

SUFFOLK COUNTY COUNCIL

MAJOR ACCIDENT HAZARD PIPELINE
EMERGENCY PLAN

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This Plan is supported by a package of further information appropriate to the organisation holding the Plan.

If you feel you have insufficient details please contact the County Emergency Plans Officer at Suffolk County Council on 01473 584140.

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EMERGENCY PLAN

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1. INTRODUCTION

The Pipeline Safety Regulations 1996 task local authorities with the production of emergency plans or the modification of existing plans, to cover certain major accident hazard pipelines (MAHP) within their area. The Health and Safety Executive notify Suffolk County Council of those pipelines that require plans in the County.

In Suffolk planning is required for gas pipelines operating above 8 bar absolute (7bar g). This plan is based on modification of existing emergency response procedures.

2. AIM

The aim of this document is to give an overview of the emergency response to a pipeline incident, showing how the existing procedures of various organisations would be applied and co-ordinated.

It follows the recommended national format for Pipeline Safety Plans.

3. PIPELINE SYSTEM

3.1 Description. The operator for the notified Major Accident Hazard Pipelines in Suffolk is Transco (formerly British Gas). The product carried is *natural gas*.

3.2 Pipeline details: maps and data. Transco supply maps showing pipeline routes and data to the Emergency Plans Team of Suffolk County Council. This information is stored on a Geographic Information System and shared with the Fire Service. The details recorded include data on bore diameter, operating pressure and above ground equipment such as valves and pumping stations.

For security reasons this information is not available to the public. Local Authority Planning and Emergency Planning sections can request the Pipeline Major Accident Prevention Document containing the above information from Transco.

4. HAZARD AND EFFECT

An incident involving a high pressure gas pipeline is readily identified by the following features:

4.1 Release of gas. Significant damage to a Major Accident Hazard Pipeline that results in a pipeline puncture or rupture will lead to a pressurised release of natural gas. All pipelines operating under 75 bar (which is used for the National Transmission System) contain odourised gas.

If ignited this may give rise to a thermal radiation hazard to individuals in the vicinity. Ignition can be immediate, delayed local ignition, delayed remote ignition, or no ignition at all. Each may have different consequences, hazard ranges and duration and for this reason time scale and sequence of any incident will vary.

4.2 Duration of pipeline Leaks. When a high-pressure pipeline fails, immediate and rapid de-pressurisation occurs over a matter of seconds, and is followed by relatively stable flow as the pipeline unpacks due to the leak and continued pumping of gas into the pipeline. Flow may last for several hours dependant on the location and topography of the pipeline and the time for Transco personnel to arrive on site to shut down valves not shut remotely from the Transco Control Centre.

4.3 Blast Effects and Projectiles. The pressure blast at the time of failure can be significant in close proximity to the pipeline, cover material over the pipeline may be thrown into the air at high velocity, but the serious effects will diminish with distance. Delayed ignition in the vicinity of buildings may result in loss of window glass as a result of blast over pressure.

4.4 Fire and Explosion. The ignition of any release of gas will cause a flare, which may have serious effects due to thermal radiation. People can be shielded indoors but radiation levels may be sufficient for the buildings to catch fire. Techniques are available for estimating the thermal radiation from an estimated quantity of gas released over time. Any failure of pipelines carries the risk of ignition, but experience has shown that in the majority of cases ignition does not occur.

If a release of gas does not ignite immediately, it will form a cloud, which will disperse over large distances. If a cloud of gas ignites it may burn back as a flash fire to the point of origin. As it disperses it will be diluted with air, the concentration falling below the lower explosive level (LEL) when it will no longer present a fire hazard. The distance over which such a release may disperse depends on the type of release and the prevailing weather conditions. Concentrations and duration may be estimated using plume modelling.

It is important that ignited gas is **not** extinguished unless specifically requested by the Transco on site controller.

4.5 Noise. The release of high-pressure gas creates a great deal of noise, which can be very intense leading to temporary hearing damage. High noise levels can also be disorientating and may cause unexpected behaviour in people effected.

4.6 Hazard Range and Emergency Planning Distances. Transco have calculated hazard information related to thermal radiation. This is supplied to the Fire Service and is also available to planning departments in local authorities.

5. PLAN ACTIVATION

In view of the extreme nature of a high-pressure pipeline failure it is likely that initial notification will be by a member of the public either by 999 call or to the gas emergency number.

The Emergency Services and Transco will follow their standard procedures to investigate reports. If at any stage they identify a requirement for additional resources, a mutual decision is taken to notify other organisations and undertake wider co-ordination. This process is the same as that employed in response to other major incidents.

There is a single national gas emergency number for all notifications: **0800 111 999**

6. ORGANISATION AND SUPPORT SERVICES

This section summarises the roles of the key organisations that may respond to a high pressure gas pipeline failure.

6.1 Emergency Services

6.1.1 **Police.** In response to all incidents the Police will consider the following responses:

Officers are sent to the scene and report back, depending on assessment, consideration will be given to the following actions:

- Ensure the safety of the Public, including by evacuation
- Liaise with other emergency services
- Establish Cordon
- Establish Incident Control Point
- Traffic Control
- Protect and Preserve the Scene
- Investigation the incident, in conjunction with other investigative bodies
- Collation and disseminate casualty information
- Identification of victims on behalf of the Coroner

The Police will be the lead authority in most cases.

6.1.2 **Fire Service.** In response to all incidents involving fire or with a requirement for rescue, the Fire Service will establish an Incident Control Point and consider the following responses:

- Rescue trapped casualties
- Prevent further escalation of the incident by tackling fires, dealing with released chemicals and other hazardous situations
- Gather information and assess hazards to give advice to the Police to enable them to advise the public to evacuate or stay-put

- Liaise with the Police regarding the provision of an inner cordon around the immediate incident, to enable the Fire Service to exercise control
- Ensure the safety of all personnel involved in rescue work
- Consideration of the effect the incident may have on the environment and the action to be taken to minimise this
- Liaise with the Medical Incident Officer and other medical services, and liaise with the Ambulance Service with regard to providing assistance at ambulance loading points and the priority evacuation of injured persons
- Assisting the police with recovery of the dead
- Participate in investigations as appropriate and preparing reports and evidence for enquiries
- Standby during the non-emergency recovery phase to ensure continued safety at and around the site if necessary

6.1.3 **The East Anglian Ambulance NHS Trust.** The Ambulance Service is responsible for the treatment and care of those injured at the scene either directly or in conjunction with medical personnel. An Ambulance Control Point will be set up to act as a focal point for all medical resources.

- Either directly, or in conjunction with other medical personnel, determine the priority needs of the injured (triage)
- Determine the main receiving and supporting hospitals for the receipt of those injured
- Arrange and ensure the most appropriate means of transporting the injured to the receiving or supporting hospitals
- Ensure that adequate medical manpower and support equipment resources are available at the scene
- Provide communications facilities for NHS resources at the scene

6.2 **Transco.** The aspects of the Transco organisation that feature in response to MAHP failure are:

6.2.1 **Transco Emergency Call Centre (TECC).** A call to the Transco emergency number will be received by the TECC at Hinckley, which is responsible for passing on the appropriate information to the relevant Transco District Personnel and alerting the on call Transco Competent Person local to the incident site.

6.2.2 **Transco District.** Suffolk is covered through the Transco District Offices in Harlow or Peterborough.

As soon as it has been established which District Office will be dealing with the incident they will fax a list of contact numbers to Suffolk Police Headquarters, although the primary point of contact will be the Transco representative at the scene.

If required the District would activate the District Major Incident Team. This team would be responsible for managing the Transco emergency response. A District Incident Controller would be appointed, responsible for co-ordinating the

Transco response through liaison with Local Authorities, Emergency Services and welfare organisations (to ensure that adequate provision is made for vulnerable members of the community).

- 6.2.3 **Transco Incident Control - On-Site Control.** In most cases the incident will be dealt with on site and the on call Transco Competent Person will manage the Transco response from the site and act as the point of contact.

Where a larger incident has occurred a Local Incident Control Point may be set up (e.g. Transco caravan or community hall), this will be as close as possible to the Emergency Services Incident Control. Depending on the nature of the incident Transco may send a Network Maintenance Engineer or Network Operations Manager to act as the point of contact at the scene.

For major incidents the Transco point of contact at the scene may be asked to arrange for a suitable liaison officer to attend Gold Command or support other aspects of the command and control structure.

- 6.2.4 **Transco Area System Control (TASC).** Parts of the Transco pipeline network are controlled remotely from a control centre at Hinckley. In consultation with the Transco Incident Control they would take steps to mitigate the effects of the incident, for example by closing remotely operable shut off valves.

- 6.2.5 **Transco Public Relations.** Contact between the media and Transco should be channelled through the Transco Public Relations Office:

Working Hours

Tel No. 01455 615949

Fax No. 01455 615949

Out of Hours

Tel No. 01455 890521

Fax No.01455 615949

- 6.3 **District and Borough Councils.** The District or Borough Councils affected by the incident would be notified by the Police. Emergency Management Teams would be set up in accordance with the District/Borough Emergency Plans and in relation to the nature of the incident. These would respond in support of the emergency services and in the interests of the public.

- 6.4 **Suffolk County Council.** The County Council responds to requests for assistance from the District Councils or to co-ordinate activity where more than one District Council is involved. This is undertaken in line with the policies agreed in the Memorandum of Understanding. Requests for support from the Emergency Services and other organisations will also be considered. In all cases the County Council will monitor activity and report to the Health & Safety Executive. The County Council has a responsibility to prepare this Plan and has undertaken to conduct co-ordination activities to ensure its effectiveness.

7. **COMMAND AND CONTROL**

Where there is a requirement for a multi-agency response, Suffolk operates the Gold (strategic), Silver (tactical), and Bronze (operational) system of command and control. In most cases of pipeline failure it is anticipated that the incident officers will make the strategic decisions at the site.

In circumstances where wider co-ordination is required or there are significant associated problems a Gold Command may be established off site. The Police as Lead Authority will make this decision and nominate a location. Where there is major disruption Gold Command will be established at Police Headquarters.

In certain circumstances there may be damage to a pipeline as part of a major incident. Decisions in respect of the pipeline would be made by the Gold Command set up to deal with the major incident.

8. CROSS-BORDER LIAISON

Identification of a cross-border incident would be made at an early stage by the emergency services. They would agree mutual assistance and which authority will lead the response. The lead authority will establish the strategic command and the control structure will develop from this.

9. PUBLIC INFORMATION AND THE MEDIA

It is anticipated that enquiries from both the public and the media would start at an early stage, which makes the sharing of information between the responding agencies critical from the early stages. Information should be circulated via the command and control structures.

It is expected that most media interest would be directed to the incident site. The on scene press officer would lead the media response and request appropriate support. If required, the on scene press officer could request mutual aid under the provisions of the Suffolk Major Incident Media Plan.

Established methods of Public Information will be used; dealing with calls from the public to all the involved agencies, broadcasts by the media, use of vehicles with public address systems, door to door calling and passing information to local authority departments (for example Environmental Health Officers or the Education Department to notify schools).

All calls reporting suspected gas leaks must be referred to the Transco national gas emergency number for investigation.

10. RECOVERY AND ENVIRONMENTAL EFFECTS

Once the emergency aspects of a pipeline failure have been dealt with, recovery aspects will be considered. It is likely that a local authority will become the lead authority in the Gold Command and instigate an assessment of the recovery requirements, agreeing necessary action with the appropriate authorities.

The environmental impact is considered to be negligible but would form part of the assessment process, calling on other agencies as required.