

Research and Development of the Project of Decommissioning, Contaminated Water and Treated Water Management and Connection to Engineering

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1. Changes in R&D under the Decommissioning, Contaminated Water and Treated Water Management Program

To decommission the Fukushima Daiichi NPS safely and steadily, it is important to conduct R&D by leveraging expertise from Japan and overseas. Accordingly, the Ministry of Economy, Trade and Industry (METI) established a fund in FY 2013 and has since implemented the “Project of Decommissioning, Contaminated Water and Treated Water Management” as a subsidy program through public solicitations to support technically challenging R&D (Figure 1).

The R&D projects are managed by the Management Office for the Project of Decommissioning, Contaminated Water and Treated Water Management. To ensure that R&D results contribute to the decommissioning of Fukushima Daiichi NPS, the projects are conducted in cooperation with TEPCO, which manages the site and assesses the applicability of the results. This presentation introduces the links among the subsidized projects and their expected contributions to decommissioning.

2. Subsidized Projects of Decommissioning, Contaminated Water and Treated Water Management and Connection to Engineering

The R&D projects for the decommissioning of the Fukushima Daiichi NPS have been subdivided and subsidized. Each subsidized project is being conducted by domestic and foreign organizations. The subsidized projects are classified into “Internal Investigation”, “Development of Fuel Debris Retrieval Method”, “Improvement of Work Environment”, and “Processing of Solid Waste, etc.”. The current projects are closely related to each other and connected to engineering which has been utilizing wisdom in Japan (Figure 2) and overseas. Also, to obtain the information on R&Ds from organizations in Japan and overseas, PMO conducts RFI (Request for Information) on the website. ^[1](<https://en.dccc-program.jp/>)

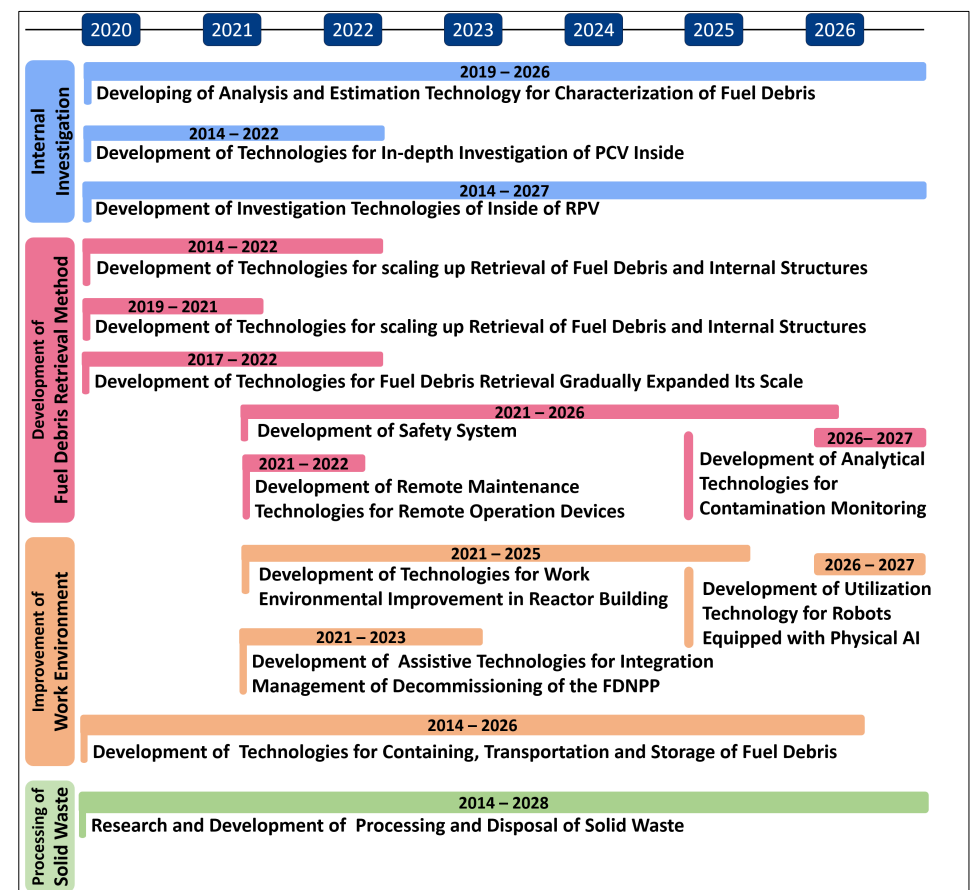


Figure.1 Changes in R&D under the Decommissioning, Contaminated Water and Treated Water Management Program

R&D Connection Summary Chart of 1F Decommissioning Project

This chart, based on the historical context and public sources, summarizes R&D themes and their intended application areas in 1F Decommissioning project.

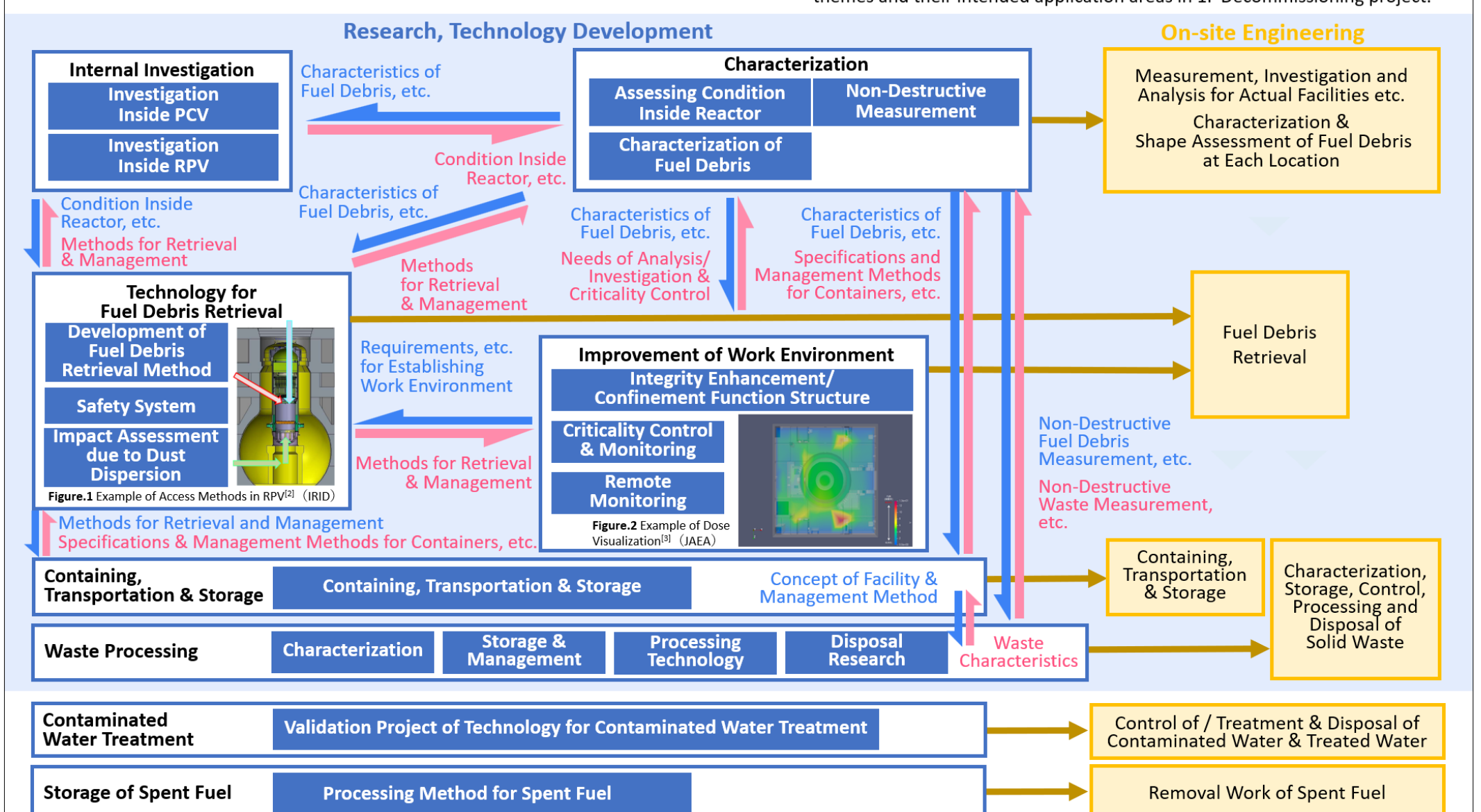


Figure.2 R&Ds of Decommissioning, Contaminated Water and Treated Water Management Program and Connection to Engineering

* This figure is summarized by MRI in the light of the project objective.

[Reference] [1] Management Office for the Project of Decommissioning, Contaminated Water and Treated Water Management, <https://en.dccc-program.jp/>.

[2] Development of Investigation Technology for inside the Reactor Pressure Vessel (RPV) (Upgrading of Processing Technology for the Top-Access Investigation Method and Development of the Bottom Access Investigation Method) FY2022 Final Report, IRIID

[3]令和3年度開始 廃炉・汚染水対策事業費補助金（原子炉建屋内の環境改善のための技術の開発(被ばく低減のための環境・線源分布のデジタル化技術の開発)に係る補助事業、JAEA