

# Requirements for Project Implementation, Application and Adoption

---

Revision 1

April 10,2014

April 8, 2014

 **MITSUBISHI RESEARCH INSTITUTE, INC.**

Management Office for the “Project of Decommissioning and Contaminated Water Management”

# Contents

Requirements for project implementation and point rating of each project	3
1. Demonstration Project for <b>Seawater Purification Technologies</b>	
2. Demonstration Project for <b>Technologies for Capturing Radioactive Substances from Soil</b>	
3. Demonstration Project of <b>Technologies for the Decontamination of Contaminated Water Tanks</b>	
4. Demonstration Project for <b>Unmanned Boring Technologies</b>	
5. Evaluation of Additional Points	
Application procedures	21
1. Application Form	
2. Submission of Application	
Method and criteria of evaluation	29
1. Method of Evaluation	
2. Evaluation Criteria	

---

## **Requirements for project implementation and point rating of each project**

---

1. Seawater Purification Technologies
2. Technologies for Capturing Radioactive Substances from Soil
3. Technologies for the Decontamination of Contaminated Water Tanks
4. Unmanned Boring Technologies
5. Evaluation of Additional Points

# 1. Seawater Purification Technologies

---

- Details of Demonstration Implementation

In order to demonstrate the decontamination performance of the purification technology of seawater to remove mainly radioactive cesium, radioactive strontium, etc, demonstration tests must be carried out.

- Requirement for Project Implementation  
(Basic Conditions)

- (1) Basic concept of the purification system

- The technology must be capable of radioactive purification without pumping up seawater<sup>(Note)</sup>.

- (2) View regarding the elimination goal

- The proposal must specify a target for removal performance, assuming seawater with cesium 134 concentration between about 5 and 15 Bq/L, cesium 137 concentration between about 10 and 35 Bq/L and a total beta-emitter concentration between 100 and 1000 Bq/L.

- (3) Concepts for maintenance

- The proposal must include suggestions to reduce the maintenance frequency.

- (4) Concepts for secondary waste

- The proposal must include suggestions to reduce the secondary waste.

Note: Regarding the removal of radioactive substances from seawater, the following methods are envisaged: Absorption of radioactive substances, aggregation and precipitation of radioactive substances, and others.

# 1. Seawater Purification Technologies

---

## ● Requirement for Project Implementation (cont.)

(Items for Additional Points)

### (1) Elimination efficiency

Proposals with high performance in the elimination efficiency of radioactive substances will gain additional points.

### (2) Sustainability of elimination effects

Regarding proposals that present views on the sustainability of the elimination performance proposed in purifying seawater, those with longer sustainability will gain additional points.

### (3) Suppression of secondary waste generation

Regarding proposals that present views on the secondary waste generated in purifying seawater, those with a smaller volume of generation will gain additional points.

### (4) Presentation of experimental data

Points will be added to proposals that are able to demonstrate their feasibility with experimental data regarding the basic conditions or additional point items. Extra points will be added for the data presented if they have already been published in a peer-reviewed form, such as in an academic conference or journal, etc. Furthermore, additional points will be gained by proposals which are expected to shorten the time period necessary for validation based on the presentation of experimental data.

## ● Goals and objectives

Technical feasibility and validity of the items concerning the basic conditions and the additional point items are to be confirmed during the contract term.

# 1. Seawater Purification Technologies

---

## ● Point Rating Method

(Basic conditions)

Total 20 points

### (1) Basic concept of the purification system

(5)

- ✓The technology for radioactive purification without pumping up seawater is presented.
- ✓The mechanisms to eliminate radioactive materials are concretely described.

### (2) Target for the amount of elimination

(5)

- ✓The targets for the amount of elimination are presented for each radioactive material.

### (3) Concepts for maintenance

(5)

- ✓The devices to decrease the frequency of the maintenance are concretely described.
- ✓The sustainable periods of elimination efficiency are presented for certain conditions (e.g. tide condition, height of wave, and concentration of radioactive materials).
- ✓The mechanisms to confirm the sustainable period are concretely described.
- ✓The methods and the number of workers required for maintenance are concretely described.

### (4) Concepts for secondary wastes

(5)

- ✓The mechanisms to suppress the secondary wastes are concretely described.
- ✓The methods to retrieve the secondary wastes are concretely described.
- ✓The methods to process the secondary wastes are concretely described.
- ✓The methods to store the secondary wastes are concretely described (methods and degree of ease).

# 1. Seawater Purification Technologies

## ● Point Rating Method (cont.)

(Items for Additional Points)

Total technical points=40 points

### (1) Elimination efficiency

(10)

✓ The elimination efficiency of the proposed technology (eliminated amount per used materials for elimination or per time) is high. (7)

✓ The kind of eliminated radioisotopes (radioactive elements) is much. (3)

### (2) Sustainability of elimination effects

(8)

✓ The period to sustain the elimination performance is long. (4)

✓ The number of workers for maintenance is small. (2)

✓ The methods for maintenance are easy. (2)

### (3) Suppression of secondary waste generation

(8)

✓ The amounts of secondary wastes are small. (4)

✓ The volume of secondary wastes can be reduced easily. (2)

✓ The secondary wastes can be withdrawn easily (The additional dose to the workers by this work is not high) (2)

### (4) Presentation of experimental data

(14)

✓ The experimental data are with control samples and with data statistically processed and evaluated. (4)

✓ The data are already published as peer reviewed in an academic conference, journal, etc. (4)

✓ The experiment is conducted and the data are analyzed from various points of view to confirm the effect.(2)

✓ Based on the presented data, it is expected to be shorten the time period for demonstration.(4)

## 2. Technologies for Capturing Radioactive Substances from Soil

---

- **Details of Demonstration Implementation**

In order to verify the capturing capacity of the technology for radiological materials (mainly radioactive strontium) in the soil, demonstration experiments must be carried out in the environment of chloride ion concentration above 200ppm.

- **Requirement for Project Implementation  
(Basic Conditions)**

- (1) **Efficiency to capture radiological materials**

- The proposal must include the capturing efficiency for radiological materials (particularly radioactive strontium).

- (2) **Soil environment for the installation location**

- The proposal must include the description of the technology which works in the environment of chloride ion concentration above 200ppm.

- (3) **Concepts for maintenance**

- The proposal must include suggestions to reduce the maintenance frequency.

- (4) **Concepts for secondary waste**

- The proposal must include suggestions to reduce the secondary waste.



## 2. Technologies for Capturing Radioactive Substances from Soil

---

- Requirement for Project Implementation (cont.)

(Items for Additional Points)

- (1) Capturing efficiency

Proposals with high performance in the capturing efficiency of radioactive substances will gain additional points.

- (2) Sustainability of capturing effects

Regarding proposals that present views on the sustainability of the capturing performance, those with longer sustainability will gain additional points.

- (3) Suppression of secondary waste generation

Regarding proposals that present views on the secondary waste generated, those with a smaller volume of generation will gain additional points.

- (4) Presentation of experimental data

Points will be added to proposals that are able to demonstrate their feasibility with experimental data regarding the basic conditions or additional point items. Extra points will be added for the data presented if they have already been published in a peer-reviewed form, such as in an academic conference or journal, etc. Furthermore, additional points will be gained by proposals which are expected to shorten the time period necessary for validation based on the presentation of experimental data.

- Goals and objectives

Technical feasibility and validity of the items concerning the basic conditions and the additional point items are to be confirmed during the contract term.

## 2. Technologies for Capturing Radioactive Substances from Soil

### ● Point Rating Method

(Basic conditions)

Total 20 points

#### (1) Efficiency to capture radiological materials

(5)

- ✓ The efficiency to capture radiological materials (mainly radioactive strontium) is presented.
- ✓ The mechanisms to capture radiological materials are concretely described.

#### (2) Soil environment for the installation location

(5)

- ✓ The technology which works in the environment of chloride ion concentration above 200ppm is presented.

#### (3) Concepts for maintenance

(5)

- ✓ The devices to decrease the frequency of the maintenance are concretely described.
- ✓ The sustainable periods of capturing efficiency are presented for certain conditions (groundwater flow rate, chloride ion concentration, etc.).
- ✓ The mechanisms to confirm the sustainable period are concretely described.
- ✓ The methods and the number of workers required for maintenance are concretely described.

#### (4) Concepts for secondary wastes

(5)

- ✓ The mechanisms to suppress the secondary wastes are concretely described.
- ✓ The methods to retrieve the secondary wastes are concretely described.
- ✓ The methods to process the secondary wastes are concretely described.
- ✓ The methods to store the secondary wastes are concretely described (methods and degree of ease).

## 2. Technologies for Capturing Radioactive Substances from Soil

### ● Point Rating Method (cont.)

(Items for Additional Points)

Total technical points=40 points

#### (1) Capture efficiency

(10)

✓The capture efficiency of the proposed technology is high. (7)

✓The kind of captured radioisotopes (radioactive elements) is much. (3)

#### (2) Sustainability of capture effects

(8)

✓The period to sustain the capture performance is long. (4)

✓The number of workers for maintenance is small. (2)

✓The methods for maintenance are easy. (2)

#### (3) Suppression of secondary waste generation

(8)

✓The amounts of secondary wastes are small. (4)

✓The volume of secondary wastes can be reduced easily. (2)

✓The secondary wastes can be withdrawn easily(The additional dose to the workers by this work is not high.). (2)

#### (4) Presentation of experimental data

(14)

✓The experimental data are with control samples and with data statistically processed and evaluated. (4)

✓The data are already published as peer reviewed in an academic conference, journal, etc. (4)

✓The experiment is conducted and the data are analyzed from various points of view to confirm the effect. (2)

✓Based on the presented data, it is expected to be shorten the time period for demonstration.(4)

### 3. Technologies for the Decontamination of Contaminated Water Tanks

---

- **Details of Demonstration Implementation**

From the view point to reduce the radiation exposure of workers for dismantling, demonstration tests shall be performed using mock-ups of flange-type tanks, for demonstrating the decontamination performance which will be done as pre-stage works of dismantling after drainage of contaminated water in the tanks.

- **Requirement for Project Implementation**  
(Basic Conditions)

- (1) **Decontamination performance**

Decontamination speed of tanks and decontamination factor (DF as the ratio of dose rate before and after decontamination) must be shown in the proposal. DF is assumed at target decontamination performance for the tank whose maximum dose rate before decontamination is 10 mSv/h as 70 micro-meter dose equivalent of beta ray measured at 5 mm from the surface of tanks. In addition, devices must be presented with which the decontamination effect can be evaluated simultaneously in decontamination works.

- (2) **Concepts for waste**

The proposal must include suggestions to reduce the amount of liquid waste as low as possible and concepts for reduction or recover secondary wastes.

- (3) **Countermeasure for curved inner surface of tank and joints**

The proposal must include the technologies to enable the decontamination of curved inner surface of tank and joints.

- (4) **Countermeasure for tanks located in the area of tank yards**

The proposal must include the technologies to decontaminate tanks located in the area of tank yards since some of such tanks exist in Fukushima Daiichi NPS.

### 3. Technologies for the Decontamination of Contaminated Water Tanks

---

- Requirement for Project Implementation (cont.)

(Items for Additional Points)

- (1) Decontamination performance

Regarding the decontamination performance for tanks, proposals that are capable of quick and effective decontamination operation will gain additional points. The proposal with high decontamination performance will also gain additional points. Extra points will be added for the proposals of technologies to realize the decontamination in very narrow spaces.

- (2) Suppression of waste generation

Points will be added to proposals that have excellent performance for reducing the amounts of wastes (low waste generation) or for the recovery of wastes (easy recovery).

- (3) Presentation of experiment data

Points will be added to proposals that are able to demonstrate their feasibility with experiment data regarding the basic conditions or additional point items. Additional points will be gained by proposals which are expected to shorten the time period necessary for demonstration based on the presentation of experimental data.

- Goals and objectives

Technical feasibility and validity of the items concerning the basic conditions and the additional point items are to be confirmed during the contract term.

### 3. Technologies for the Decontamination of Contaminated Water Tanks

#### ● Point Rating Method

(Basic conditions)

Total 20 points

##### (1) Decontamination performance

(5)

- ✓ The decontamination speed of tank is presented.
- ✓ Decontamination factor (DF as the ratio of dose rate before and after decontamination) is assumed at target decontamination performance for the tank whose maximum dose rate before decontamination is 10 mSv/h as 70 micro-meter dose equivalent of beta ray measured at 5 mm from the surface of tanks is presented.
- ✓ Devices with which the decontamination effect can be evaluated simultaneously in decontamination works are presented.

##### (2) Concepts for waste

(5)

- ✓ Suggestions to reduce the amount of liquid waste as low as possible are presented.
- ✓ Concepts for reduction or recover secondary wastes are presented.

##### (3) Countermeasure for curved inner surface of tank and joints (5)

- ✓ Technologies to enable the decontamination of curved inner surface of tank and joints are presented.

##### (4) Countermeasure for tanks located in the area of tank yards (5)

- ✓ Technologies to decontaminate tanks located in the area of tank yards.

### 3. Technologies for the Decontamination of Contaminated Water Tanks

- Point Rating Method (cont.)

(Items for Additional Points)

Total technical points=40 points

(1) Decontamination performance

(26)

✓Decontamination performance is high. (7)

✓The decontamination speed is high for proposed decontamination performance. (7)

✓The number of workers for decontamination is small. (5)

✓The required space for decontamination works and exchanging the equipment is small. (7)

(2) Suppression of waste generation

(8)

✓The amounts (mass and volume) of generated wastes are small. (4)

✓The wastes can be recovered or no problem will occur without recovery. (4)

(3) Presentation of experiment data

(6)

✓The experiment is conducted and the data are analyzed from various points of view to confirm the effect. (2)

✓Based on the presented data, it is expected to be shorten the time period for demonstration.(4)

## 4. Unmanned Boring Technologies

---

### ● Details of Demonstration Implementation

Various civil engineering works will be required in Fukushima Daiichi NPP. To ensure the workers for boring works which is a fundamental part of civil engineering works, it is required that radiation dose may be reduced for the workers. From the view point to reduce the radiation dose to boring workers, demonstration tests must be carried out the performance of boring under high dose rate condition.

### ● Requirement for Project Implementation (Basic Conditions)

#### (1) Applicable for the unmanned boring

The boring works in Fukushima Daiichi NPS are required to excavate the hole which diameter is 20 to 30 cm and depth is about 50 m.

The proposal must include the technologies which realize above requirement and the labor automation (including partial remote control) to reduce workers' exposure to radiation in highly radioactive environments.

#### (2) Concept of boring performance

The proposal must include how much working time in high dose rate will be reduced with the technology.



## 4. Unmanned Boring Technologies

---

- Requirement for Project Implementation (cont.)

(Items for Additional Points)

- (1) Minimizing working time

- Proposals which show shorter working time in high dose rate will gain additional points.

- (2) Working space

- Proposals with a small working space required for the boring will gain additional points.

- (3) High quality boring

- Points will be added to proposals with high quality boring such as preventing destruction of geological structure to get boring core, or suppress too much consumption of rod.

- (4) Presentation of experiment data

- Points will be added to proposals that are able to demonstrate their feasibility with experiment data regarding the basic conditions or additional point items. Additional points will be gained by proposals which are expected to shorten the time period necessary for demonstration based on the presentation of experimental data

- Goals and objectives

- Technical feasibility and validity of the items concerning the basic conditions and the additional point items are to be confirmed during the contract term.

## 4. Unmanned Boring Technologies

---

### ● Point Rating Method

(Basic conditions)

Total 10 points

(1) Applicable for the unmanned boring

(5)

- ✓ Technologies to excavate the hole which diameter is 20 to 30 cm and depth is about 50 m is presented.
- ✓ Technologies which realize labor automation (including partial remote control) to reduce workers' exposure to radiation in highly radioactive environments is presented.

(2) Concept of boring performance

(5)

- ✓ The reduction of working time in high dose rate is presented.

## 4. Unmanned Boring Technologies

### ● Point Rating Method (cont.)

(Items for Additional Points)

Total technical points=50 points

#### (1) Minimizing working time

(23)

- ✓ How much working time in high dose rate area will be reduced comparing ordinary boring work? (10)
- ✓ There are no environmental effects with the boring work. (3)
- ✓ The number of workers required is small. (10)

#### (2) Working space

(12)

- ✓ Required space for boring work is small. (10)
- ✓ Installation of equipment is easy. (2)

#### (3) High quality boring

(9)

- ✓ The quality of obtained boring core is high. (6)
- ✓ Too much consumption of rod is suppressed. (3)

#### (4) Presentation of experimental data

(6)

- ✓ The experiment is conducted and the data are analyzed from various points of view to confirm the effect. (2)
- ✓ Based on the presented data, it is expected to be shorten the time period for demonstration. (4)

## 5. Evaluation of Additional Points

The evaluations for technical additional points are classified into four classes;

A: 5/5 = Factor is 1.0

B: 3/5 = Factor is 0.6

C: 1/5 = Factor is 0.2

D: 0/5 = Factor is 0

and the technical point of an item is calculated by multiplying the allocated marks of the item by the factor.

For example, in the case of the item of “(1) Minimizing working time” in “Demonstration Project for Unmanned Boring Technologies”;

- ✓ How much working time in high dose rate area will be reduced comparing ordinary boring work? (10) → evaluated as “A”
- ✓ There are no environmental effects with the boring work. (3) → evaluated as “C”
- ✓ The number of workers required is small. (10) → evaluated as “B”

the technical point of the item is calculated as;

$$10 \text{ points} \times 1.0 + 3 \text{ points} \times 0.2 + 10 \text{ points} \times 0.6 = 16.6 \text{ points.}$$

---

# Application Procedures

---

1. Application Form
2. Submission of Application

# 1. Application Form

---

- An Application of the RFP is consisted of following three forms;
  - Form 1                      Information of Applicant
  - Form 2                      Proposal
  - Form 3                      Conformity to Evaluation Criteria
- You can download Microsoft Word files of the forms from the home page of the project.
- The application must be written in Japanese or in English.

# 1. Application Form (cont.)

## Form 1 Information of Applicant

- Applicant
  - ✓ Name of (Prime) Company or Organization
  - ✓ Name and Title of Representative (of the company or organization)
  - ✓ Address
- Contact
  - ✓ Name of contact person
  - ✓ Section / Department\*
  - ✓ Title
  - ✓ Telephone Number
  - ✓ E-mail address
  - \* If the contact person is belongs to a company or an organization other than applicant, please write the company / organization name of the contact person.
- Sign or seal of the representative is required.

(Form 1)

	Entry No. <input type="text"/> *Not to be filled in by the applicant.
Management Office for the Project of Decommissioning and Contaminated Water Management	
Application for the subsidies the "Validation of technologies for contaminated water management project" in the FY2013 Supplementary Budget. (Please specify the name of the project you wish to participate in).	
Applicant	Company/Organization Name
	Representative (Full Name and Title) <span style="float: right;">Seal or Signature</span>
	Address
Contact	Contact Person (Full Name)
	Section/Department
	Title
	Telephone (Extension, if any)
	E-mail

# 1. Application Form (cont.)

## Form 2 Proposal

### 1. Project purpose, details and implementation method

- ✓ The background and purpose of the project
- ✓ Your concrete proposal for enhancing the performance of the project.
- ✓ This item is evaluated by the conformity to the basic conditions and to the items with additional points described in Exhibit 1 (1) to Exhibit 1 (4)

### 2. Project Implementation Plan

- ✓ Implementation schedule
- ✓ Concrete implementation procedure
- ✓ Concrete milestone targets
- ✓ Quasi-quarterly progress meetings

### 3. Project Implementation Scheme

- ✓ Diagram of the scheme
- ✓ Number of persons engaged the project
- ✓ Roles of the persons
- ✓ Brief CV, expertise and experience in similar fields of Project manager and leader
- ✓ Description of outsourcing

(Form 2)

Entry No. . . . .	
* Not to be filled in by the applicant. . . . .	

Plan: Proposal for the subsidies the "Validation of technologies for contaminated water management project" in the FY2013 Supplementary Budget.

(Please specify the name of the project you wish to participate in.) . . . . .

1. Project purpose, details and implementation method. . . . .
* State your understanding about the background of this project and the purpose of the project. . . . .
* State your concrete proposal for enhancing the performance of the project. . . . .
* State the concrete implementation method and its details for each of the items listed in Section 2 "RFP Topics" of the subsidy application procedure according to the description in Exhibit 1 (1) to Exhibit 1 (4). . . . .
* State the conformity to the basic conditions and to the items with additional points described in Exhibit 1 (1) to Exhibit 1 (4) respectively so that they are easier to understand. . . . .
In preparing necessary documents, please refer to the Technology Readiness Level (TRL) of NASA, as a reference. . . . .
<a href="http://www.nasa.gov/content/technology-readiness-level/#UyIYoON_u3J">http://www.nasa.gov/content/technology-readiness-level/#UyIYoON_u3J</a> . . . . .
2. Project Implementation Plan. . . . .
* State your implementation schedule (with monthly basis) for each of the items listed in Section 2 "Project Description" of the subsidy application procedure. . . . .
* State the concrete implementation procedure. . . . .
* Establish and state concrete milestone targets to achieve the purpose of the project implementation. . . . .
* You will be required reporting and presentation at quasi-quarterly progress meetings held by PMO-D/CW. . . . .
3. Project Implementation Scheme. . . . .
* Provide a diagram of your project implementation scheme and state the number of persons engaged in the scheme and their roles. . . . .
* List the top project manager and those involved in the leadership of the project including their brief personal history, specialized field and track record of similar projects. . . . .
* Description of outsourcing, if scheduled. . . . .



# 1. Application Form (cont.)

## Form 2 Proposal (cont.)

### 4. Track Record of Other Projects

- ✓ Organization's track record of similar projects
- ✓ Expertise and experience in similar fields of major full-time personnel

### 5. Financial basis and Management System

- ✓ Your fiscal condition
- ✓ System for financial management

### 6. Total Project Cost

- ✓ Labor cost
- ✓ Operating cost
  - [1] Design, manufacturing and processing
  - [2] Consumables
  - [3] Travel
  - [4] Reward
  - [5] Outsourcing

- You cannot add up general and administrative expenses.
- Re-entrustment (outsourcing major part of the project) is inhibited.

4. Track Record of Other Projects.
*State your organization's track record of similar projects. Include the following items:..
• Project name, project overview, fiscal year(s) of the project, project owner (if it is your own project, state so)...
*List major full-time personnel solely committed to this project including their specialized field and track record of similar projects (those listed in item 3 above to be excluded)...
5. Financial basis and Management System.
*State your fiscal condition as a necessary financial basis for smoothly implementing this project, and your adequate system (persons in charge of and their role) for financial management (filing and storing of written evidences for expenditures)...
6. Total Project Cost (thousand yen).
*State necessary expenses according to 10. (1) "Expenditure Classification" of the subsidy application procedure. Note that the expense items listed below are only provided as examples...
I. Labor cost.
II. Operating cost.
[1] Design, manufacturing and processing.
[2] Consumables.
[3] Travel.
[4] Reward.
[5] Outsourcing.
Total □ thousand yen (※ The total amount must not exceed the upper limit of the subsidy)...

# 1. Application Form (cont.)

## Form 3 Conformity to Evaluation Criteria

- Conformity of the proposal details to “Basic conditions” and “Items for Additional points”

### Example for [Basic Conditions]

- (1) Basic concept of the purification system

*The proposed equipment will be sank in seawater and purify the seawater continuously.*

*(The technology for radioactive purification without pumping up seawater is presented. → Yes)*

### Example for [Items for Additional points]

- (1) Elimination efficiency

*The decontamination factor (DF) of the equipment is 10 for the seawater including 8mg/L of strontium at room temperature. It can purify 1000L of seawater per an hour and can recover approximately 7.2g of strontium per an hour. (Evaluation for “The elimination efficiency of the proposed technology (eliminated amount per time) is high.”)*

- Applications that do not meet all the “basic requirements” shall not be adopted.
- The additional technical points shall be calculated only for the applications that meet all the “basic requirements”. The project with higher additional points shall be advantageous in adoption.

[Basic conditions]	
Details of the proposal	Allocation of marks (Basic points)
(1) Basic concept of the purification system > → The technology for radioactive purification without pumping up seawater is presented. > → The mechanisms to eliminate radioactive materials are concretely described.	5
(2) Target for the amount of elimination > → The targets for the amount of elimination are presented for each radioactive material.	5
(3) Concepts for maintenance > → The devices to decrease the frequency of the maintenance are concretely described. > → The sustainable periods of elimination efficiency are presented for certain conditions (e.g. tide condition, height of wave, and concentration of radioactive materials). > → The mechanisms to confirm the sustainable period are concretely described. > → The methods and the number of workers required for maintenance are concretely described.	5
[Items for Additional Points]	
Details of the proposal	Allocation of marks (Technical points)
(1) Elimination efficiency > → The elimination efficiency of the proposed technology (eliminated amount per used materials for elimination or per time) is high. > → The kind of eliminated radioisotopes (radioactive elements) is much.	10 (7) (3)
(2) Sustainability of elimination effects > → The period to sustain the elimination performance is long. > → The number of workers for maintenance is small. > → The methods for maintenance are easy.	8 (4) (2) (2)
(3) Suppression of secondary waste generation > → The amounts of secondary wastes are small.	8 (4)

## 2. Submission of Application

---

### ■ Application period

from Monday, March 24 to Monday, May 19, 2014 (by noon, Japan time)

### ■ Documents to be submitted

- Form 1            Information of Applicant
- Form 2            Proposal
- Form 3            Conformity to Evaluation Criteria

and followings.

- Corporate and organization data (i.e. the name, address, foundation date, major business areas, organization chart and number of employees)
- The financial results, and statement of revenues and expenses (for the past one year)
- The articles of association or the act of endowment

## 2. Submission of Application (cont.)

---

### ■ Acceptable format of application

- PDF file attached to E-mail or in CD-ROM or other media brought or sent by postal mail. (recommended)

or

- 10 copies of the application documents brought or sent by postal mail.

### ■ Place of submission

2-10-3, Nagata-cho, Chiyoda Ward, Tokyo, 100-0014 Japan

Responsible personnel: Dr. Takizawa and Dr. Sato

Management Office for the Project of Decommissioning and Contaminated Water Management

Mitsubishi Research Institute, Inc.

E-mail: [cw-apply@mri.co.jp](mailto:cw-apply@mri.co.jp)

**Please do not use the above E-mail address for the purpose other than sending applications, such as sending questions.**

---

## **Method and criteria of evaluation**

---

1. Method of Evaluation
2. Evaluation Criteria

# 1. Method of Evaluation

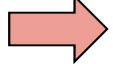
---

- The evaluation procedure is as follows.
  1. The applicants shall be evaluated based on the application documents by the Management Office of the Project.
  2. “The Review Committee for the Project of Decommissioning and Contaminated Water Management” shall confirm the evaluations for the proposals for which the application documents were complete and met all the “basic requirements” and shall determine the evaluations.
  3. The applicants who made remarkable proposals may be requested to make a presentation to “the Review Committee for the Project of Decommissioning and Contaminated Water Management”. (The schedule shall be announced after the proposal deadline.)
  4. Also, hearings and on-site inspections shall be conducted as required, and submission of additional documents may be requested.
  5. The adopted applicants shall be determined considering the results of the evaluation of the application documents, presentations (if implemented), hearings and field research (if implemented).

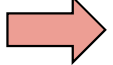
## 2. Evaluation Criteria

The descriptions in the applications shall be evaluated based on the following criteria.

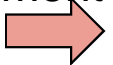
### [1] Adequacy and Efficiency of Project Plan

• The plan shall be evaluated as to whether it is appropriately viable in accordance with the requirements for the Subsidy.  The descriptions in the application shall be evaluated on “Basic conditions” and “Items for Additional Points” in Form 3. Applications that do not meet all the “basic requirements” shall not be adopted.


### [2] Adequacy of Subsidy Amount

• Accounting of the costs (quote details) shall be evaluated as to whether it is reasonable and precise, and whether it is sufficiently economical.  The applicants shall be evaluated based on “1. Project purpose, details and implementation method”, “2. Project Implementation Plan” and “6. Total Project Cost”. in Form 2, and descriptions in Form 3

### [3] Technical Competence (Knowledge and Skill) (Prerequisite)

• The applicants shall be evaluated as to whether they have the skills, knowledge and experience required to implement the subsidized project, for instance if they have been proven successful in the field concerned.  The applicants shall be evaluated based on “1. Project purpose, details and implementation method”, “2. Project Implementation Plan”, “3. Project Implementation Scheme” and “4. Track Record of Other Projects” in Form 2. and descriptions in Form 3.

### [4] Financial Basis and Management System (Prerequisite)

• Subsidized project operating entities shall be evaluated as to whether they have the sufficient financial basis and management to implement the subsidy project smoothly.  The applicants shall be evaluated based on “3. Project Implementation Scheme” and “5. Financial Basis and Management System” in Form 2.

---

Contact

Mitsubishi Research Institute, Inc.

Management Office for the “Project of Decommissioning  
and Contaminated Water Management”

FAX :03-5157-2145 (until April 18,2014)

03-3578-7025 (from April 21,2014)

E-mail : [hairo-jimu@mri.co.jp](mailto:hairo-jimu@mri.co.jp)





**MITSUBISHI RESEARCH INSTITUTE, INC.**