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الوكالة الدولية للطاقة الذرية

国际原子能机构

International Atomic Energy Agency

Agence internationale de l'énergie atomique

Международное агентство по атомной энергии

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2016-12-08

**Subject:** Invitation to a Practical Training Course on Planning and Implementation of Nuclear Facility Decommissioning and Remediation of Radioactively Contaminated Sites, Argonne, USA, 24 April – 5 May 2017

Dear National Liaison Officer,

I am pleased to invite you to send nominations of suitable candidates to participate in the above-mentioned training course of TC Project INT9/183 – ‘Overcoming the Barriers to Implementation of Decommissioning and Environmental Remediation Projects’. The purpose of the training course and related information are outlined in the attached Prospectus.

For candidates who are selected by the IAEA, the IAEA will cover the cost of return international travel from the home country to Argonne, USA and provide a stipend for the duration of the training course in line with IAEA rules and procedures.

Please submit nominations to the IAEA online through the Technical Cooperation Department's InTouch system (<http://intouch.iaea.org>). Only if this is not possible, nominations may be submitted on the Nomination Form for Training Course available on the IAEA website: <http://www.iaea.org/technicalcooperation/How-to-take-part/train-course/index.html>. Completed forms should be endorsed by relevant national authorities and sent to the Programme Management Officer for this project, Mr Andrejs Salmins (IAEA Official Fax: +43-1-26007 or E-Mail [Official.Mail@iaea.org](mailto:Official.Mail@iaea.org)), through the official channels, i.e. the designated National Liaison Office for IAEA matters, not later than **10 February 2017**.

Yours sincerely,

Martin Krause

Director

Division for Europe

Department of Technical Cooperation

Enclosure: Prospectus

# International Atomic Energy Agency

## Practical Training Course on Planning and Implementation of Nuclear Facility Decommissioning and Remediation of Radioactively Contaminated Sites

### PROSPECTUS

- Project Number & Title:** INT/9/183 Overcoming the Barriers to Implementation of Decommissioning and Environmental Remediation Projects
- Place (City, Country):** Argonne National Laboratory, Argonne, IL, USA
- Dates:** 24 April to 5 May 2017
- Deadline for Nominations:** 10 February 2017
- Organizers:** The International Atomic Energy Agency (IAEA) in collaboration with the Government of the United States of America through the Argonne National Laboratory (ANL)
- Host Country Organizer:** Ms Sunaree Hamilton.  
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Email: [Shamilton@anl.gov](mailto:Shamilton@anl.gov)
- Language:** English
- Purpose:** The primary objective of this training course is to provide implementing and regulatory organizations with a global understanding of the key aspects that need to be considered in the planning and implementation of Decommissioning and Environmental Remediation Projects. In line with the overall objectives of TC Project INT 9183 the training course will present those aspects that can constrain or delay project implementation and discuss potential mechanisms that can assist in overcoming these barriers focusing on regulatory and policy aspects; technology and overall human and financial resources and societal aspects.
- Expected Output(s):** The course will enable the participants to understand the fundamentals of the main activities involved in decommissioning projects and associated environmental remediation activities and appreciate the necessary infrastructure that must be put in place to carry on D&ER projects. This overview will enhance their profile and performance in the overall managerial aspects of decommissioning and remediation projects in the planning and/or implementation stage in their home countries thus contributing to facilitating their implementation.

**Scope and Nature:**

The course will take place over a two-week period, providing:

- Lectures on key topics related to policy, regulatory, funding, project planning and management and overall technological/technical aspects including dismantling, decontamination, demolition and site clean-up works of contaminated facilities (land and building structures). Attention will also be paid to stakeholder communication and engagement related issues
- Interactive exercises to allow training course participants to put in practice the key concepts, methods and tools they have been exposed to.

The course will be supported by a wide range of IAEA Safety Standards and NE-Series Reports that are relevant to the topics of Decommissioning and Environmental Remediation. These reports include, but are not restricted to the Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards – General Safety Requirements GSR Part 3 and GRS Part 5. IAEA Safety Guides WS-G-3.1 (environmental remediation) and WS-G-2.4 (decommissioning) and NE-Series Reports on Policy and Strategies for Decommissioning and Environmental Remediation The CIDER Baseline Project Report NW-T-1.10 will also provide important elements for discussion during the course. Appropriate analytical and project management tools for the implementation and oversight, sound and cost-effective strategies in the fields of decommissioning and environmental remediation will be covered.

The course has been evolving for the last five years. Although its core contents are the same, new elements are added every year and more weight has been continuously given to exercises and demonstration events.

The training Modules will be presented using a format based on the proven learning sequence of lecture-, video- and field-observation and discussion. In addition, where applicable, IAEA resource documents such as guides, standards and technical reports will be used to support the lectures.

Over the two-week period the following topics will be addressed:

- Policies and Strategies on D&ER and Regulatory Framework;
- Project planning, management, cost-estimation and decision-making;
- Site characterization, sampling, and analysis;
- Safety Assessment
- Stakeholder involvement and risk communication;
- Data management
- Technology selection and deployment, proven and emerging technologies and materials for environmental remediation and decommissioning
- Site closure and long term stewardship; and
- Other topics specifically of interest to each sub-group.

In addition, the course will provide participants with details on IAEA networking opportunities, e.g. via the Environmental Management and Remediation Network (ENVIRONET) and International Decommissioning Network (IDN), their resources, and opportunities for assisting them.

It is anticipated that the course instructors will include staff from US organisations such as the U.S. Environmental Protection Agency, Department of Energy and Nuclear Regulatory Commission.

**Background Information:**

Despite the fact that significant progress has been achieved in recent years in terms of implementation of D&ER projects, much remains to be done in terms of addressing the legacies from the early development of nuclear energy. There is a need to improve the implementation of decommissioning and clean-up of nuclear fuel cycle and research facilities, the dismantling of research reactors and the remediation of sites affected by past practices developed without proper consideration of environmental aspects. Some countries are moving forward with dealing with these legacies, and accordingly have built up appropriate technical resources and expertise. However, many national programmes still face very significant challenges. This course is an excellent opportunity to provide for the transfer of knowledge and experience with the final goal of contributing to build capacity in Member States in such a way that participants will become better equipped to find means to overcome the barriers that prevent the implementation of decommissioning and environmental remediation (D&ER) projects.

**Participation:**

The training course is open to up to 25 candidates from implementing and regulatory organizations responsible for the oversight of environmental remediation from the target countries.

The target Member States are: Algeria, Argentina, Armenia, Azerbaijan, Bangladesh, Belarus, Brazil, Bulgaria, Chile, China, Croatia, Cuba, Czech Republic, Egypt, Estonia, Georgia, Greece, Hungary, Indonesia, Iraq, Islamic Republic of Iran, Jamaica, Jordan, Kazakhstan, Kyrgyzstan, Kuwait, Latvia, Libya, Lithuania, Malawi, Malaysia, Mexico, Mongolia, Morocco, Mozambique, Namibia, Niger, Pakistan, Peru, Philippines, Poland, Republic of Korea, Republic of Moldova, Romania, Russian Federation, Saudi Arabia, Serbia, Slovakia, Slovenia, South Africa, Tajikistan, The Former Yugoslav Republic of Macedonia, Uganda, Ukraine, United Arab Emirates, United Republic of Tanzania, United States of America, Uzbekistan, Viet Nam and Zambia.

**Participants’  
Qualifications:**

The targeted audience for this training course is project managers, planners and other senior staff at organizations working on (or eventually to be designated as being responsible for) decommissioning/dismantling and environmental remediation projects (e.g., state or national resource management and regulatory agencies, operators of facilities or sites needing or undergoing large scale cleanup actions, national research organizations.)

In order to facilitate and improve the training activities efficacy an on-line training course on environmental remediation and decommissioning will be made available to training course participants through the IAEA CONNECT platform. This training material will cover topics related to remediation and decommissioning works and will enable the training course participants to come to the training course with a broader perspective of the important issues in both areas. While this material will help the participants to cope with the D&ER topics of the course, it will still be necessary that training course participants should have familiarity with D&ER elements. The training modules will be designed to ensure that any participant who currently only has a general idea of the process used to decommission nuclear facilities and remediate contaminated sites will be able to learn a substantial amount of detail about these processes from this course. A basic understanding of some fundamentals of health physics and radioactive waste management is necessary. An important characteristic of those attending will be a genuine interest in becoming knowledgeable in the technical area of decommissioning and/or environmental remediation practice and to become a national and regional resource as well as a facility specific resource for their countries. In this regard, participants should be either currently active in the field, or from organizations willing to make that commitment on their behalf, and willing to offer their assistance on a timely basis to others in their region with similar needs.

Participants must be nominated by the competent national authority of the Member State and, most specifically, by the Member States’ official counterpart for the project.

**Nomination  
Procedure:**

Please submit nominations to the IAEA online through the Technical Cooperation Department’s InTouch system (<http://intouch.iaea.org>). Only if this is not possible, nominations may be submitted on the Nomination Form for Training Course available on the IAEA website: <http://www.iaea.org/technicalcooperation/How-to-take-part/train-course/index.html>. The completed nomination forms should be sent to the Programme Management Officer for this project, Mr. Andrejs Salmins, through IAEA Official Fax (+43-1-26007) or E-Mail (Official.Mail@iaea.org), not later than **10 February 2017**.

**Administrative  
and Financial  
Arrangements:**

Nominating Governments will be informed in due course of the names of the candidates who have been selected and will, at that time, be given full details of the procedures to be followed with regard to administrative and financial matters.

Selected participants from countries eligible to receive technical assistance will be provided with a round trip economy class air ticket from their home countries to Chicago, United States of America, and a stipend sufficient to cover the cost of their accommodation, food, and minor incidentals. Shipment of accumulated training course materials to the participants' home countries is not the responsibility of the IAEA.

The organizers of the training course do not accept liability for the payment of any cost or compensation that may arise from damage to or loss of personal property, or from illness, injury, disability or death of a participant while he/she is travelling to and from or attending the training course, and it is clearly understood that each Government, in nominating participants, undertakes responsibility for such coverage. Governments would be well advised to take out insurance against these risks.