

**Report of the workshop held with
members of the Women's Institute**

**Friday 25th February 2005
Denham College, Oxfordshire**

**Produced
by
Sue Tibballs**

**for
Nirex**

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1. Background to the Day

The idea for this workshop first arose at the Women's Institute's (WI) 2004 annual conference in Sheffield. Nirex had a stand at the conference, and was struck by the high level of interest from WI members. Discussions with various WI officers confirmed that the WI has a long-standing interest in many aspects of the radioactive waste management debate – science, environment, rural affairs – and that a day-long workshop held at Denham College would be well received. Invitations by the WI were extended through the WI science co-ordinators network.

The costs of the conference, including participants' travel costs, were paid by Nirex. This report has been written by Sue Tibballs, the independent Chair of the workshop, as a record of the day. It will be circulated to participants for comment before being placed on the Nirex website, and we hope, on the Women's Institute's website.

2. Participants

Sue Tibballs, Chair, Independent Consultant. Sue works as a freelance consultant largely on issues of equality and environmental sustainability. She has worked with Nirex for over five years contributing strategic and communications support. Sue is also an associate of DEMOS, an associate of the Future Foundation, and is currently chair of Fawcett.

Members of the Nirex team who hosted the day:

Chris Murray, Managing Director

John Dalton, Corporate Communications Manager

Cleve Forty, Package Assessment Manager

Members of the Women's Institute who took part:

Violet B Bryer

Janet Clemas

Pam Fisher

Jackie Gregory

Sandra Mistlin

Wendy Robinson

Margaret Rogers

Mary Sykes

Judith Underwood

Brenda Yates

3. Agenda

Agenda, Friday 25 February 2005

Venue:- Denman College, Marcham, Abingdon, OXON, OX13 6NW

- 10.00** Opening reception with tea and coffee
- 10.30** Welcome and introduction to the day
Sue Tibballs, Independent Consultant
- 10.45** Introduction to Nirex and Radioactive Waste Management
Chris Murray, Nirex Managing Director
- 11.30** **Morning tea and coffee break**
- 11.45** Breakout Groups 1:
- Discuss: "If we agree that radioactive waste exists and so should be dealt with, what issues or concerns are likely to arise in finding a *safe, environmentally sound and publicly acceptable* management option?"
- 12.30** Come back together to identify priority issues
- 13.00** **Lunch**
- 13.45** Breakout Groups 2:
- Discuss: "Nirex has argued that past policy has failed because insufficient attention was paid to the social science of radioactive waste management. How do you think society should be involved in decision-making? What would this mean in practice for organisations like yours?"
- 14.30** Come back together to identify priority issues
- 15.00** **Afternoon tea and coffee break**
- 15.15** The Future – key future messages from Nirex
David Wild, Nirex Head of Corporate Communications
- Feed-back or comments about the day or any further interest queries
- 16.00** Workshop Ends – wrap up
Sue Tibballs, Independent Consultant

4. Introduction to Nirex and Radioactive Waste Management (Chris Murray, Managing Director, Nirex)

Chris Murray opened the day with a presentation setting out Nirex's current role, and giving an overview of radioactive waste management policy in this country. We have not included Chris's actual presentation because it included a number of graphics that require a verbal explanation. Instead, we have written up the main points here. However, if you would like further information, or have questions, please visit www.nirex.co.uk or contact us at the address given below:

Nirex
Curie Avenue
Harwell
Didcot
OX11 0RH

About Nirex

The Nuclear Industry Radioactive Waste Executive (NIREX) was set up in 1982 to research develop and operate radioactive waste disposal facilities on behalf of the nuclear power industry. In 1985 we became a limited company – United Kingdom Nirex Ltd – known as Nirex. Nirex shares, until very recently, have been owned by waste producers, British Energy, British Nuclear Fuels Limited (BNFL), UKAEA, etc., with the Department of Trade and Industry holding one golden share.

As of the 1st April 2005, however, Nirex's status has changed. A new Company Limited by Guarantee (CLG) is being set up by Government, jointly owned by Department for Environment, Food and Rural Affairs (DEFRA) and Department for Trade and Industry (DTI). It is acquiring the shares in Nirex Ltd, so Nirex will no longer be owned by the industry. This represents a huge step forward for Nirex, as we have long argued that our lack of independence severely limits our legitimacy.

The current Nirex Mission is:

"In support of Government policy, develop and advise on safe, environmentally sound and publicly acceptable options for the long-term management of radioactive materials in the UK".

To fulfil our Mission, we undertake four main objectives:

- a) **Carry out scientific, engineering and social science research to help develop safe and environmentally sound options for dealing with radioactive waste in the long term** (Nirex does now deal with high level waste (HLW), such as plutonium

and uranium. A concept for managing these kinds of waste is being developed through international collaboration.)

Currently, there is no formal policy on what to do with intermediate level waste (ILW) in this country. The last time we had a national policy was in the mid-90's when it was deep geological disposal. But the policy failed, largely because of public opposition.

This current Government have said that there is no policy at present, and that it wants to review all options. To do this they have set up a consultation body, the Committee on Radioactive Waste Management (CoRWM), which is currently considering all options in order to make a recommendation in July 2006. To find out more about CoRWM visit: www.corwm.org.uk.

Nirex agrees that all options for managing radioactive waste need to be fully considered and evaluated, and is working closely with CoRWM in support of its deliberations. (Although some options that initially seem attractive, like sending the waste into space or exporting it overseas, are neither safe or ethical). The viable options all involve the waste being stored in this country, but with varying views on whether this should be on the surface, just under the surface or in a deep, geological store.

Nirex currently works to the concept that we believe provides for the greatest long-term safety. This is the Phased Geological Repository Concept in which waste is packaged and then stored in a facility between 450m and 900m underground. The Phased Geological Repository Concept is a multi-barrier, multi-phased approach, based on storing wastes deep underground, beyond disruption by man-made or natural events. It is so called because we have worked over the last few years to incorporate extended **monitoring** and the option of **retrievability** into the Nirex concept. These ideas have been incorporated as a result of extensive consultation with a range of interested groups and individuals.

One of the important features is that choices on how, and if, to proceed, are left in the hands of future generations without placing an undue burden upon them. This is achieved by dividing the plan into a number of phases.

It is also the option favoured by those other countries that have an active waste management policy, including Finland, Sweden and the USA.

b) Set specifications and standards based on a phased deep geological repository concept and advise the industry on how to treat and package radioactive waste through the application of the Nirex Letter of Compliance process¹

Given there is no formal policy on what to do with ILW, Government have agreed a de facto policy which is that current waste arisings should be packaged in a way that is consistent with Nirex's Phased Geological Repository Concept (PGRC). Under this system, waste producers have to obtain a 'Letter of Compliance' (LoC) from Nirex which says that the waste is being packaged in accordance with Nirex standards and specifications. These ensure that the waste is being packaged and stored in a way that is safe in the short-term and that is consistent with the PGRC concept, and other possible long-term options. Different types and sizes of packaging are recommended by Nirex, depending on the type of waste to be stored.

Currently, only 6% of Britain's ILW has been packaged with final letter of compliance approval. 16% has been issued with approval, but has not yet been packaged. 22% is currently within the LoC assessment process. 56% has yet to be addressed.

c) Maintain an inventory of radioactive waste in the UK in conjunction with Defra (the Department for Environment Food and Rural Affairs)

In the UK a diverse range of radioactive waste types has been generated through various activities. Every three or four years we publish an Inventory of the quantities of each type of waste. In the last 2001 summary it shows about 2,500m³ of high-level waste and 250,000m³ of intermediate level waste will need to be managed. Currently there are 34 major waste producers' sites in the UK.

¹ Waste producers are responsible for managing their radioactive waste while plant is operational and awaiting decommissioning, which can include the recovery, treatment and conditioning of raw wastes and their storage in a passive form. Nirex recognises the increasing pressure from regulators and Government to reduce potential hazard, and is committed to helping waste producers achieve their short-term hazard reduction goals by streamlining its own processes to help ensure that these are consistent with long-term waste management policy.

- d) **Communicate with all stakeholders, including the public, to build understanding and develop ways of addressing the wide range of concerns and views surrounding the management of radioactive waste, so that these influence our work.**

This final aspect of our work has developed largely in response to the policy failure of the late 90's. We have invested heavily in trying to understand what went wrong at that time, and to respond to past failure.

Nirex's learning falls into three areas:

Structure: Need right governance structure to ensure accountability

- Institutional framework that gives issues visibility: Nirex should be independent from the nuclear industry
- Public interest to be at the heart of long-term management
- Broad societal involvement

Process: Must be open, transparent and accountable

- Clear decision points over long-term waste management options
- Clarity from the outset over how these decisions are taken
- Review of all technical options
- Stakeholder consultation and involvement
- Open siting process - criteria and weightings decided in advance

Behaviour: Be an informed and responsive guide, not elite specialist

- Work at stakeholders' speed
- Listen to people who have an interest
- Involvement not information
- Add 'preview' to review
- 1998 Transparency initiative

At the heart of what we have learnt since the late 90's is the recognition that radioactive waste management is as much a social and ethical issue as a scientific and technical one. And the reasons why past policies have failed has been more to do with a failure to understand the social and ethical implications of radioactive waste management, rather than a failure of the technical thinking and expertise. It is for this reason that we have placed such a priority on understanding the social science of radioactive waste management, and made this a central component of our work programme.

5. Report of first breakout session

For the first breakout session, participants were divided into two groups. The groups were facilitated by John Dalton and Cleve Forty from Nirex, and the Chair, Sue Tibballs, moved between the groups. Notes were written up on a flip chart by the facilitators. At the end of each breakout session, the whole group re-convened, and one nominated participant from each group reported back the main points from their discussion.

The first of the two break out sessions addressed the following proposition:

"If we agree that radioactive waste exists and so should be dealt with, what issues or concerns are likely to arise in finding a *safe, environmentally sound and publicly acceptable* management option?"

The conversation opened with a discussion surrounding the first part of the proposition: **"If we agree that radioactive waste exists and so should be dealt with"**.

This issue must be addressed

Participants quickly agreed that this is an important issue and that "it is not an option to do nothing". It was felt that we have to concentrate on the fact that radioactive waste exists, and that it is the responsibility of today's generations to ensure the waste is responsibly managed for future generations. It was acknowledged that some feel it is impossible to talk about the waste without talking about the wider nuclear industry. But this group felt the waste is essentially a legacy issue (most current waste was created in the 50's and 60's) and therefore should be dealt with without *"getting tied up in the wider debates about the future of the nuclear industry"*.

There was a strong sense of needing to take responsibility. *"We must sort it out"* and *"we need to get it done"* captured the wider sentiment.

The waste would be safer deep underground than stored on the surface.

Participants had heard during Chris Murray's presentation that radioactive waste is currently in surface storage. It was quickly established that participants did not think this arrangement was acceptable in the long-term, and that we should move towards a safer, and more sustainable option.

Participants discussed other options currently available, such as sending waste to space, or exporting it overseas, and quickly concluded that these options would not be safe or ethically acceptable. There was a common view that this country should deal with its waste, and other countries theirs. One participant commented that by the same token, we should not be taking other country's waste.

The group agreed that, in light of the evidence given by Nirex, and given that it is the option being pursued by other countries, that deep geological disposal did appear to be the safest option for managing radioactive waste in the long-term. [It should be noted that other management options were not discussed in detail, so the conclusions drawn should be seen as views formed after a presentation from Nirex, rather than after a comprehensive review of all options. Other more in-depth public consultations have been held in recent years, however. Please get in touch if you would be interested in learning more about the results of these other exercises.]

There is a public safety issue

It was also acknowledged that there are risks with leaving the waste where it is, in surface storage. A terrorist attack, for example, poses a much greater risk if surface waste could be targeted. It was also said that we should *"hurry up and package the rest of the waste that already exists"* so that it as safe as it can be in the short-term.

The discussion then turned to the second part of the proposition:

"what issues or concerns are likely to arise in finding a safe, environmentally sound and publicly acceptable management option?"

Communicating with a general audience

The first issue to be raised concerned the problems presented by a problem that is science-based. It was acknowledged that there is a real problem trying to engage the general public in such an issue when most people do not have science backgrounds. Participants talked of the benefits of talking about the 'good' aspects of radiation, for example in medical treatment of cancers, and making the issue relevant to people's lives. There was a strongly held view that the issue should not be communicated by experts - *"I am very cynical about 'experts'"*. Rather, the debate needs to be made accessible, and ways found to help the public to be involved. *"There needs to be a national education of the public"*, as one said, and *"There should be a TV programme to raise awareness"*.

Science is misunderstood, and often not trusted

Underlying the challenges of trying to communicate with a general audience, participants also felt that science has its own reputational problems. As an audience mostly of scientists, this group felt that unrealistic expectations were made of science. Science is expected to guarantee outcomes, and give firm promises, and yet *"Science cannot give 100% guarantees – there is never certainty. But the media want this."*

The time-spans involved are difficult to manage

Another issue raised was the psychological reaction to an issue that has implications for hundreds of thousands of years. Participants acknowledged that this was difficult for

people to deal with – we are not used to having to think about the consequences of current decisions over such a long period of time. This contributes to the wider sense of insecurity and fear, with a general sense that people are *'out of their depth'*. It was also recognised that these time-spans mean that normal cycles of Governance are not set up to deal with what are effectively inter-generational responsibilities – Governments, for example, are elected for four or five year terms. This is, as one participant put it, *"Quite an enormous project"*.

The idea of a single repository raised some concerns

Concern was expressed about all the waste being in one location. This, it was argued, made the risk of mis-management or attack even higher. It also meant that one community alone would have to accept the waste. Wouldn't it be fairer if it were shared around? At the same time, participants could see the benefits of all the waste being in one place. It would make transportation simpler, and it would make monitoring and protection easier.

Not In My Back Yard !

The NIMBY phenomenon was raised. Participants could see that this is likely to be a major barrier to finding a location – or a 'host community'. It was recommended that policy-makers and organisations involved in delivering the policy needed to work closely with local communities. A wide range of views should be canvassed, and an open debate held. It was felt that there might be a case for compensation – e.g. lower community charge. It was also acknowledged that there could be benefits for a host community. For example, where waste is currently stored on the surface, they might feel safer knowing the waste is stored deep underground.

6. Report of second break out session

At the request of the delegates, the second of the two break out sessions was conducted as one group and addressed the following proposition:

"Nirex has argued that past policy has failed because insufficient attention was paid to the social science of radioactive waste management. How do you think society should be involved in decision-making? What would this mean in practice for organisations like yours?"

Again this proposition was broken down into two parts: the group first discussed who should be involved in decision-making.

The following groups were identified as having a part to play in the decision about what should happen with radioactive waste.

- Government
- Industry
- Green groups
- Academics
- Civil society
- Local communities

Participants felt that while Government should take overall responsibility, it was vital that all of these groups were involved, partly because they all bring different expertise and interests, and partly because individual members of the public will want to hear what each of these constituencies is saying in forming their own views.

Participants went on to discuss the way any high level public debate in the future would be likely to progress. Some anticipated that there would be opposition from environmental organisations, although it was noted that this stance is likely to be bound up with a wider opposition to nuclear power. As had been discussed in the morning, participants acknowledged that the future of our energy supply is an extremely important and pressing social issue – and the role of the nuclear power industry, in particular. But they still felt strongly that this should not stop us from dealing with the waste.

It was also commented that the media were likely to look for dissent from any proposed policy, because they also want to show stark differences of view. In view of which, the direct links with the public and local communities were felt to be all the more important.

Turning to the question of how an organisation like the WI could be involved, participants felt this was an issue members of the WI would be interested in, if they were exposed to the debate. However, it is not a subject many members would be likely to self-identify as relevant to them. This goes back to the points made in the morning about science-based

issues not being accessible to a general audience. However, it was felt that other members may feel encouraged to learn more, and perhaps more confident about being able to participate in the discussion, on hearing about the discussion at today's workshop.

Some specific suggestions were made:

- The policy-making process of the WI was described, and it was suggested that a motion was tabled for the AGM.
- It was suggested that science co-ordinators could extend a general offer for Nirex to be invited to speak to local or regional groups.
- It was felt that making the report of the workshop available on the website would help raise the profile of the issue, and make the debate accessible.
- It was suggested that an article be produced for the WI publication "Home and County".
- Individual members also unanimously agreed that they were interested in how the debate develops, and agreed to read a publication, currently in draft, that sets out Nirex's story of the last six, seven years.

7. The future and feed-back

A proposed name change

The workshop closed with a more in-depth discussion of the implications of Nirex's soon to be (at time of writing, actual) independence from the nuclear industry. Nirex took the opportunity to ask participants about one consequence that was currently being discussed – the question of whether Nirex should change its name to reflect its new status.

Nirex explained that given originally the acronym 'NIREX' stands for Nuclear Industry Radioactive Waste Executive, the company felt it was no longer accurate to keep this same name. However, Nirex also said it is aware that name changes can arouse suspicion, and that it was vital that its audiences did not see any change as a 'whitewash' or a 're-brand'.

WI participants said they personally would not have any difficulty with a name change. The point was made that any new name should be appropriate – i.e. should state clearly what the organisation does, and not attempt to 'dress it up' in any way.

Nirex said that feed-back was helpful, and they would let people know the result of their on-going deliberations.

Feed-back

Initial feedback, on both sides, was that the workshop had been stimulating, informative and useful. An analysis of the evaluation forms given to participants on the day is included as an annex to this report.

Report of workshop with members of the Women's Institute

Annex

ANALYSIS OF WI WORKSHOP FEEDBACK FORMS

Note: Workshop took place on 25 February 2005 at Denman College, Marcham

Questions:	Excellent	Good	Satisfactory	Poor	Total	
How useful did you find the pre-course information ?	2	0	1	1	4	6 no response
What was the clarity of initial invitation	1	2	3	1	7	3 no response
What was the clarity of venue information	3	2	3	0	8	2 no response
What was the clarity of accommodation arrangements	5	3	0	0	8	2 no response
How did you rate the format of the day	5	5	0	0	10	
How did you rate the Charing of the event	6	4	0	0	10	
How did you rate the facilitation of the break out groups	2	5	2		9	1 no response
How useful did you find the presentation on Introduction to Nirex and radioactive waste management (Chris and John)	6	4	0	0	10	
How useful did you find the plenary session 1	1	8	1	0	10	
How useful did you find the plenary session 2	3	7	0	0	10	
Could everyone who wanted to contribute						10 yes 0 no
How did you find the venue ?	5	4	0	0	9	1 no response
Meeting room	3	4	2	0	9	1 no response
Discussion room	3	2	0	0	5	5 no response
Catering	4	5	0	0	9	1 no response
Accommodation	1	1	0	0	2	8 no response

Analysis by percentage	Excellent	Good	Satisfactory	Poor	Total	
How useful did you find the pre-course information ?	50%	0%	25%	25%	100%	
What was the clarity of initial invitation	14%	29%	43%	14%	100%	
What was the clarity of venue information	38%	25%	38%	0%	100%	
What was the clarity of accommodation arrangements	63%	38%	0%	0%	100%	
How did you rate the format of the day	50%	50%	0%	0%	100%	
How did you rate the Charing of the event	60%	40%	0%	0%	100%	
How did you rate the facilitation of the break out groups	22%	56%	22%	0%	100%	
How useful did you find the presentation on Introduction to Nirex and radioactive waste management (Chris and John)	60%	40%	0%	0%	100%	
How useful did you find the plenary session 1	10%	80%	10%	0%	100%	
How useful did you find the plenary session 2	30%	70%	0%	0%	100%	
Could everyone who wanted to contribute						100% Yes
How did you find the venue ?	56%	44%	0%	0%	100%	
Meeting room	33%	44%	22%	0%	100%	
Discussion room	60%	40%	0%	0%	100%	
Catering	44%	56%	0%	0%	100%	
Accommodation	50%	50%	0%	0%	100%	