CLIENT CASE STUDY · NUCLEAR DECOMMISSIONING

Berwicks build an operational risk capability to achieve best practise

A world leader in decommissioning, reprocessing and nuclear waste management had to prove to its Regulator that it understood the hazards inside every building on a five-site estate. Berwicks wrote the system, worked through 1,400 facilities, trained the client's own fire and rescue service to run it and handed it over. The Regulator's verdict on the result was that it absolutely represents industry best practice.

1,400+	5 sites	6 months	Best practice
Facilities brought into one risk system	Around 10,000 employees covered	From Berwicks led to client run	The nuclear Regulator's verdict, December 2015

The Regulator's verdict

Regulators are not in the business of paying compliments. They record findings, they set conditions and they move on. In December 2015 this one went further and said the operational risk information process and the products Berwicks produced absolutely represent industry best practice.

> ***"Absolutely represents industry best practice."***
>
> **Nuclear Inspector, December 2015**

That verdict matters for two reasons. It closed out the regulatory question that started the programme, and it gave the client a benchmark position rather than a repaired one. The operator is no longer explaining itself. It is the reference point others are measured against.

Why this matters

Regulators do not accept good intentions. A nuclear operator has to show, building by building, what the hazards are, who they threaten and what the response will be. It has to produce that evidence on demand and keep it current. Fail and the consequence is not a fine. It is the licence, the site and the confidence of everybody who lives near it.

Most large operators can describe their risks in general terms. Far fewer can put the right page in front of the first commander through the gate at three in the morning. That gap is where regulatory findings come from, and where people get hurt. So the requirement here was not a report. It was a working system, and an in-house team able to keep it alive long after the consultants left.

The client

THE SITUATION	
BUSINESS	Decommissioning, reprocessing and nuclear waste management delivered on behalf of a national nuclear decommissioning authority. Berwicks on site since 2013.
SCALE	Five locations, over 1,400 facilities, around 10,000 employees.

THE DEMAND	Demonstrate to the nuclear Regulator that the hazards and risks presented by the buildings and facilities on site had been properly assessed, and that credible plans existed to respond.
IN-HOUSE RESPONSE	A dedicated site fire and rescue service with limited experience of this form of inspection and no structured system for managing operational risk information.

How the work was sequenced

Six stages, running from policy through to the point where the client's own people took ownership.

1	**Operational risk information policy** Written to meet the client's document control requirements and national fire and rescue guidance, so the site operated to the same standard as the local authority service and integrated seamlessly with the county brigade. Five risk areas sat at the centre of it: emergency responders, on-site personnel, the environment, the community and the economic consequences.
2	**Tactical plans and risk information sheets** Two levels of document. A two-page Site Specific Risk Information Sheet for every front-line team, and a detailed Tactical Information Plan for the buildings that warrant one.
3	**A single inspection proforma** One data gathering form used at every site, so an inspection in year three is comparable with an inspection in year one and nothing relevant gets missed.
4	**Risk based inspection programme** With more than 1,400 facilities to cover, we built a priority list and split delivery into three tranches. Very high and high priority buildings in year one, medium in year two, the remainder in year three.
5	**Audit and review programme** A structured, risk-based review cycle so the information stays valid. Delivered in its first year by the Berwicks team alongside the tranche two inspections.
6	**Coaching and mentoring** Six months of structured handover to the client's fire and rescue personnel.

The engine underneath

The policy is only worth what the process behind it delivers. Every facility runs through the same five phases.

1	**Initial building risk analysis** Review of what the client already held on its internal databases for every building and facility.
2	**Data gathering** Physical inspection against the standard proforma, capturing what is needed to assess the five key risk areas.
3	**Risk grading** Assessment by people with the skills and operational experience to identify the hazards and judge the risk properly.
4	**Risk treatment** Production of operational risk information in the format the level of risk demands, matched to what site commanders and external emergency services actually need.

5 **Distribution**
Making certain the information is in the hands of site commanders and external responders before they need it, not after.

The wider capability

Operational risk information solves the problem at the incident ground. It does not solve the problem in the boardroom. Alongside the inspection programme, Berwicks audited the client's emergency management arrangements using embedded personnel, recommended changes to the organisational structure, wrote an emergency programme for responders and a separate crisis management plan for the board, and built a training strategy shaped around the organisation as it is rather than as a textbook would like it to be. Berwicks then delivered that training, coaching and mentoring directly to emergency responders.

Where the value was created

- **Endorsed by the Regulator.** In December 2015 the nuclear Regulator put it in writing that the operational risk information process and the products Berwicks produced absolutely represent industry best practice. Not adequate, not compliant. Best practice, from the body with the power to stop the site.
- **Every facility accounted for.** More than 1,400 buildings brought inside one system, with the highest hazard facilities inspected first rather than in whatever order the estate happened to fall.
- **Effort matched to risk, permanently.** Very high and high risk buildings are reviewed annually, medium risk every three years, low risk every five. Re-inspecting 1,400 facilities on one cycle would have swallowed the service whole. The risk-based cycle puts the same people on the buildings that can actually hurt them.
- **Decisions supported at the door.** A two-page risk sheet gives the first commander on scene what they need for a dynamic risk assessment. The tactical plan carries the detail for the incidents that turn complicated, down to hazardous substance locations, UN numbers, isolation distances and firefighting media restrictions.
- **The board covered as well as the fireground.** A crisis management plan written for the senior team gave them the clarity to make critical decisions under pressure, rather than improvising alongside the responders.
- **One standard of training.** Everybody involved in emergency response now trains to a consistent standard. Previously it depended on who you were and where you sat.
- **Capability that stayed in the building.** Three months observing Berwicks inspections, three months being coached through their own. After six months the client's personnel could run the inspections themselves and senior management had the assurance that quality would hold.
- **120 years of operational experience transferred.** The Berwicks team on site brought the combined operational background the client's service did not yet have and left it behind.

Before and after

MEASURE	BEFORE	AFTER
Regulatory position	Preparedness challenged, evidence incomplete	Regulator: industry best practice
Risk information	No structured system across the estate	Policy, process and products covering 1,400+ facilities
Inspection and review	Unprioritised and ad hoc	Three tranches by hazard, then annual, three yearly or five yearly by risk

MEASURE	BEFORE	AFTER
Information at an incident	Held by individuals, hard to find	Two-page risk sheets and tactical plans, distributed in advance
Board readiness	No dedicated crisis management plan	Plan in place, senior team clear on its decisions
Training	Inconsistent across responders	One standard for everyone in the response organisation
Ownership	Dependent on external support	Client personnel running the process in-house

What the client said

> ***“The support that the Fire & Rescue Service have received from the Berwicks team has been exceptional and has enabled us to move forward with confidence.”***
>
> **Senior Fire and Rescue Officer, nuclear decommissioning operator**

JOIN THE DOTS

Berwicks looks across the whole operation, builds response capability that stands up to independent scrutiny and embeds it with the people who will use it.

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IMPORTANT QUALIFICATION

The client is not named at their request. Regulator and client comments are reported as they were given to Berwicks. Timescales and volumes reflect the programme as delivered on site. No financial estimates appear here because none were commissioned. The value described is regulatory, operational and organisational.