



# ENVIRONMENTAL IMPACT ASSESSMENT WORKSHOP

Environmental Impact Assessment Implementation in United  
Kingdom and European Community Requirements

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## Structure of Presentation



- Applicable UK and European Community Legislation and Guidance on Environmental Impact Assessments (EIA)
- Key UK requirements for Environmental Impact Assessments and Environmental Statements (ES)
- Typical UK Environmental Impact Assessment for a major Decommissioning Project

## Applicable UK/European Community Legislation for Environmental Impact Assessments



- UNITED KINGDOM GOVERNMENT. Town and Country Planning (Assessment of Environmental Effects) Regulations 1988 (as amended 1994)
- UNITED KINGDOM GOVERNMENT. Town and Country Planning (Environmental Assessment and Permitted Development) Regulations 1995 (SI 1995/417) ("the EA and Permitted Development Regulations"),
- EUROPEAN COMMISSION. Environmental Assessment. Council Directive 85/337/EEC of 27 June 1985 and amendment Council Directive 97/11/EEC of 3 March 1997. O.J. No. L73, 14.3, 1997. P.5.
- EUROPEAN COMMISSION. Commission Recommendation of 7 December 1990 on the Application of Article 37 of the Euratom Treaty
- UNITED KINGDOM GOVERNMENT. Statutory Instrument 1999 No. 2892. EUROPEAN COMMUNITIES. Nuclear Reactors (Environmental Impact Assessment for Decommissioning) Regulations 1999.
- EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT. Environmental Procedures. September 1992. Revised 1996.

## Content of an Environmental Impact Assessment – Key Features



- Detailed review of all potential contaminative sources: radioactive, chemical and hazardous, with their potential release mechanisms into the environment during the project works
- Reasoned view of the alternative options for carrying out the works
- Selection of the best practicable environmental option (BPEO) for carrying out the works within the identified options
- Identification of the baseline conditions around works area prior to commencement to provide basis for demonstration that any contamination releases, etc, during the works are small and agree with predictions
- Identification of potential fault conditions, assessment of their environmental impacts and determination/assessment of possible mitigation, minimisation and recovery options

# Environmental Statement Requirements



- Description of project, including physical characteristics, land and/or sea-use requirements during construction and operational phases, processes to be used with resource implications, estimates by type and quantity of expected emissions, residues, etc, from proposed operations
- Outline of main alternatives studied, option selected, reasons for choice, taking into account environmental factors
- Description of aspects of the environment likely to be significantly affected by the proposed project, including population, fauna, flora, soil, water, air, climatic factors, material assets, e.g. architectural and archaeological heritage, landscape, and all interrelations
- Description of likely direct and any indirect effects of proposed project on the environment. This includes any secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects, resulting from existence of project, use of natural resources, emission of pollutants, creation of nuisances, elimination of wastes, etc. Description of methods used to assess the impact of these effects on the environment
- Description of measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment
- A non-technical summary of the above
- An indication of uncertainties, e.g. technical deficiencies, lack of data, etc, in the assessment

# Contents of the Environmental Impact Assessment for a major UK Decommissioning Project



- 1. INTRODUCTION
- 2. DATA REVIEW
- 3. ENVIRONMENTAL LEGISLATIVE CONTEXT  
Introduction, risk assessment and decommissioning, Best Practicable Environmental Option, other environmental legislation, Environmental Assessment, waste, other Relevant Legislation
- 4. RISK ASSESSMENT  
Potential pollutant linkages, assessment of significance, assessment methodology, summary of risk assessment results, risks to human health from chemical and radioactive contaminants, risks to water sources, assumptions and limitations and conclusions
- 5. SELECTION OF THE PREFERRED DECOMMISSIONING OPTION  
Introduction, stakeholders, potential decommissioning options and their review, detailed decommissioning assessment, HAZOP analysis, indicative costs, options assessment and identification of preferred option
- 6. RISK-BASED OPERATIONAL EXPOSURE LEVELS

## Contents of the Environmental Impact Assessment for a major UK Decommissioning Project (2)



### ■ 7. HAZARD ANALYSIS DURING IMPLEMENTATION OF PREFERRED DECOMMISSIONING OPTION

Introduction, hazard identification, risk analyses for chemical, hazardous and radioactive contaminants - background and purpose, conceptual site model, summary of results, impact of contaminants (normal operation and fault conditions, quantification of risks, conclusions

### ■ 8. DECOMMISSIONING OPTION DEVELOPMENT

Health and safety measures, containment arrangements, monitoring and sampling regimes, radiological, chemical and human monitoring, monitoring, confined space workings, decontamination procedures, security and emergency arrangements, operator training

### ■ 9. IMPACT ASSESSMENT FOR THE DECOMMISSIONING OPERATION

Introduction, scope of impact assessment, description of the proposed project, policy framework, baseline environmental characteristics, overview of the site, approach, existing land, etc, use, flora and fauna, geology, topography and soils, hydrogeology, hydrology, air quality, climate, noise and vibration, radioactivity, infrastructure, cultural and archaeological heritage, prediction and evaluation of environmental impacts, methodology, assessment of environmental impacts and proposed mitigation measures and summary of residual impacts

### ■ 10. CONCLUSIONS

## Key Differences between Russian and Donor Practices on Total Risk Management on environmentally sensitive Projects



- Stakeholder involvement in the process of identifying options and selection criteria, and selection of preferred option/management strategy, i.e. optioneering and BPEO approach, continuing risk management
- Full consideration of options before choice of optimum option and work started
- Extent of up-front assessment and planning
- Total risk management approach throughout project life with regular review and feedback of results of all assessments into management plans/practice, etc.
- Sequence in which assessments are made and revalidation process

## Key Differences between Russian and Donor Practices on Total Risk Management on environmentally sensitive Projects (continued)



- Adoption of “best practice” throughout all aspects of project
- Compliance with spirit as well as detail of regulations
- ALARA(P) principle applied to all aspects of potential harm or detriment, not simple compliance with “safe” levels
- Broad interpretation of EIA process
- Judgement of “worst case” rather than following predefined scenarios
- Full assessment of conventional safety risks