

# Advice by IAEA Mission on Remediation



# Advice 1 :

## Balance, Justification, Optimization

Advice 1. The Japanese authorities involved in the remediation strategy are encouraged to cautiously **balance** the different factors that influence the net benefit of the remediation measures to ensure dose reduction. They are encouraged to avoid over-conservatism which could not effectively contribute to the reduction of exposure doses. This goal could be achieved through the practical implementation of the **Justification and Optimization principles** under the prevailing circumstances. Involving more radiation protection experts (and the Regulatory Body) in the organizational structures that assist the decision makers might be beneficial in the fulfillment of this objective. The IAEA is ready to support Japan in considering revised, new and appropriate criteria.

Advice2 :

## Strengthening Coordination of the National and Local Government

Advice 2. It is appropriate to consider to further strengthening coordination among the main actors, through the establishment of a more permanent liaison **between the Organizational Structures of the Government of Japan and the Prefectural and Municipal authorities.**

## Advice3 : Stakeholders Involvement

Advice 3: The central and local governments are encouraged to continue **strengthening the involvement** of and cooperation between various **stakeholders**. The Government might wish to strengthen the engagement of appropriate universities and/or academia in the process of further developing a stakeholder involvement strategy and implementation methods, which would be based on stakeholder needs and domestic cultural settings.

# Advice5 : Clearance Levels and Reuse

Advice 5: It is important to avoid classifying as “radioactive waste” such waste materials that do not cause exposures that would warrant special radiation protection measures. The Team encourages the relevant authorities to revisit the issue of establishing realistic and credible limits (**clearance levels**) regarding associated exposures. Residues that satisfy the clearance level can be **used in various ways, such as the construction of structures, reclamations, banks and roads.** The IAEA is ready to support Japan in considering revised, new and appropriate criteria.

## Advice 6:

Dose rather than Concentration

Sv rather than Bq/m<sup>2</sup> or m<sup>3</sup>

Advice 6: The team draws the authorities' attention to the potential risk of misunderstandings that could arise if the population is only or mainly concerned with contamination concentrations (surface contamination levels Bq/m<sup>2</sup> or volume concentrations Bq/m<sup>3</sup>) rather than dose levels. The investment of time and effort in removing contamination beyond certain levels (the so-called optimized levels) from everywhere, such as all forest areas and areas where **the additional exposure is relatively low, does not automatically lead to reduction of doses for the public.** It also involves a risk of generating unnecessarily huge amounts of residual material. The Team encourages authorities to maintain their **focus on remediation activities that bring best results in reducing the doses to the public.**

## Advice 8:

### Room for Removing Some of the Conservatism

Advice 8: With respect to the remediation of agricultural areas, the team considers that for the next cropping season there is **room for removing some of the conservatism** (such as that in factors determining the transfer of radioactive caesium from soil to crops) by taking into account **data and factors** published by the IAEA and the results obtained from the **demonstrations sites**. The IAEA is ready to support Japan in considering new and more appropriate criteria.

## Advice9 :

### Utilize existing Waste Infrastructure

Advice 9: With respect to waste in urban areas, the Team is of the opinion that it is obvious that most of the material contains very low levels of radioactivity. Taking into account the IAEA safety standards, and subject to safety assessment, this material might be remediated without temporary and/or interim storages. It is effective **to utilize the existing municipal infrastructure** for industrial waste. The IAEA is ready to support Japan in considering revised, new and appropriate criteria.

Advice 10:

Analyze the benefit in reducing Doses

Advice 10: Before investing substantial time and efforts in remediating forest areas, **a safety assessment** should be done to indicate if such remediation has benefit in reducing doses in order to **invest in areas of greater benefits**. This safety analysis should make use of the results of the demonstration tests

## Advice 12:

### Cooperate between National and Local Government for Waste facilities

Advice 12: The IAEA Mission team encourages Japanese authorities to actively pursue appropriate end-points for the waste in close cooperation with stakeholders. **The national and local governments should cooperate in order to ensure the provision of these facilities.** A lack of availability of such an infrastructure would unduly limit and hamper successful remediation activities, thus potentially jeopardizing public health and safety.