



# A regulator's viewpoint

## Nuclear sector plan

A radioactive substances regulation case study

The nuclear sector has made giant steps over the last 20 years in reducing its impact on the environment, but the industry still faces major challenges. We introduced our nuclear sector plan in 2005. It's a prime example of how we are working with industry to achieve real environmental improvements. Each year we report on the performance of the nuclear sector. As we publish this year's report, we take a look at one company that is going the extra mile.

### **Plan for change**

Over the past 10 years we have developed and implemented a modern, risk-based approach to regulation. We want to work alongside the industries we regulate, focusing our effort where it will have the most benefit. We have developed an environmental improvement plan ('sector plan') for each industry we regulate.

The nuclear sector plan, one of the first we published, provides an overview of the industry in England and Wales. Developed in discussion with the nuclear industry, it looks at those parts of the sector that have the most impact on the environment. It identifies what the sector, we and others must do to reduce these impacts against a number of

environmental objectives. It covers statutory responsibilities, but goes further by including voluntary activities the industry has agreed to carry out.

We are pleased that the industry is supporting the sector plan and that it has agreed to use it to monitor and report on the impact of its activities.

### **Nuclear performs well**

Our second annual report, describing performance in 2007, showed improvements in a number of areas.

The sector is using fewer natural resources (water and energy), greenhouse gas emissions are small and reducing, and discharges of pollutants to the environment are generally falling.

## Leading by example

There are a number of companies leading the way in meeting the objectives of the nuclear sector plan. Magnox North's Oldbury site in Thornbury, South Gloucestershire is one of only two remaining Magnox reactor sites still operating. Since 1967 the site has produced electricity around the clock, supplying on a typical day enough electricity to meet the needs of a city one and a half times the size of Bristol.

Our Nuclear Regulation Group (NRG) carries out an annual review of the site to report on its environmental performance against the nuclear sector plan. Paul Mountford Lister is our regulator for the Oldbury site.

**“The Oldbury site run by Magnox has produced an excellent report against the nuclear sector plan. Managers have benchmarked themselves against their sister sites as well as against the rest of the nuclear industry, using the plan and performance indicators we developed with them.”**

Paul Mountford Lister, regulator

## Major environmental benefits

The largest source of waste at Oldbury is silt. It is dredged from the cooling water intake in the River Severn tidal reservoir and deposited on land at the site. Although they are landfills, Oldbury's three silt lagoons bring major environmental benefits. One lagoon is important to wetland birds while the other two are designated as 'Sites of Nature Conservation Importance (SNCI) due to their ornithological and botanical interest.

Biodiversity action plans (BAPs) are part of the nuclear sector plan and Oldbury is one of many sites where they are being implemented.

As part of the BAP, staff have been regenerating the site's 150-tree cider orchard, as Oldbury's Melissa Ledger explains.

“Our Oldbury site is in a rural location. We recognise the importance of managing a BAP to ensure we meet our responsibilities towards sustainability and continual environmental improvement.”

Orchards are a particularly important habitat in South Gloucestershire. These habitats are slowly being lost across the UK, while their importance in biodiversity is increasing.

Oldbury's cider orchard had become overgrown and the trees were



Oldbury's cider orchard

unproductive as they were diseased and unpruned. Regeneration work involved the local community as much as possible and it is hoped larger-scale cider production will begin again next year. Future work will include improving the area for birds and wild flowers.

### **Real difference to the environment**

Phil Heaton, a team leader within the NRG, is delighted with the progress made.

“This is exactly the response we want from industry, working in partnership with us to make a real difference to the environment. As one example, we are not only working with Oldbury to keep radioactive discharges down. We are also pushing for a better

understanding of nitrogen oxide emissions from the site, which is going beyond the sector plan requirements. This approach will allow us to use site data to evolve our guidance.”

### **Moving forward**

We are reviewing the nuclear sector plan with industry to build on the successes of the current version, but also to look ahead to the challenges that face a rapidly-changing industry.

### **Further information**

We will be updating the nuclear sector plan in 2009. For more information visit our website <http://www.environment-agency.gov.uk/nuclear>.