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COMPAGNIE INTERCOMMUNALE LIEGEOISE DES EAUX

Distribution water pollution:

Emergency Plan Management

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General overview: CILE (Belgium)



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2nd biggest water op. in Wallonia
35 Mill. m³ per year water
10 different production sites
115 Mill. €: turnover
565.000 citizens
24 communes (± 1400 km²)
255.000 water meters
3.500 km water pipes
80% total distribution yield
400 employees

Water pollution: what and why?

<u>Day 1 pm :</u>

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- 4 phone calls from sick people (living in the same district but in 3 different streets) due to drinking tap water (vomiting, stomach pains),
- Water samples taken and analysed (bacteriological analysis) by the Company,
- Started flushing water in the water network.



Water pollution: what and why?

<u>Day 2 am :</u>

- Analysis confirmed water pollution,
- Setting up of the emergency team with different skills (technics, laboratory, communication) under the leadership of the Water Quality Manager,
- The 218 houses inside the polluted area were separated from the general network,
- A first notice prohibiting the use of water for all purposes written and distributed doorto-door,
- An employee of the Laboratory dedicated to giving continuous answers to the citizens by phone,
- Distribution of water bottles (produced by the Company) throughout the crisis period and continued flushing of the water in the network,
- The local authorities and the different public departments in charge of health and food safety (AFSCA) were informed.



Water pollution: what and why?

Day 2 am and pm :



- Control of all the 218 private installations in order to find the source of the pollution. It consisted of verifying the presence of an alternative water production (rain water) and if so, the presence of the required non-return valve.
- In the evening : the source of the pollution was discovered:



An industrial customer was pumping back water from emergency tank to the CILE water network. This tank was generally fed by drinkable water, but due to significant leaks in his fire network, surface water was added to this.

The non-return valve was also absent.

- Decision to separate the connection and to seal it under the control of a bailiff.
- To date, connection returned to service after backfitting of all the technical nonconformities, but without recognition of responsability by this customer (court).



Water pollution: crisis management

• In order to assure accurate communication and understanding of the crisis, decision to work with an external professionnal interface directly in contact with the press.

- Maximum 10 people suffering from diarrhoea, vomiting and stomach pains; fortunately symptoms disappeared within 24 h.
- After detailed analysis of the bacterial stem from the water samples and after consultation with medical authorities, confirmation that there will be no further adverse effect on health.

Days 3 to 7 :

Day 3 :

- Installation of a chloration system on the polluted network with information by new notices distributed door-to-door.
- Draining and filling of the 218 private installations with the help of CILE workers.
- Day 5: authorization to use water except for food purposes following new analysis of water quality.

<u>Day 7 :</u>

• After analysis of water samples on day 6, new notice to inform the customers that the situation was normal and that the water could be used as before.

Emergency plan management: main conclusions

<u>Days 1 to 7</u>:

- A total of 9.000 10l bottles and 6 notices distributed door-to-door
- 10 m³ free on the next water invoice as compensation for loss and refund of all the damages
- Direct and continuous contacts with the customers in the field
- No consequences for the health
- VERY HIGH LEVEL OF SATISFACTION
- Information to the local authorities and the press under control



- NO NEGATIVE MISUNDERSTANDINGS
- « Lucky » to discover the causes of the problem so quickly

 \Longrightarrow SMART METERING AND CONTROL OF THE PRIVATE INSTALLATION ?

