness of the engagement and communication throughout implementation of the community engagement plan, as well as after the conclusion of the process. This will allow for midcourse improvements to be made, where necessary. The effectiveness of a community engagement plan can be measured by evaluating the implementation of engagement techniques and actions, the quality and quantity of stakeholder interactions, and by reviewing stakeholder relationships.

4.1.8 Develop an engagement and communication protocol

This kind of public document should include the following information:

- a brief, clear statement of the issues and background information
- a clear statement of issues that are not negotiable within the engagement
- a broad description of who is affected
- a statement of what kind of information is being sought and how it will, or won't, be used
- a timeline for the engagement program that allows sufficient time for stakeholders to discuss and form opinions on the issues
- a list of engagement techniques to be used
- identity of author, accessible point of contact, phone number, email address and website link (if available)
- a list of staff and funding resources available for engagement.

4.1.9 Reporting on community engagement

Following the implementation of a community engagement plan, reporting and subsequent feedback to the community should be undertaken, which should address the following:

- the extent of community engagement undertaken should be documented and justified
- details of the engagement process including names of potential stakeholders (individuals and groups) who were identified and invited to participate, method or techniques of engagement used, names of community members who participated, details of how, when and where engagement was carried out
- information provided to the community
- input and comments received from the community
- how the community's input was considered and incorporated in the decision-making process
- availability of all documentation to the community.

4.2 Key messages for contaminated land practitioners

The ten key take-home messages (adapted from Heath et al. 2010) for contaminated land practitioners in regards to community engagement are:

4.2.1 Community perceptions

Risk, in the context of contaminated land, is an inherently predictive, multidimensional estimate that is useful in trying to prevent future harm from happening. Because predictions of risk inevitably rely on a mixture of evidence, assumptions and judgment, characterising any differing beliefs of the public about risk as being just 'perception' is guaranteed to undermine trust and mutual respect, if not create open conflict and further outrage.

4.2.2 Credibility is based on more than scientific and technical competence

Scientific competence is essential to establish credibility, but is by itself not sufficient to ensure trust. Openness, honesty and transparency are also necessary to demonstrate credibility and warrant trust. This includes a frank and honest approach to dealing with uncertainty, which is inevitable in any risk assessment. Denial of uncertainty (both knowledge uncertainty and uncertainty caused by variability) will eventually backfire and undermine credibility.

4.2.3 Effective communication is necessary but not sufficient

Scientific and technical evidence is often complex and difficult to understand. If an audience is presented with confusing information they can at best ignore it or at worst be angered by it. However, regardless of how carefully or compassionately it is presented, scientific or technical evidence is unlikely to have a constructive impact if the public is outraged.

4.2.4 Avoiding community engagement will guarantee trouble

There is no all-purpose, sure way to avoid problems simply by engaging communities. However, it is equally certain that failing to engage a community about an issue of concern will create problems that could be reduced, if not avoided, by effective community engagement.

4.2.5 Do not promise more than you can deliver

Overly zealous claims (even if they are sincere) about what or how quickly something can be achieved will, when not achieved, cause disappointment that may boil over into distrust. It is better to be realistic from the outset. With the public engaged from the beginning, they can make the journey through a project with some sense of ownership and reality that can lead to tolerance of missed targets.

4.2.6 An unfair process will generate outrage

People who believe they are being treated unfairly, in a condescending manner, or being ignored altogether, will become aggrieved, possibly to the point of active opposition. It is extremely difficult to engage an outraged public in a constructive manner.

4.2.7 Effective communication must be a two-way process

One-way communication is simply preaching or selling. Any risk communication process that lacks an effective means to listen to community concerns, a commitment to seriously seek to understand those concerns and respond to them will be dismissed by the community as merely public relations.

4.2.8 Resolving disputes requires a dedicated process

Because proponent objectives for dealing with contaminated land may not coincide with the objectives of other stakeholders, there is always potential for disputes that are unlikely to be resolved purely by communication. Because litigation is expensive and often ineffective, dedicated alternative dispute resolution methods, such as negotiation or meditation, should be pursued before disputes become unmanageable.

4.2.9 Validate your messages and behaviour

Everyone involved in a project will have associates, whether they are family members, friends or non-technical staff, who can offer perspectives on key issues that will not be based on, or limited to, narrow scientific and technical interpretation. Talk with them to remind yourself of the lay person's view.

4.2.10 Trust and credibility are both essential

Trust and credibility are closely related and interdependent. Credibility (being worthy of confidence) is usually necessary to establish trust, but credibility alone does not guarantee trust. Because we are all busy and we already have more things to think about than we have time for, we inevitably have to rely on the views of others for most of the things that we face in our lives. When we rely on the views of others rather than analysing a problem for ourselves firsthand, we are placing trust in others. In essence, trust often serves as a means for dealing with complexity that we have insufficient time to resolve for ourselves.

5 Community engagement techniques

An effective community engagement plan includes all affected stakeholders and uses techniques that ensure that those who wish to participate in the engagement are able to do so. Achieving effective engagement with stakeholders relies on selecting methods of communication that will reach the target groups.

Determining the extent of engagement depends upon the nature and impact of the contaminants, the proximity of the community, and the particular stage of the assessment process. As a general guide, the more significant the impact of the contamination on the community, the more community participation is expected. It is important to recognise that there is no single stakeholder and that different techniques need to be used to reach different stakeholders. It is also important to recognise that a combination of one or more techniques may need to be used to effectively engage with a particular stakeholder. Moreover, engagement is most likely to be effective if it builds on or creates an ongoing relationship between various stakeholders.

The choice of techniques will depend on a number of factors including:

- the purpose of involving the wider community
- the stage of the process
- the nature of the wider community and their willingness to participate
- the likely impact of the contaminants and the assessment process
- timelines
- the skills and resources that are available.

A description of a range of engagement techniques, and the advantages and disadvantages of each, is provided below.

5.1 Engagement techniques: summary of advantages and disadvantages

Group techniques			
Technique	Description and Guidelines	Advantages	Disadvantages
Public meetings	Usually more than 20 people, self-selection by advertised invitation, formalised proceedings aimed at presenting information to large audience, conducted at a time and location to suit most people, needs to be widely publicised.	Provides a forum for information dissemination and exchange with large numbers, may incorporate other techniques such as workshops, brings a wide range of people together.	Focused discussion on one issue is difficult, more articulate and better prepared members of the community may dominate, less vocal sections of the community may not express their views.
On-site meetings	Open-air community meetings held on-site or adjacent to the affected site to provide information, gauge interest and explain process and procedures.	Enables interested individuals to gain an understanding of the issues involved. Useful for site contamination as standing on the site can remove some aura of the unknown.	Accessibility to site not always possible (for example, for aged or disabled community members, or for safety concerns).

Group techniques			
Technique	Description and Guidelines	Advantages	Disadvantages
Search conference	Usually 20–30 participants selected to be heterogeneous but sharing an interest, staged discussion aimed at identifying broad cross-section of views on a variety of issues, lasting a day, weekend or longer.	Can assist in the early stages of the engagement process to identify community characteristics and relevant issues, program devised with participants, future orientated, allows lengthy discussion to develop and refine ideas.	Large time commitment, may appear to be an elite group, participants may not have necessary information, may tend to result in 'wish list' of unrealistic future requirements.
Design meeting	Community members meet to work on maps, scale representations and photographs to gain better idea of the effect on their community of proposals and options, expert presenters may be required.	Allows community members to better express their views and visualise the impact of changes, enables consultant to understand how a proposal appears to the community.	Numbers of participants limited, limited technique if complete socio-economic and environmental impact to be determined.
Workshops	Participants are usually homogeneous in terms of skills and concerns, structured sessions aimed at encouraging open discussion between participants and producing proposals for solutions.	Provides opportunity for all stakeholders to contribute, a flexible technique that can be used at all stages of the engagement process, can provide a forum for testing alternatives, training opportunities, information gathering and dissemination, receiving feedback and refining input.	If the participants are specifically selected then the nature of this technique can result in it appearing exclusive, the specific workshops may restrict discussion and debate.
Seminars	A meeting where a particular subject is explored in depth for some length of time under expert guidance.	Opportunity for learning and information sharing, detailed discussion and inquiry can take place, all participants can question or contribute.	The 'right' expert may not be available, participants may not be adequately prepared, experts may dominate and inhibit discussion.

Individual techniques			
Technique	**Description and Guidelines**	**Advantages**	**Disadvantages**
Individual discussion	Selected individuals consulted by telephone, meetings and doorknocking an area.	Provides a quick and efficient means of disseminating information and identifying a range of issues and views.	Provides limited opportunities for large numbers of community members to participate in the process, does not allow for broadscale exchange of ideas.

Individual techniques			
Technique	**Description and Guidelines**	**Advantages**	**Disadvantages**
Submission	Oral or written submissions to enable people to register their ideas and concerns, open to the general community and usually undertaken in the early or later stages of engagement.	Political and institutional demonstration of commitment to open engagement, provides focus for groups to organise a basis from which to lobby, provides consultant with some information on viewpoints of key stakeholders.	Limited role as submissions are unlikely to draw response from minority groups in the community, only 'organised' and articulate stakeholders are likely to respond, the formality of hearings may intimidate some.
Survey	Structured questioning of community sample that statistically represents the whole population or sector, used to gather information about objective characteristics or attitudes of a community.	Provides data for analysis of characteristics of a community, and to document probable effects of a proposal and for gauging likely public reaction to a proposal.	Minimal discussion and no interaction between members of the community, respondents may be indifferent to the subject matter and require persuasion.
Open houses	Informal arrangement where tables or booths are manned by knowledgeable government staff or consultants who are able to discuss what individuals in the community want.	Sets up a comfortable discussion situation for staff and members of the public. Especially useful early in the process to establish rapport and explain complex processes.	Attendances may be low if distrust of the consultants and government by the public is already high.
Display and exhibitions	Means of disseminating information to the community, mobile or permanent exhibition, may be staffed for seeking response and giving detailed explanation.	Opportunity to inform and meet with the wider community who can speak directly to the consultants, opportunity to demonstrate commitment to engagement.	May be costly and ineffective, particularly if the community does not perceive the issues as being of high importance.
Observations	Means of gathering information and establishing contacts in a community.	Provides a thorough understanding of the community in preparation for engagement.	This technique is generally only suitable in the early information collection stage of engagement.
Information bulletins and brochures	Regular information bulletins and brochures distributed to households and/or made available to the community at key public outlets.	Provides ongoing information on the project.	Generic flyers may be perceived as junk mail and may be ignored.
Site office	Temporary accommodation for consultants in the area, provides information for the wider community, needs to be suitably located and staffed.	Provides consultants with a convenient base from which to work and establish contact in the area, satisfies some community needs for individual attention to their issues and concerns.	Does not involve interaction between members of the community and may be costly, has limited value in the overall engagement process if used alone.

Individual techniques			
Technique	**Description and Guidelines**	**Advantages**	**Disadvantages**
Open door	Conducting periodic open days to invite interested people and complainants to visit the site.	Can shift community confidence in current and proposed operations, pinpoint particular problems and result in problems being address and resolved.	May not be possible for commercial confidentiality or occupational health, safety and welfare reasons.
Hotline	A telephone service to provide information and to record comments, concerns and suggestions.	Ensures that information is available; provides the opportunity for the wider community with mobility problems.	Would not reach all people from non-English speaking backgrounds unless hotline is available in different languages.
Websites	Information dissemination through an interactive web page, aimed at informing and generating interest.	Keeps the public and other interested parties informed. Can be updated quickly and easily. Allows people to access large amounts of information and provide feedback.	Can only be accessed by those with access to a computer with web connection. Tends not to be available to minority groups such as the elderly, poor, people with non-English speaking backgrounds. Can contribute to information overload if not managed effectively.
Use of media	Information dissemination through printed and electronic media, can be aimed at informing or generating interest and feedback.	Political and institutional advantages of ensuring that information is provided, keeps the community informed, provides opportunity for all of the community to contribute.	Will not reach all groups unless special attention is given to minority groups by the use of ethnic media, and other avenues to reach other target groups.

The above information was sourced and adapted from *The human services planning kit,* (SA Department of Housing and Urban Development 1994).

An extensive list of community engagement methods and techniques can also be found in *Effective engagement: building relationships with community and other stakeholders, Book 3: the engagement toolkit,* published by the Department of Sustainability and Environment Victoria (DSE VIC 2005) (www.dse.vic.gov.au/engage).

5.2 Engagement and communication DOs and DON'Ts

	DO	**DON'T**
Abstractions	DO use examples, anecdotes and analogies to establish a common understanding	DON'T generalise too much or use hypothetical situations
Attacks	DO attack the issue	DON'T attack the person or organisation
Blame	DO take responsibility for your share of the problem	DON'T try to shift blame or responsibility to others
Clarity	DO ask whether you have made yourself clear	DON'T assume you have been understood
Guarantees	DO emphasise ongoing efforts and	DON'T say there are no guarantees

	DO	DON'T
	achievements made and explain any limitations on the guarantee and why they exist	
Humour	DO use humour wisely — if used, direct it at yourself	DON'T use humour in relation to safety, health or environmental issues
Jargon	DO define all technical terms and acronyms (e.g. NATA)	DON'T use language that may not be understood by your audience
Length of presentation	DO limit presentation to 15 mins to allow for longer question & answer periods	DON'T ramble or fail to plan the time well
Money	DO refer to the importance you attach to health, safety and environmental issues; your moral obligation to protect public health and the environment outweighs financial considerations	DON'T refer to the amount of money spent as if it proved your concern
Negative allegations	DO refute allegations	DON'T repeat or refer to them
Negative words and phrases	DO use positive or neutral terms	DON'T minimise or trivialise the risk
Non-verbal messages	DO be sensitive to non-verbal messages you are communicating; make them consistent with what you are saying	DON'T allow your body language, your position in the room, or your dress to be inconsistent with your message
'Off the record'	DO assume everything you say and do is part of the public record	DON'T make side comments or 'confidential' remarks
Organisational identity	DO use personal pronouns (i.e. I, we)	DON'T take on the identity of a large organisation
Promises	DO promise only what you can deliver. Set and follow strict orders	DON'T make promises you can't keep or fail to follow up
Reliance on words	DO use visuals to emphasise key points	DON'T rely entirely on words
Risk comparisons	DO use comparisons, when asked, to help put risks in perspective	DON'T compare unrelated risks
Speculations	DO provide information on what is being done	DON'T speculate about worst-case scenarios
Technical details and debates	DO base your remarks on empathy, competence, honesty and dedication	DON'T provide too much detail or take part in protracted technical debates
Temper	DO remain calm. Use a question or allegation as a springboard to say something positive	DON'T let your feelings interfere with your ability to communicate positively

6 Case studies

Examples where effective community engagement practices were implemented early in the assessment of site contamination are provided below. Further case studies and examples of effective and ineffective engagement practices can be found in Heath et al. 2010.

6.1 Case study 1: Radioactive site in metropolitan area

Background
In 1997, a relatively undeveloped site in a metropolitan area was alleged to contain radioactive contamination. A site history and a radioactive survey were undertaken to assess the level of any immediate risks to public health. Following this, an engagement plan was developed prior to conducting a detailed site investigation.

Community engagement and risk communication plan
The following broad plan was formulated with the assistance of local government officers and elected members:

- a consultation process, initially to inform targeted key members of the wider community prior to the detailed site assessment
- following the site assessment, a wider engagement program with the local community to enable the community to contribute to decisions that could affect them.

Engagement and communication
The initial engagement involved informing and conducting meetings with:

- identified community representatives
- peak trade unions
- elected members of local government
- relevant government authorities and organisations.

Outcomes
The main outcomes of the initial engagement were that:

- key members of the wider community were well informed about the contamination and the engagement process to be undertaken
- these key stakeholders responded well and appeared satisfied that the issue was being managed in a logical and comprehensive manner
- a level of trust and confidence in the consultants was established in the minds of the key stakeholders at the outset, which assisted further engagement with the community during the site assessment and remediation phases.

6.2 Case study 2: Ardeer, Victoria

Background
In 1989, severe lead contamination was confirmed in soil of a residential area in the Melbourne suburb of Ardeer. The site was used previously for secondary lead smelting and lead-acid battery manufacture. Measures were put in place to relocate residents of the severely affected properties and to assess contamination in the surrounding area. Accordingly, 19 properties had their soil remediated and ceiling dust was removed from 65 properties. The site assessment and the clean-up process necessitated engagement and communication with the residents.

Community engagement and risk communication plan
Following the establishment of a broad snapshot of the local Ardeer community, the EPA developed an engagement plan. The engagement process extended over three and a half years, from initial assessment to completion of the remediation. The plan was based upon the following principles:

- identifying the affected community
- being clear about the purpose of conveying information
- accepting the rights of the residents and groups to contribute to decisions that could affect them.

Engagement techniques
The EPA used various engagement techniques including:

- doorknocking residents
- discussions with principals and teachers of education establishments in proximity to the site
- production and dissemination of ongoing multilingual information bulletins to the community in the area and the relevant action group
- intensive contact and personal visits undertaken with those with contaminated properties
- advising residents of sampling results
- periodically issuing media releases.

Outcomes
The main outcomes of the process were that:

- the community was well informed about the contamination and the remediation process
- the local community was able to contribute to decisions that affected them
- overall, the engagement plan was successful as the residents generally appeared satisfied that their safety was not compromised.

7 Bibliography

ANZECC 1996, Polychlorinated Biphenyls Management Plan, Australian and New Zealand Environment and Conservation Council.

ASTM 2006, Standard E2348, Standard Guide for Framework for a Consensus-based Environmental Decision Making Process, ASTM International, West Conshohocken, PA, E2348-06, www.astm.org.

Blencowe, S 1992, 'Remediation: level of disclosure and right to know', Contaminated Land Remediation Technology Seminar: An International Perspective.

Bord, RJ & O'Connor, RF 1990, 'Risk communication, knowledge and attitudes: explaining reactions to a technology perceived as risky', Risk Analysis, vol. 10, no. 4.

Chun, A (Cptn) 1993, Human health risk assessment for contaminated sites: workshop, US Environmental Protection Agency, 8-10 November.

Chun, A (Cptn) 1997, Managing community outrage - risk communication for development projects: resource kit, US EPA & MFP Development Corporation, Adelaide, Australia.

Chess, C, Hance, BJ & Sandman, P 1989, Planning dialogue with communities: a risk communication workbook, Centre for Environmental Communication (CEC), Cook College, Rutgers University.

CEC 1994, Communicating with the public: ten questions environmental managers should ask, Centre for Environmental Communication, Cook College, Rutgers University.

City of Altona 1993, 'Altona's three community consultative committees', 4th national environmental expo, 1993 municipal environment achievement awards, City of Altona.

Corvello, VT, McCallum, DB & Pavlova, MT (eds) 1989, Effective risk communication, Plenum Press, New York, pp. 45–49.

enHealth 2006, Responding to environmental health incidents, community involvement handbook, enHealth Council, Melbourne NPHP.

Fischer, GW et al. 1991, 'What risks are people concerned about?' Risk Analysis, vol. II, no. 2.

Gardner, GT & Gould, LC 1989, 'Public perceptions of the risks and benefits of technology', Risk Analysis, vol. 9, no. 2, pp. 225.

Hadden, G 1991, 'Institution Barriers to Risk Communications' Risk Analysis, vol. II, no. 2, pp. 301.

Health Canada 2006, Improving Stakeholder Relationships: Public Involvement and the Federal Contaminated Sites Action Plan: A Guide for Site Managers, Minister of Public Works and Government Services Canada, Ottawa, Ontario.

Heath, L, Pollard, S, Hrudey, S & Smith, G 2010, Engaging the community: a handbook for professionals managing contaminated land, CRC for Contamination Assessment and Remediation of the Environment, Adelaide, Australia.

Harris, JS 1983, 'Toxic uproar: a community history', Journal of Public Health Policy, vol. 4, no. 2, pp. 189–190.

International Association for Public Participation (IAP2) (2000) Code of Ethics for Public Participation Practitioners.

International Association for Public Participation (IAP2) Website http://www.iap2.org

Keeting, C, Hodgson, N & Reid, T (eds) 2003, Facilitation tool kit: a practical guide for working more effectively with people and groups, WA Department of Environmental Protection, Water and Rivers Commission and Department of Conservation and Land Management, Western Australia.

Kinke, A & Renn, O 2002, 'A new approach to risk evaluation and management: risk based, precaution-based, and discourse-based strategies', Risk Analysis vol. 22, no. 6, pp. 1070–1091.

Lundren, R & McMakin, A 2009, Risk communication: a handbook for communicating environmental, safety, and health risks, 4th edn, John Wiley & Sons, New Jersey.

McKersie, F, O'Brien, G & Royston, D 1992, 'Siting a secure landfill: the community consultation factors', Proceedings from 1st national hazardous and soil waste convention.

Meek, T (EPA) 1994, Effective community consultation, paper presented at the odour workshop, Clean Air Society of Australia & New Zealand, in cooperation with the Office of the South Australian Environment Protection Authority & the Institute of Public and Environmental Health Officers, August.

Meek, T 1996, Community right to know: community involvement in decision-making?, paper presented at the 13th International Clean Air Society of Australia & New Zealand conference, September.

Meek, T & Monahan, D (EPA) & Mival, K (Dames & Moore) 1994, Lead contamination on residential properties - assessment, clean-up and community aspects, paper presented at the 2nd National Hazardous & Solid Waste Convention & Trade Exhibition.

NAB & SWMG (2000), A Case Study of Problem Solving Through Effective Community Consultation, National Advisory Body (NAB) on Scheduled Wastes and Scheduled Wastes Management Group (SWMG), Canberra, Australia.

Otway, H & Wynne, B 1989, 'Risk communication: paradigm and paradox', Risk Analysis, vol. 9, no. 2, pp. 143.

PCB Consultation Panel 1995, Summary report of the PCB consultation panel on major outcomes from PCB public consultation, April.

Rust PPK Pty Ltd 1995, Community, industry and government partnerships: a review of consultation processes, June.

SA DHUD 1994, Human services planning kit, South Australian Urban Land Trust, Department of Housing and Urban Development, Adelaide, Australia.

SAHC 1991, The health risk assessment and management of contaminated sites, South Australian Health Commission, Adelaide, Australia.

Sandman, PM 1989, 'Hazard versus outrage in the public perceptions of risk', in Corvello, VT, DB McCallum, DB & Pavlova, MT (eds), Effective risk communication, Plenum Press, New York, pp. 45–49.

Scottish Environment Protection Agency 2010, Communicating Understanding of Contaminated Land Risks, Project UKLQ13, Scotland and Northern Ireland Forum for Environmental Research (SNIFFER), Edinburgh.

Starr, G, Langley, A & Taylor, A 2000, Environmental Health Risk Perception in Australia: A Research Report to the Commonwealth Department of Health and Aged Care,

Adelaide: Centre for Population Studies in Epidemiology, Department of Human Services.

US EPA 1993, Ecological risk assessment for contaminated sites, workshop, 11 November.

US EPA 2007, Risk communication in action: the risk communication workbook, EPA/625/R-05/003, National Research Programs, United States Environmental Protection Agency, Washington, DC, USA.

US EPA 2007, Risk communication in action: the tools of message mapping, EPA/625/R-06/012, National Research Programs, United States Environmental Protection Agency, Washington, DC, USA.

VIC DSE 2005, Effective engagement: building relationships with community and other stakeholders, Book 1, An introduction to engagement, Department of Sustainability and Environment, Victoria, available online at http://www.dse.vic.gov.au/engage.

VIC DSE 2005, Effective engagement: building relationships with community and other stakeholders, Book 2, The engagement planning workbook, Department of Sustainability and Environment, Victoria, available online at http://www.dse.vic.gov.au/engage.

VIC DSE 2005, Effective engagement: building relationships with community and other stakeholders, Book 3, The engagement toolkit, Department of Sustainability and Environment, Victoria, available online at http://www.dse.vic.gov.au/engage.

WA DEC 2006, Contaminated Sites Management Series: Community Consultation Guideline, Western Australia Department of Environment and Conservation, Perth, WA.

WA DoE 2003, Community involvement, framework, Western Australian Department of Environment, Perth, WA.

8 Glossary

Community engagement is the process of communicating and deliberating with the community and other stakeholders. It can include a variety of project-specific approaches:

Inform	one-way communication or delivery of information
Consult	providing for ongoing public feedback
Involve	a two-way process to ensure community concerns are considered as part of the decision-making process
Collaborate	developing partnerships with the community to make recommendations
Empower	allowing the community to make decisions and to implement and manage change.

Community means those individuals and/or groups residing in the locality where a site assessment is to be conducted and who may be affected by the assessment and/or possible site contamination physically (for example, through risks to health or the environment, loss of amenity) or non-physically (for example, via concern about possible contamination).

Contamination means the condition of land or water where any chemical substance or waste has been added as a direct result or indirect result of human activity at above background level and represents, or potentially represents, an adverse health or environmental impact.

EPA means the relevant environment protection authority or equivalent agency responsible for the regulation and management of contaminated land.

Exposure occurs when a chemical, physical or biological agent makes contact with the human body through breathing, skin contact or ingestion; for example, contaminants in soil, water and air.

Hazard is the intrinsic capacity of a chemical, biological, physical or social agent to produce a particular type of adverse health or ecological effect.

Community engagement consultant means an appropriately skilled professional employed to develop and implement the community engagement and risk communication plan.

Remediation means the clean-up or mitigation of pollution or of contamination of soil or water by various methods.

Risk assessment means the process of estimating the potential impact of a chemical, physical, microbiological or social hazard on a specified human population or ecosystem under a specific set of conditions within a certain timeframe.

Risk communication means an interactive process involving the exchange among individuals, groups and institutions of information and expert opinion about the

nature, severity and acceptability of risks and the decisions to be taken to combat them. Risk communication is delivered most efficiently in the context of a well-structured community engagement process.

Risk management means the decision-making process to analyse and compare the range of options for site management and select the appropriate response to a potential health or environmental hazard. It may involve considerations of political, social, economic, environmental and engineering factors.

Risk means the probability in a certain timeframe that an adverse outcome will occur in a person, group, or ecological system that is exposed to a particular dose or concentration of a hazardous agent; that is, it depends on both the level of toxicity of hazardous agent and the level of exposure.

Risk perception is the subjective judgment that people make about the characteristics and severity of a risk.

Site managers are those responsible for environmental site assessment, risk assessment and risk management and may include landowners, contaminated land consultants, contractors or environmental auditors.

Site means the parcel of land being assessed for contamination.

Stakeholder means one who has an interest in a project or who may be affected by it.

Sustainable development means development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Wider community means individuals and/or groups, not necessarily residing in the locality of a site assessment, who may have an interest in the assessment.