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国际原子能机构

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In reply please refer to: **ME-INT9183-1903003**

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2019-05-21

**Subject: Interregional Workshop on Cost Estimation for Environmental Remediation, Pocos de Caldas, Brazil, from 26 to 30 August 2019**

Dear National Liaison Officer / National Coordinator,

I am pleased to inform you that the International Atomic Energy Agency (IAEA) is organizing the above event under the IAEA technical cooperation project INT9183, "Overcoming the Barriers to Implementation of Decommissioning and Environmental Remediation Projects".

The purpose of the event is to review and discuss the approaches that can be used to prepare a cost estimate for the remediation of radioactively contaminated sites by explaining the terminology used in cost estimation, cost-estimating elements that should be included for each phase of remediation, different methodologies that may be used to estimate costs and how and when to apply them and suggesting a step-wise approach for preparing estimates.

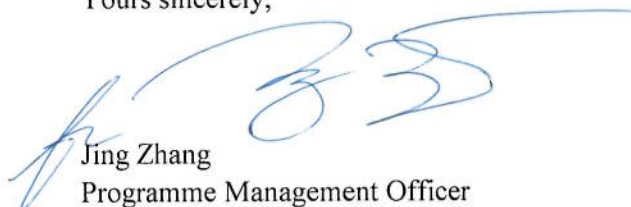
The attached Information Sheet provides further details, including technical and administrative aspects of the event. Selection of participants will be in accordance with IAEA procedures.

The IAEA will provide non-local participants with a round-trip air ticket based on the most direct and economical route between the airport nearest the participant's residence and Pocos de Caldas. Travel details will be agreed with the participants upon receipt of their official nomination. Participants will also receive an allowance from the IAEA sufficient to cover their costs of lodging, daily subsistence and miscellaneous expenses for the duration of the event in line with IAEA rules and procedures.

We would appreciate receiving your country's nominations by **14 June 2019** through the IAEA's InTouch+ platform (<https://Intouchplus.iaea.org>). Should this not be possible, applicants may download the Nomination Form for the course from the [IAEA's webpage](#). Completed forms must be endorsed by the relevant government authority and may be sent to the IAEA, preferably by email to Official Mail - IAEA Mail address [Official.Mail@iaea.org](mailto:Official.Mail@iaea.org), with copy to Mr Jing Zhang [J.Zhang@iaea.org](mailto:J.Zhang@iaea.org). Please be advised that late nominations or replacements of participants after the closing date for nominations will not be accepted.

We look forward to receiving your early response.

Yours sincerely,



Jing Zhang  
Programme Management Officer  
Division for Europe  
Department of Technical Cooperation

Enclosure: Information Sheet



# **Interregional Workshop on Cost Estimation for Environmental Remediation**

Hosted by

The Government of Brazil

through the

Divisao do Laboratório de Pocos de Caldas

Pocos de Caldas, Brazil

**26 to 30 August 2019**

Ref. No.: ME-INT9183-1903003

## **Information Sheet**

### **Purpose**

The purpose of the event is to review and discuss the approaches that can be used to prepare a cost estimate for the remediation of radioactively contaminated sites by explaining the terminology used in cost estimation, cost-estimating elements that should be included for each phase of remediation, different methodologies that may be used to estimate costs and how and when to apply them and suggesting a step-wise approach for preparing estimates.

### **Working Language(s)**

The working language(s) of the event will be English.

### **Deadline for Nominations**

Nominations received after **14 June 2019** will not be considered.

## Expected Outputs

The workshop will enable the participants to understand the main aspects involved in cost estimate related to environmental remediation projects and help them to enhance their capabilities to make informed decisions on ways to develop and document cost estimates for environmental remediation projects. This overview will enhance their profile and performance in the overall managerial aspects of remediation projects in the planning and/or implementation stage in their home countries thus contributing to facilitating their implementation.

## Scope and Nature

The workshop will take place over a week period, providing:

Lectures on key topics related to the remediation process, establishment of the end-state, cost estimation process (planning considerations, problem identification and conceptualization, objectives and approaches for the development of cost estimates (budget forecasting, evaluating and comparing of options, evaluating cost proposals for contract awards), steps of the cost estimation process (screening alternatives, detailed analysis of alternatives, steps of the cost estimate process for the selected remedial option, Final Design Stage, Cost checklist, documenting the cost estimate) and funding mechanism;

Site visit to the former uranium mining and milling facilities of Poços de Caldas (with technical discussions on the main features of the site including mine pit, tailings dam, waste rock piles)

Open session with local stakeholders

Interactive exercises to allow meeting 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 e-Learning material, specific NE-Series Report on Guidance for developing cost estimates for environmental remediation projects; Safety Standards and other NE-Series Reports that are relevant to the topics of Environmental Remediation (ER).

The course has been evolving for the last seven 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 workshop Modules will be presented using a format based on the proven learning sequence of lecture-, e-Learning (pre-face-to-face workshop), lectures, discussion and table exercises. In addition, where applicable, IAEA resource documents such as guides, standards and technical reports will be used to support the lectures.

The workshop will provide participants with details on IAEA networking opportunities, e.g. via the Environmental Management and Remediation Network (ENVIRONET) their resources, and opportunities for assisting them

## **Project Background**

Even though 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 remediation of contaminate sites. 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. An important step in this process is the ability to figure out the costs that might be associated with specific project.

Cost estimates in environmental remediation are developed to evaluate remedy selection decisions, waste site clean-up options or assessment of environmental liabilities. The quality and ultimately the accuracy of the cost estimate will depend on the quality of the information available at the time it is prepared, and on the application of the appropriate cost estimation methodology.

This workshop addresses the preparation and documentation of cost estimates associated with key phases of the environmental remediation project life cycle and help participants to take necessary steps to make informed decisions on ways to develop and document cost estimates for environmental remediation projects. To help achieve these goals, the workshop will discuss clear procedures and includes a checklist of cost elements, examples of Work Breakdown Structures (WBSs), Cost Estimating Plans, cost estimating approaches and an overview of potentially suitable remediation technologies.

## **Participation**

The workshop is open to up to 30 candidates from the project implementing entities, state's programme management authorities, as well as regulatory organizations responsible for the oversight of environmental remediation from the target countries.

## **Participants' Qualifications and Experience**

The targeted audience for this workshop 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 clean-up actions, national research organizations.)

In order to facilitate and improve the workshop activities efficacy an on-line training course on environmental remediation will be made available in advance to workshop participants through the IAEA CONNECT platform. This training material covers general topics related to environmental remediation and specific points on cost estimate of remediation projects and will enable the workshop participants to come to the workshop with a broader perspective of the important issues in this area. While this material will help the participants to cope with the Environmental Remediation topics of the course, it will still be necessary that workshop participants should have familiarity with ER elements. A basic understanding of some fundamentals of health physics and radioactive waste management is desirable. An important characteristic of those attending will be a genuine interest in becoming knowledgeable in the technical area of 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.

## Application Procedure

Candidates wishing to apply for this event should follow the steps below:

1. Access the IAEA TALEO page (<https://iaea.taleo.net/careersection/ex/jobsearch.fil>) and complete the Candidate Profile.

2. Be registered on the Nucleus page of the IAEA (<https://nucleus.iaea.org/>).

3. Through Nucleus, access the InTouch+ platform where the Profile is completed (My Profile tab) (<https://nucleus.iaea.org/Pages/InTouchPlus.aspx>).

**NOTE:** The email used for TALEO and Nucleus must be the same. If not, the candidate's profile will not appear complete.

4. On the InTouch + platform, under the 'My InTouch +' tab, the candidate needs to:

a. select the institute / organization that he/she works at / represents ('My Institute' section);

b. click on the link called '**Refresh Personal History Form**' to update the system, *otherwise the nominations submitted will have these fields empty and it will not be possible to evaluate them during the selection of candidates* ('IAEA Recruitment Platform' section).

**NOTE:** Once the above steps are finalized, the candidate's profile will appear as completed and he/she can apply for Technical Cooperation events.

5. In the InTouch+ platform (<https://intouchplus.iaea.org>), in the 'Applications' tab, search by the event number provided in the invitation.

The help for each step is located at the top of the page. For additional help on how to register, create a profile and apply for an event, please refer to the online guide and training videos available under the following links: [how-to guide](#) and [training videos](#). Any issues or queries related to the new system can be addressed to [InTouchPlus.Contact-Point@iaea.org](mailto:InTouchPlus.Contact-Point@iaea.org) or [TC-AIPS-PL4.Contact-point@iaea.org](mailto:TC-AIPS-PL4.Contact-point@iaea.org).

Should this not be possible, applicants may download the Nomination Form for the ME from the IAEA website <https://www.iaea.org/services/technical-cooperation-programme/how-to-participate>.

Applications should contain sufficient information to establish that the nominees have the required qualifications. Please note that the information regarding LANGUAGE SKILLS, EDUCATION AND WORK EXPERIENCE is exported from TALEO. If an applicant's profile in TALEO is not updated, the information in INTOUCH+ for these sections appears as empty and the candidates cannot be evaluated. Completed applications need to be endorsed by the relevant national authority, i.e. the National Liaison Office and submitted through the established official channels.

## **Administrative and Financial Arrangements**

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

Selected participants will receive an allowance from the IAEA sufficient to cover their costs of lodging, daily subsistence and miscellaneous expenses. They will also receive either a round-trip air ticket based on the most direct and economical route between the airport nearest their residence and the airport nearest the duty station through the IAEA's travel agency American Express, or a travel grant, or they will be reimbursed travel by car/bus/train in accordance with IAEA rules for non-staff travel.

## **Disclaimer of Liability**

The organizers of the event 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 course, and it is clearly understood that each Government, in approving his/her participation, undertakes responsibility for such coverage. Governments would be well advised to take out insurance against these risks.

## **Note for female participants**

Any woman engaged by the IAEA for work or training should notify the IAEA on becoming aware that she is pregnant.

The Board of Governors of the IAEA approved new International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources. The Standards deal specifically with the occupational exposure conditions of female workers by requiring, inter alia, that a female worker should, on becoming aware that she is pregnant, notify her employer in order that her working conditions may be modified, if necessary. This notification shall not be considered a reason to exclude her from work; however, her working conditions, with respect to occupational exposure shall be adapted with a view to ensuring that her embryo or foetus be afforded the same broad level of protection as required for members of the public.

## IAEA Contacts

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