

## Task Group 98: Application of the Commission's Recommendations to Exposures Resulting from Contaminated Sites from Past Industrial, Military and Nuclear Activities



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### Mandate

The objective of Task Group 98 is to develop a report that describes and clarifies the application of the Commission's Recommendations on radiological protection of workers, the public, and environment to exposures resulting from sites contaminated due to past industrial, military and nuclear activities.

### Scope

The scope of the report will cover sites contaminated by residual radioactive material arising from past industrial, military and nuclear activities that were never subject to regulatory control or that were subject to regulatory control but not in accordance with current Recommendations. Emergency response in the case of a severe nuclear power plant accident, and subsequent post-accident recovery phase, are not within the scope of this report.

### Approach

Due to the potential wide variety of contaminated sites and circumstances that could fall under the scope of this report, our approach is to provide generic advice with enough flexibility to be applicable to a wide variety of contaminated sites, supported by a series of site-specific case studies.

The generic advice will consider the characterization of the sources on contaminated sites, identifying exposure pathways, assessment of dose distribution, categories of exposure (occupational & public), protection of the environment, and the setting of reference levels for the implementation of sustainable protection strategies. Stakeholder involvement in all steps of the process will be considered.

The supporting series of site-specific case studies includes six sites encompassing a range of contaminants from past industrial, military and nuclear activities, specifically:

- Rocky Flats Manufacturing Plant (USA);
- Maralinga Nuclear Weapons Test Site (Australia);
- Radium legacies from the Swiss watch industry (Switzerland);
- Techa River liquid discharges (Russian Federation);
- Palomares Nuclear Weapons Accident Site (Spain); and
- Mounana Uranium Mining (Gabon).

Each case study provides background on the past site activities and resultant contamination followed by a description of the experience in applying the Commission's Recommendations to these specific sites including, as appropriate, site characterization, dose assessment, the setting of reference levels, remediation strategies and stakeholder engagement, as well as any lessons learned.



**Left:** Maralinga Nuclear Weapons Test Site main radioactive waste burial trench 12 years after the remediation work had been completed.

Photo courtesy of Stephen Long, ARPANSA.

### Key Messages (Preliminary)

- This report addresses existing exposure situations from contaminated sites.
- Variety and complexity requires a flexible approach to radiation protection.
- Reference levels are the starting point for optimization.
- Reference levels for the public involve stakeholder involvement and are developed considering prevailing circumstances.
- In most cases, remediation workers may be considered and managed as occupationally exposed workers.
- Ionizing radiation may not be the only hazard, requiring an integrated approach to remediation.

### Deliverable & Current Status

The report is currently in the drafting phase, with considerable progress having been made on developing both the generic advice and the site-specific case studies.

The next steps include addressing the comments we have gratefully received from our ICRP Committee 4 reviewers, finalization of the text for consideration by the ICRP Main Commission, followed by public consultation and final publication.