

PROVISION OF SCIENTIFIC AND TECHNICAL ADVICE IN THE STRATEGIC CO-ORDINATION CENTRE

Guidance to Local Responders

Issue

1. The explosion at the Buncefield oil terminal in December 2005 and Andoversford chemical works a year later highlighted weaknesses in arrangements for providing co-ordinated scientific and technical advice to Police Gold Commanders and other responders in an emergency, and some uncertainty over responsibilities for the provision of such advice.
2. This note provides guidance to local responders on the establishment of a Science and Technical Advice Cell (STAC) within the multi-agency Strategic Co-ordination Centre (SCC) in the event of an emergency where there is likely to be a requirement for co-ordinated scientific or technical advice, and invites local responders to consider collectively the implementation of these arrangements in each LRF area. The note also summarises at Annex A the roles and responsibilities of those organisations with statutory duties for the provision of scientific and technical support in an emergency. While some organisations have the same responsibilities across the UK, others' remit may be limited to certain parts of the UK. These arrangements will be included in the next revision of Emergency Response and Recovery¹.

The Science and Technical Advice Cell (STAC)

3. To ensure timely coordinated scientific and technical advice during the response to an emergency, local responders are invited to consider collectively through the relevant Local Resilience Forum (LRF), arrangements for establishing a STAC to provide advice to the Strategic Coordination Group (SCG) when required. They will also need to identify a designated STAC lead and alternates who would co-ordinate the work of the STAC when activated (see paragraphs 9 and 11).
4. The establishment of a STAC is likely to be particularly important where there may be significant wider health and environmental consequences (but see paragraph 13 in respect of terrorist incidents involving chemical, biological, radiological or nuclear (CBRN) material). The STAC should bring together technical experts from those agencies involved in the response and who may provide scientific and technical advice to the Gold Commander. The purpose of the cell would be to ensure that, as far as possible, scientific or technical debate was contained within the cell so that the SCG (and others involved in the response) received the best possible advice based on the available information in a timely, coordinated and understandable way. Given that a number of agencies will be involved in the response, the STAC lead and the LRF should identify the core membership of the STAC, as well as any other membership that may be required on an ad-hoc basis. To ensure the effective working of the cell, membership and attendance should be strictly controlled by the cell lead. It

¹ Current version Emergency Response and Recovery – Non-statutory guidance to complement Emergency Preparedness (2005) Ref: 269056/1110/D40.

is also essential that the STAC arrangements are regularly exercised and the list of default membership and contact details kept up to date.

5. The STAC would subsume the role currently undertaken by the Health Advisory Team (HAT) (also known as the Joint Health Advisory Cell) at the SCC. The establishment of other groups and cells within the SCC, such as the Recovery Working Group, should not be affected and should continue to execute their roles. The STAC would, of course, provide these groups with advice as required. Technical experts may be required to attend other groups as well as the STAC necessitating coordination and deconfliction within the SCC.

Activation

6. The STAC would be activated by the Police Gold Commander through the cell lead or relevant duty officer. However, a senior public health professional (i.e. the National Health Service Regional Director of Public Health or the Health Protection Agency Regional Director) may recommend to the Gold Commander that a STAC needs to be established due to the potential impact on the health of the local population from an actual or evolving incident.

Role

7. The STAC brings together technical experts operating under the strategic direction of the SCG. The SCG would agree the high-level objectives guiding the multi-agency response, including the immediate priorities. The STAC would be expected to advise on issues such as the impact on the health of the population, public safety, environmental protection, and sampling and monitoring of any contaminants. The role of the cell in response to an incident would be to:
 - provide a common source of science and technical advice to the Gold Commander and other members of the SCG;
 - monitor and corral the responding science and technical community to deliver on Gold's high-level objectives and immediate priorities;
 - agree any divergence from agreed arrangements for providing science and technical input;
 - pool available information and arrive, as far as possible, at a common view on the scientific and technical merits of different courses of action;
 - provide a common brief to the technical lead from each agency represented in the cell on the extent of the evidence base available, and how the situation might develop, what this means, and the likely effect of various mitigation strategies²;
 - identify other agencies / individuals with specialist advice who should be invited to join the cell in order to inform the response;

² In extremis, such a common brief does not prevent a STAC member providing separate advice to their agency representatives at the SCG where an issue cannot be resolved within the STAC.

- liaise with national specialist advisors from agencies represented in the cell and, where warranted, the wider scientific and technical community to ensure the best possible advice is provided;
- liaise between agencies represented in the cell and their national advisors to ensure consistent advice is presented locally and nationally;
- ensure a practical division of effort among the scientific response to avoid duplication and overcome any immediate problems arising;
- maintain a written record of decisions made and the reasons for those decisions.

Composition

8. The composition and function of the STAC will be incident specific and tailored to local requirements. Members should have the necessary knowledge and skills to collectively provide scientific and technical advice in any emergency. The cell is always likely to include specialists in health, the environment, and site specific response concerns (site / infrastructure owner / operator). In England these would be, but not limited to, the senior HAZMAT officer from the Fire Service, HPA, relevant Primary Care Trust and/or Strategic Health Authority (probably the Director of Public Health (DPH)), the Environment Agency (EA), for industrial accidents the Health and Safety Executive (HSE), and where there is a risk to food safety the Food Standards Agency (FSA). Agencies covering other specific capabilities and/or responsibilities would be represented dependent on the type of incident and requirement for specific technical advice, such as local authorities, Met Office, Government Decontamination Service, utility and transport operators (see Annex A for a description of agency roles in an emergency). Attendance would, initially, be decided by the cell lead or relevant duty officer. There should also be effective liaison, usually through a police liaison officer, to provide a link into the police Gold commander. To ensure that the STAC operates effectively, STAC leads should ensure that only those specialists necessary for the specific incident are present. Membership is likely to include but not be limited to:

- Cell Lead;
- Secretariat / Staff Officer support;
- Gold Liaison;
- Relevant emergency service technical advisors (e.g. Fire Service HAZMAT officer);
- Health Protection Agency;
- Primary Care Trust and/or Strategic Health Authority Director of Public Health;
- Environment Agency;
- Food Standards Agency;
- Health and Safety Executive;
- Local Authorities (e.g. Environmental Health Officer);

- Met Office;
- Government Decontamination Service, if required;
- Operational partners of the Department for Environment, Food, and Rural Affairs (Defra);
- Other agencies invited to address sector specific issues, such as the Utilities or transport operators;

Leadership

9. In the initial stages of any emergency the immediate concern is likely to be the risk to human health from the substances involved and any possible mitigation measures required. The STAC is likely to be required to provide advice on whether to shelter or evacuate people from around the scene or downwind and with duty of care concerns for responders on scene. These health related issues suggest that an appropriate person from the health community (such as the HPA or DPH) would be best placed to lead the cell during the early response phase of an emergency reflecting the likely initial focus on public health issues. In practice, however, what matters most is that the person has the right knowledge and skill set to chair complex technical meetings in order to arrive at a consensus based on whatever limited information is available. The STAC lead should also be someone who has the authority to command the respect of their peers. As an incident progresses, the focus may move away from health matters to, for example, wider environmental concerns. It may therefore be appropriate for the lead to be reassigned to a more appropriate person with the necessary knowledge and experience. Leadership should, therefore, be a matter for local responders to consider during the planning phase. Potential STAC leads should receive appropriate training to execute their key role in the STAC.

Immediate Provision of Advice

10. It is likely that the STAC, once activated, will take several hours to stand-up. Therefore, immediately following an incident the incident commander may still be without a coordinated source of scientific and technical advice provided by the STAC. In this situation, the primary source of advice will be local expertise (e.g. local and regional HPA professionals, Directors of Public Health, Environmental Health Officers, etc.) who will provide an early assessment of the actual or likely impact the incident may have on public health and public safety. This may include advice on sheltering and first responder safety.
11. Regional Directors of Public Health, in consultation with local chiefs of police, are responsible for ensuring that a suitable and robust 24/7 mechanism is in place to provide public health advice during this initial phase. This must also include a pool of health professionals who are appropriately trained and exercised in chairing and leading technical meetings in an information scarce, time critical environment. Police forces should ensure that adequate and suitable arrangements are in place at the SCG to ensure the initial STAC response can operate effectively.

Media Support

12. Any incident which may affect the health of the population will attract intense media interest. As with any major incident, it is important that the public are accurately and regularly warned and informed, most likely through the media, of potential risks. In particular, the public will need information on sheltering and potential hazards of self evacuation. All media statements particularly on public health aspects of the incident or where scientific or technical information is being provided must be agreed by the STAC and the incident commander through the SCG.

Counter Terrorist Chemical, Biological, Radiological, or Nuclear Incident

13. In a Counter Terrorist incident, there are existing arrangements set out in the Home Office Counter Terrorism Contingency Planning Manual³ for the provision of specialist advice to the Police Gold Commander and the appointment of a Senior Scientific Advisor to advise on response measures. This will be provided through the MOD's Defence Science and Technology Laboratory (Dstl) for the handling of a chemical or biological device and Atomic Weapons Establishment (AWE) for the handling of a radiological or nuclear device. The focus of this activity is primarily within the 'hot zone' and immediate surrounding area, although they would be available to provide advice on any aspect of the response if that was requested by the incident commander. Those agencies with statutory functions to perform will also be involved and will provide advice into the SCG, through a STAC where appropriate, to consider wider scientific and technical issues affecting the response outside the 'hot zone'. Where a STAC is established, a member of staff from Dstl or AWE will ensure the effective sharing of scientific and technical advice between Dstl or AWE teams and the wider scientific and technical community working in the STAC.

Cabinet Office

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³ Home Office Counter Terrorist Contingency Planning Guidance Manual, Edition 16 – To be issued.

Roles and Responsibilities for Providing Scientific and Technical Advice at the Local Level in an Emergency

A number of agencies have statutory responsibilities to perform during the response and recovery phases of an emergency. This note provides police incident commanders and other responders with guidance on which agency should be advising the Strategic Co-ordination Group (SCG) on scientific and technical matters. While some agencies have the same responsibilities across the UK others' remit may only be limited to certain parts of the UK. This annex, therefore, covers England first and then each other part of the UK – the table at appendix 1 provides a summary of each agency's territorial remit.

Site Specific Information

- The site operator is responsible (by law in respect of COMAH⁴ sites) for providing timely and accurate information on substances stored on an affected premises and the risk they pose to the public and others (additional information may be available from the Health and Safety Executive and other regulatory / advisory bodies). The site operator and regulatory / advisory bodies, such as the Health and Safety Executive (HSE) and Health Protection Agency, should assist SCG members to assess the local and wider the implications for public health and the environment (see below).

Specialist Public Health Advice

(excluding responders' health & safety and food safety)

- The Director of Public Health is **responsible for the health** of the population within their geographic area and therefore for ensuring the public receive appropriate advice on what to do in the event of an emergency. This responsibility can be discharged by ensuring that appropriate advice from the HPA is made available to the public either directly or via a third party. The Primary Care Trust is a Category 1 Responder and can direct health resources from across the local National Health Service (NHS).
- The Health Protection Agency has a statutory duty to **protect the community against infectious disease and other dangers to health**, prevent the spread of infectious disease, and provide assistance on public health issues to responders such as the NHS, other Category 1 Responders, the Devolved Administrations, and the wider general public. The HPA will give advice on public health threats and may, where appropriate, make this advice public. While the Agency has some sampling and testing capability, this would not necessarily be deployed during an incident.

⁴ Control of Major Accident Hazard Regulations 1999 (COMAH).

Direction of NHS Resources

- The relevant Director of Public Health or Primary Care Trust Chief Executive is responsible for ensuring the most effective mobilisation and deployment of NHS (non-ambulance service) assets to meet the health needs of those affected.

Health and Safety of Responders and other Employees affected by the emergency

- Employers (e.g. site operators and Category 1 responders) are responsible for ensuring the health and safety of their employees. (The Fire and Rescue Service has traditionally had primary, though not statutory, responsibility for ensuring the **safety of responders from the emergency services operating within the inner cordon** during the response phase of an emergency. However it has recently been agreed that the Fire and Rescue Service should manage gateways into the inner cordon but that individual services maintain responsibility for their own personnel's Health and Safety)
- The Health and Safety Executive has statutory (regulatory) responsibility for ensuring that people's **health and safety in the workplace is protected**, drawing on advice from, and giving advice to, other agencies (e.g. HPA) as necessary. This will include advice on how responders might fulfil their duty of care obligations to workers, responders and others involved in the response to an emergency. The HSE will, unless agreed otherwise locally, undertake necessary sampling and testing for harmful substances arising from an affected workplace once the Fire and Rescue Service or other competent authority has advised that the site, or parts of it, is safe to enter.

Food Safety

- The Food Standards Agency has statutory responsibility for ensuring the **safety of the food chain** (excluding tap water) and for advising the public on food safety matters. The FSA may undertake testing, sampling and analysis of an area affected by potentially hazardous substances to determine the consequences for the food chain and take any necessary actions to protect public health.

Environmental Protection

- The Environment Agency (EA) is responsible for **protecting the environment** from, for example, ground pollution (including contamination of ground water supplies but **not** water once abstracted for the public water supply) and atmospheric pollution. It is also responsible for flood prevention and management. The Agency undertakes sampling and testing of material collected by ground level monitoring stations or deployed teams. In addition, it is, subject to agreement on resourcing between the Agency and Defra, taking on responsibility for co-ordinating

the development and subsequent deployment of an integrated air quality sampling capability.

Public Water Supply

- Water companies are responsible for ensuring the **safety of the public water supply**.
- Defra, through the Drinking Water Inspectorate and Water Supply Regulation Division is responsible for notifying other stakeholders of actual / potential water supply emergencies and providing advice / support as necessary to ministers, water companies and responders. The Inspectorate maintains a call-off contract for 24/7 testing of water samples collected by the water companies to identify contamination by chemical or biological agents.

Meteorological Information

- The Met Office is the lead agency for the **provision of meteorological information**, and the issue of **plume dispersion information** (but not the content of the plume). The Met Office may also be able to make available in conjunction with the Natural Environmental Research Council (NERC) an airborne sampling capability to support the multi-agency response.

Animal Welfare

- Defra and its agencies including the State Veterinary Service, the Veterinary Laboratories Agency, and the Central Science Laboratory, are responsible for providing advice on animal welfare, and the management of animal and plant disease outbreaks.

Radiological Contamination

- Defra is responsible for monitoring the fallout from overseas nuclear accidents through the Radioactive Incident Monitoring Network (RIMNET) system. In the event of a civil nuclear site accident having or considered likely to have off-site effects. The DTI would appoint a Government Technical Adviser (GTA) to provide independent advice on what actions should be taken to protect the public.

Terrorist use of CBRN material

- MOD technical experts from the Defence Science and Technology Laboratory (Dstl) or Atomic Weapons Establishment (AWE) would deploy, on behalf of the Home Office and in support of the police, as part of the **Government response to a terrorist incident involving (or suspected**

of involving) Chemical, Biological, Radiological, or Nuclear material.

The teams would provide advice on handling any device as well as identifying and advising on the material involved and appropriate counter-measures that might be taken during the initial response phase. They would also undertake the plume modelling. Advice and support may also be provided during the recovery phase.

Decontamination

- The Government Decontamination Service (GDS) (an executive agency of Defra) does not have a statutory function but provides **advice and guidance on decontamination** of buildings, infrastructure, mobile transport assets and the open environment following CBRN or significant HAZMAT incidents. This includes access to the GDS Supplier Framework which contains details of contractors with decontamination capability. The GDS ensure ready access to those services if the need arises.

Annex A
Appendix 1

Territorial Responsibilities of Agencies Providing Scientific and Technical Advice in an Emergency

	England	Wales	Scotland	Northern Ireland
Site Specific Information⁵	Site operator	Site operator	Site operator	Site operator
Specialist Public Health Advice	Dir of Public Health / Health Protection Agency	Dir of Public Health / National Public Health Service for Wales / Health Protection Agency	Dir of Public Health / Health Protection Scotland / Health Protection Agency	Dir of Public Health / Health Protection Agency
Direction of NHS Resources	Dir of Public Health Primary Care Trust Chief Exec	Welsh Assembly Government (WAG)	Scottish Executive	Northern Ireland Executive
Health and Safety of workers	Employer / Health and Safety Executive	Employer / Health and Safety Executive	Employer / Health and Safety Executive	Employer / Health and Safety Executive
Health and Safety of Responders⁶	Employer	Employer	Employer	Employer
Food Safety	Food Standards Agency	Food Standards Agency	Food Standards Agency	Food Standards Agency
Environmental Protection	Environment Agency	Environment Agency	Scottish Environmental Protection Agency	Environment and Heritage Service NI
Public Water Supply	Water Companies / Defra	Water Companies / Welsh Assembly Government	Scottish Water / Scottish Executive	Water Service NI / Environment and Heritage Service NI
Meteorological Information	Met Office	Met Office	Met Office	Met Office
Animal Welfare	Defra	Welsh Assembly Government	Scottish Executive	Northern Ireland Executive
Radiological monitoring (RIMNET)	Defra	Welsh Assembly Government	Scottish Executive	Northern Ireland Executive
Decontamination advice	Government Decontamination Service	Government Decontamination Service	Government Decontamination Service	Government Decontamination Service

⁵ Including advice on how to deal with a substance released.

⁶ Responder health and safety rests with each employer. HSE would investigate instances where responders have been injured or killed.