



Guidelines for Level 1 Chemical Emergency Response

GUIDANCE FROM THE EUROPEAN CHEMICAL INDUSTRY COUNCIL (CEFIC) AND THE NATIONAL CHEMICAL EMERGENCY CENTRE (NCEC)*

Definition (Level 1): Remote information and general advice.

Introduction

In all incidents the first requirements from the emergency services or other callers is for rapid access to accurate information concerning the chemical involved and the actual or potential hazards posed by the chemical when contained or accidentally released.

The information in an SDS (Safety Data Sheet), preferably that of the supplier, is sufficient in most cases to aid a response by a practitioner experienced in emergency response. The means of conveying and explaining this information rapidly to the emergency services and other relevant callers is a minimum requirement for any responsible chemical manufacturer.

With the more serious incidents and those involving more dangerous products with specific hazards, there may

be a need for detailed product-specific information, such as that relating to the hazards created by the product in a fire or when released to the environment. This is the type of information which should be available and can be reasonably expected from a chemical manufacturer.

The guidelines on the next page apply both to national ICE centres operating as part of the CEFIC ICE network, and other providers of Level 1 services. Level 1 may be provided by the chemical manufacturer, the ICE National Centre (in Europe), another organisation or via a coordinated effort by several organisations. Regardless of the Level 1 system utilised by the chemical manufacturer, the following guidelines serve to illustrate good practice.

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Chemical manufacturers should ensure their systems have suitable features to support a fast and effective emergency response intervention. The features described here form the basis of an “ideal” Level 1 emergency response provision, which as noted above, may be provided by one or more of a variety of organisations on behalf of the chemical manufacturer.

Available at all times

Level 1 emergency response should be **available at any time** when an emergency occurs; 24-hours per day, 7-days per week, 365-days per year. Infrastructure used to support a Level 1 service must be **reliable**, and supported by a comprehensive resilience plan able to demonstrate that it will always be in operation, if necessary via a secondary backup system that supports incoming calls despite maintenance or routine faults of the primary system. Calls should, where possible, be recorded for audit, training and quality purposes. It is not ideal to use mobile telephones outside of normal office hours, although this is superior to having no system in place during these hours.

In the local language

The Level 1 system must have the ability to receive calls in the local language and English. For providers of commercial Level 1 services operating outside their domestic territory, other relevant languages must be available. The process for receiving incoming calls should allow a prompt connection to a local language speaker (who may be an emergency responder or simply an interpreter). The connection experience should be easily recognisable to the caller and quickly provide them with local language reassurance that the call is being connected to an expert, if this connection is not immediate. The aim of this being to ensure the caller does not terminate the emergency call due to an uncertainty or lack of understanding of the process.

Connection in 3-5 minutes

The caller's connection to an emergency response expert (via an interpreter if necessary) should be performed **as quickly as reasonably possible** and should normally take a maximum of 3-5 minutes. This is necessary to enable initial advice to be provided within the target time of 10 minutes (which applies except in cases where the speed of response is detrimental to the quality of information provided) and also to preserve the caller's confidence that prompt emergency advice is available. If further advice is required after consulting the chemical supplier, this should be provided within 30 minutes. The telephone system should be designed or set up so as to enhance the caller's experience or perception of the connection time, thereby encouraging them to remain connected to the call during the connection process.

Access to expert network

Level 1 emergency response is typically the starting point for ensuring the person(s) at the incident scene has access to appropriate advice and resources to enable their incident response. The role of the Level 1 responder is first to mitigate the risk of the incident to people, the environment, assets and reputation as much as reasonably possible from a remote location. The focus of their role then switches to ensuring the caller has access to any additional advice or resources required to enable effective incident response. This means the Level 1 responder must have access to appropriate information and networks in order to seek or obtain additional support (e.g.: poison centre, explosive expert, response by environmental protection agencies, waste disposal, mutual aid schemes, etc.)

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Knowledge of chemicals and chemical behaviour

Operatives of the Level 1 helpline system (the emergency response specialist) must have access to SDS or another suitable information source from which to provide advice. In addition, the emergency response specialist should be a technically qualified, university graduate chemist, or have a similar high-level qualification (e.g.: chemical engineering, biochemistry, environmental protection) that is sufficient to give them an expert knowledge and understanding of chemicals, chemical behaviour and hazards across a range of incident types.

Advice tailored to the circumstances

The ideal emergency response specialist has experience of handling emergencies or working with chemicals in an industrial environment. The knowledge they have gained from such experience, together with a suitable level of qualification, will allow them to offer full advice to a variety of incidents that may threaten people, the environment, assets and reputation. This advice should be proportional, in other words appropriate to the size and scale of the incident. Proportionate advice enables a response that is suitable to mitigate risk from an incident, without causing unnecessary cost or delay to the overall incident response by “over-responding”.

Tactical awareness

Level 1 emergency response specialists should have sufficient training or experience to equip them with an understanding of the practical elements of responding to an incident. Their role is not to make tactical decisions for the person at the incident scene, but rather to have an appreciation of the practical issues typically posed by incidents and a knowledge of how to tailor their advice accordingly. For example, the physical location (surroundings) of the incident, **weather conditions, policies and capabilities of the local emergency services, etc. may have a practical effect** on the most appropriate response and this should be recognised and appreciated by the emergency response specialist in their advice.

Regulatory awareness

In many emergency cases the caller does not have access to complete information about a chemical name or composition to allow easy identification of the correct SDS or information source from which an emergency response specialist should provide advice. Frequently, only partial information is quickly available (e.g.: UN number, CAS number, Kemler code, UN packaging code, etc.) For this reason, Level 1 emergency response specialists should have awareness of the different regulatory regimes affecting the transport and supply of chemicals, across the countries in which Level 1 advice is offered. This will ensure the responder is able to establish some information about the chemical(s) involved and offer some level of appropriate advice.

Guidelines for Level 1

Additional guidance

In addition to the best practice for Level 1 organisations contained above, the following requirements are recommended for chemical manufacturers making use of a Level 1 system from a commercial or governmental service provider:

- The chemical manufacturer's emergency telephone number should be made widely known, through prominent display on SDS, labels, transport documents, etc.
- SDS should be available on a robust database maintained by the chemical manufacturer or a third-party Level 1 organisation. A backup system should be available in case of outage. SDS should also be lodged with Poison Centres (Official Advisory Bodies) where required by regulation. Other databases or sources of chemical information should be used where appropriate to supplement or replace information from the SDS.
- Chemical manufacturers should maintain current lists of their key contact personnel in case their expertise or assistance is called upon during an incident. These personnel should be suitably trained as to their role. Processes or procedures supporting the notification of different personnel (following a Level 1 emergency notification) should be pre-determined and tested regularly.
- Level 1 emergency response specialists should, as well as receiving comprehensive initial training, receive refresher training through a comprehensive continuing professional development (CPD) program covering all knowledge and skills required for effective performance of their role.
- Level 1 systems, as a critical step in facilitating an effective emergency response, should be thoroughly and objectively tested with an end-to-end process and subsequent lessons learned and improvement actions where required.

For over 40 years, NCEC has been supporting organisations across the globe to achieve best practice with world-leading emergency response, crisis management and regulatory compliance products and services.

To learn more, please contact us.

**NCEC's head of emergency response Dan Haggarty was the lead author of this guidance, the original version of which was published by CEFIC on 9th July 2018 and is [available here](#).*

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