Performance Potentials of Civil Protection

In response to new threats such as 11 September 2001 and the flood catastrophe of 2002, the Federal Office of Civil Protection and Disaster Assistance (BBK) was established on 1 May, 2004.

With this Office, the Federal Republic of Germany has a central organisation element for civil safety.

The interdisciplinary approach of this office includes all services of civil safety prevention and links them up to an efficient protection system for the population and its basic survival needs.

Therefore the BBK is not only a technical authority of the Federal Ministry of the Interior (BMI) but also gives competent advice and support to the other Federal and Land authorities to help them with the completion of their tasks.

Hence there is now **one** central authority

- To fulfil the tasks of the Federal government with regard to civil protection and the co-ordination of international co-operation
- To prepare national and area risk analyses, hazard cadastres and emergency planning as well as to co-ordinate civil-military-police co-operation
- To provide conceptual planning and interdisciplinary co-ordination of the protection of critical infrastructures
- To ensure national information, communication and resource management in case of damage
- To co-ordinate technical-scientific research relating to civil protection as well as to the protection of the population against weapons of mass destruction
- To ensure threat-adequate civil protection training of executives at high and highest administrative levels
- To provide national co-ordination of the European integration process in the field of civil safety prevention
- To provide disaster medicine
- To procure equipment for civil protection.

Contact

BBK Department II
Emergency Preparedness,
Critical Infrastructures
– Section II.5 –
Water Supply, physical (technical and structural) Protection of Critical Infrastructures

You can reach contact persons via:

Phone: +49(0)228-99550-3501
or -3507
Fax: +49(0)228-99550-3520

For further information please contact:

Bundesamt für Bevölkerungsschutz
und Katastrophenhilfe (BBK)
Provinzialstrasse 93
53127 Bonn

Postfach 1867
53008 Bonn

Telephone: +49(0)228-99550-0
Homepage: www.bbk.bund.de
Email: poststelle@bbk.bund.de

Federal Office
of Civil Protection and
Disaster Assistance

Drinking Water – Emergency Supply

Performance Potentials of Civil Protection

Drinking Water – Food Number One

Drinking water is vital for human beings, essential for their survival. Thus, its availability is considerably more important than solid food.

Thanks to the drinking water supply network, the German population's daily water demand of about 120 litres is normally ensured in adequate quantity and perfect quality. When, due to an emergency and crisis situation, public water supply services break down, nevertheless the Government's regulatory and preventive measures concerning drinking water emergency supply can be reverted to. These measures are based on the Emergency Water Control Act (WasSG) of 24 August 1965 and its relevant regulations.

Change of Threats

During the period of the East-West conflict the state of defence used to be the measure of all things. However, since the terrorist attacks of 11 September 2001 in New York and the subsequent events in Madrid and London, at the latest, it has become obvious that terrorist attacks as well represent a permanent threat to the population and the infrastructure. Attacks on services of water suppliers and the water distribution network, natural catastrophes (floods, hurricanes) caused by climate change, large-scale power cuts and global epidemics can temporarily compromise or even interrupt public drinking water supply.

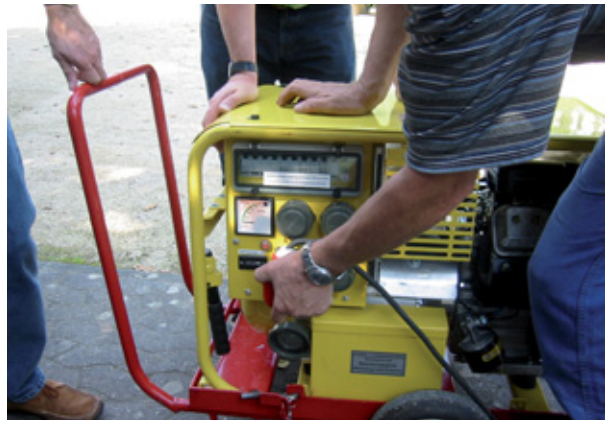
Drinking Water Emergency Facilities

Since 1970, the Federal Government has installed more than 5,000 drinking water emergency plants in big cities and densely populated areas. Basically, they are designed for use in the area of civil protection. They can, however, also be used for the prevention of other disasters. These facilities provide ground-water from wells or walled springs and work completely independently from the public water distribution network. For the supply of rural areas, also drinking water containers for mobile use as well as tie lines are available. All drinking water emergency facilities are, to a large extent, protected against destruction or pollution and are checked at least once a year. A rotational pump test is done every 5 years.

Installation of an submersible motor pump

Water Extraction

As a rule, the extraction of ground-water is done manually (e.g. beam-pumps or vane pumps) or with the help of submersible motor pumps. Electrically operated pumps obtain power supply from their own power generators in the well shaft or thanks to being connected with the public power network. As power is fed from big mobile emergency power aggregates, operation is even guaranteed during loss of power supply. An average well with power network-independent haulage provides 6,000 litres of water per hour. With a daily operation time of 15 hours, this quantity can provide 6,000 inhabitants with water for one day.



Extraction independent of power network supply

Remodelled well plant

Water Distribution and Quality

In emergencies the water is distributed at manifolds. From there, the population can collect it with the help of buckets or cans. The water demand of 15 litres per day and person, essential for survival, can be provided for 14 days. Compared to normal drinking water, emergency drinking water has higher chemical guide values. Against the background of the short period of use, however, these values are harmless. The water quality of the emergency wells is regularly checked. For the disinfection of the well water, disinfection tablets are added at the delivery points.

Distribution of drinking water