

Sanitary Risks Management

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Boris DAVID



Département
Risques, Environnement
et Performance

Direction
Technique & Synergies

Veolia Water's Crisis Management Framework

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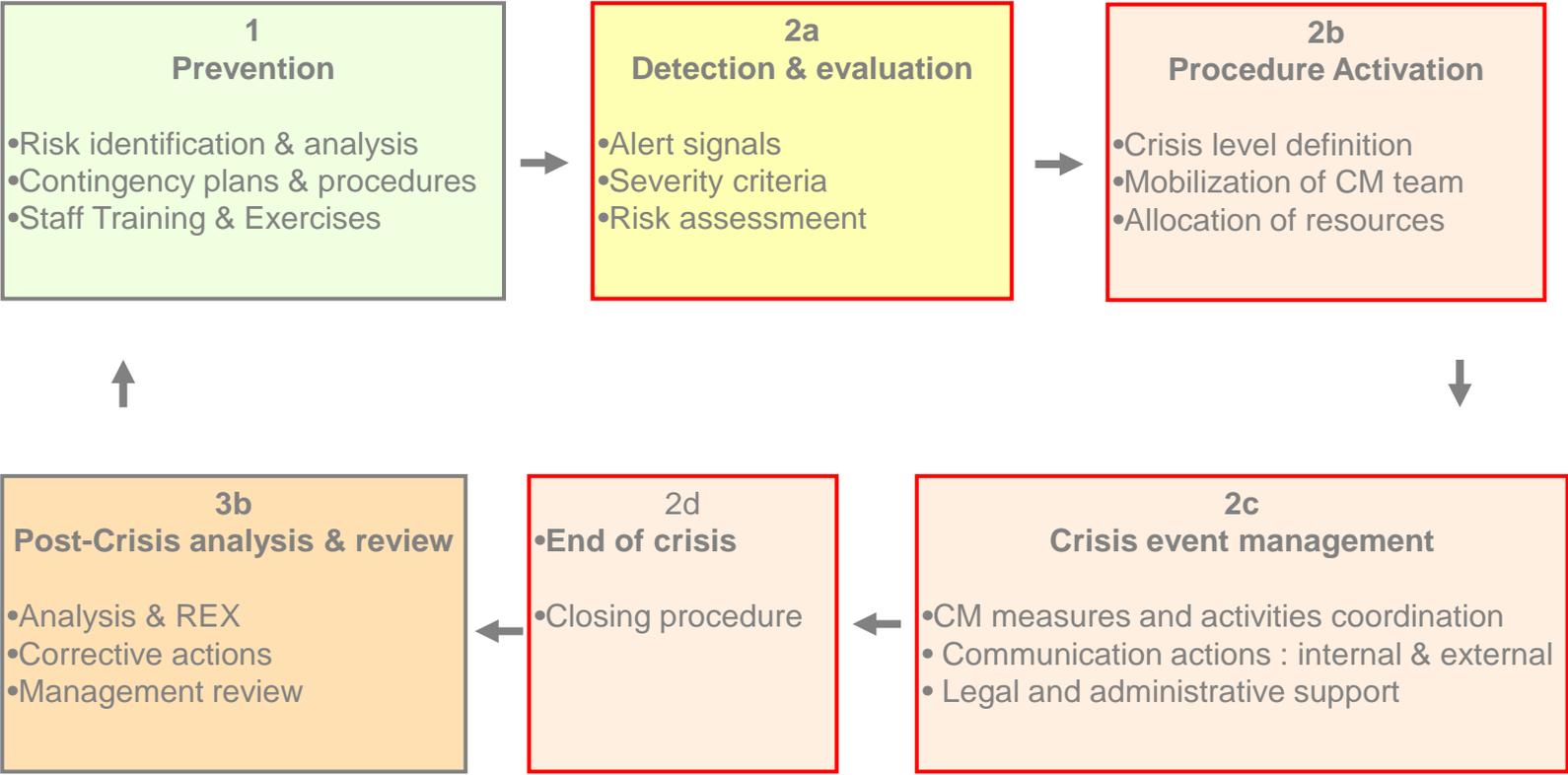


Corporate Framework

- Water Division (over 90M customers worldwide, numerous DW & WW contracts)
 - A common Crisis Management Framework for BU
- Crisis procedures adjusted to crisis level (severity criteria)
 - Regional level
 - Local & Regional Crisis Management Procedures
 - National or Business Units level
 - Veolia Water France's Alert and Crisis Management Procedure
 - Corporate
 - Veolia Environment's Group Alert Procedure
- Supplemented by specific risks procedures
 - Pollution Alert Plan, Continuity of Activity Plan, VIGIPIRATE



Veolia Water's Crisis Management Framework



Crisis Management tools & documents



● Pre-crisis Phase

- Risk prevention measures (e.g. GPRS, FMEA & HAZOP, ISO 14001, etc.)
- Definition of CM organization (team, plans & procedures)
- Monitoring & surveillance, alert system, contingency planning
- Mutual resources (e.g. CAE, list of mobile treatment units, expertise)

● Crisis Management

- Crisis event confirmation & severity evaluation (checklists & tables)
- Constitution & mobilisation of CM team (functional & technical staff list)
- Crisis “daybook” and record keeping (e.g. administrative and legal support documents)
- Practical sheets (e.g. essential sampling equipments, CM Directory)

● Post-Crisis Management

- Crisis report
- Crisis analysis & CM procedure review required

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Risks identification & evaluation



Natural risks

Resource pollution

Floods

Droughts

Natural disasters

Delivery failure risks

Chemicals

Energy

Plant & Equipment

Communication

Operating risks

Quality failures
from source to tap

Negligence or
terror threat

Staff & Public
Health & Safety

Environmental Impact

Sanitary Risks Prevention



Natural risks	Delivery failure risks	Operating risks
WFD, BMPs, SPZs, Internal tools	Supply Chain Management Special contract clauses	QMS (ISO 9001, ISO 22 000) HACCP, WSP, OGERIS
PPRI Flood defence plans & procedures	Autonomy Alternative power supply	VIGIPIRATE, Vulnerability Studies Internal security measures
Drought Committee & Orders Intercos & contingency plans	FMEA & HAZOP Maintenance policy	H&S management system OHSAS 18001
Probability analysis and RA Site specific management plans	Information Systems Backup, Dedicated lines	EIA, EMS ISO 14001

Our everyday's job!

Specific Procedures: Terror threat



- France's national security alert & planning system
 - Objectives : protection & preparation against terror threat
 - 4 levels of alert (yellow, orange, red, scarlet)
- Water = essential service = dedicated sector plan
 - 20 basic measures + additional measures (↔ level of alert)
 - Measures cover: water resource, IS, general operation, private & public buildings or places
 - Current level of alert for water sector : yellow/orange!
- Veolia Water internal procedure for terror threat alerts
- Example of additional measures : chlorination
 - Status Yellow : operator has to be capable of implementing compulsory chlorination measures within 3d (0,3mg/l free Cl₂ in reservoirs, 0,1mg/l on network)

Specific Procedures: Flooding



- EU Directive + French legislation = Flood risk planning (e.g. PPRI)
- Site specific evaluation of flooding risks (e.g. flood level frequency curve, site history)
- Internal flood risks management plans
- Site Specific Measures
 - Interconnections & alternative supplies
 - Water proofing of plants & equipment (e.g. duct proofing, flood defences)
 - Alert systems
- REX
 - Prague
 - Görlitz

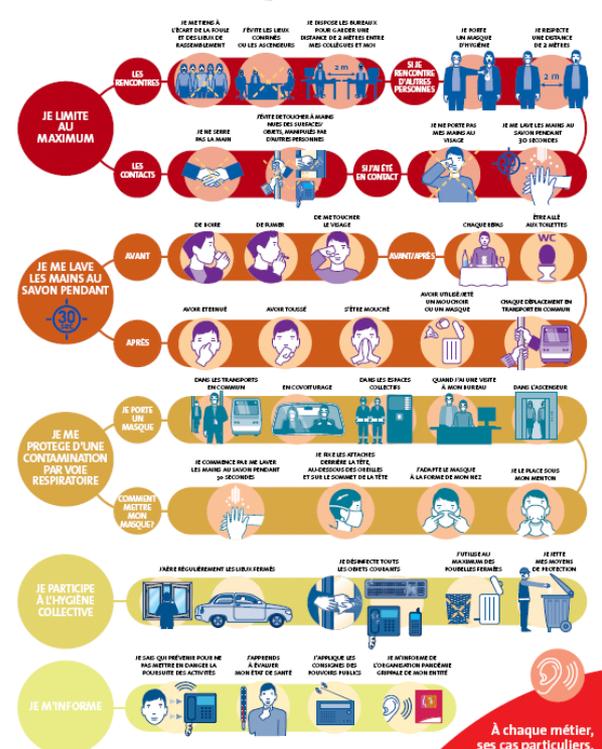


Specific Procedures: Continuity of Activity Plan



- French government plan during the Avian influenza pandemic threat in 2008
- Request for essential services to develop CA plans
 - manage shortage of resources
 - maintain staff Health & Safety
- Coordinated at corporate level
 - Entity specific CA Plan (e.g. DTS)
 - Diffusion of hygiene guidelines
 - Provision of protective equipment
 - Exercises and simulation
 - Reflex sheets

RAPPEL DES BONNES PRATIQUES EN CAS DE PANDÉMIE GRIPPALE



À chaque métier, ses cas particuliers, tenez-vous informés !

Conclusion

- Sanitary Risk Management is our everyday's job
- Unforeseen events require different response procedures and mechanisms (Crisis Management)
- The Pre-Crisis phase is as important as the Crises Management Phase (Risk identification and assessments, specific risk mitigation measures)
- Zero risks vs. acceptable residual risk (types of risks sustainable compromise)
- At corporate level CM requires a high degree of internal coordination & transparent external communication
- CM success relies on adequate resources allocation and coordination



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Thank You!

boris.david@veoliaeau.fr

