

Table 1: Fuel Research Building Plutonium Exposure Accident Timeline

| Date | Time | Accident Situation |
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| 6 June | 11:15 | During work to inspect a storage canister containing nuclear fuel materials in laboratory fume hood H-1 in an analytical lab (Room 108) in the Nuclear Fuel Research Building, plastic bags inside the canister burst, contaminating the five task personnel. The five persons were wearing half-face masks and three layers of gloves. |
| | 11:20 | The task personnel in Room 108 instructed the personnel in Room 101 (adjustment room) to suspend operation of the molten salt electrolytic furnace. |
| | 11:23 | Task personnel member A communicated the contamination incident to the facility management supervisor, head of the Fuel Materials Experiment Division, Mr. Fukushima. |
| | 11:25 | Two men from Radiation Control Department No.2 arrived at the Fuel Research Building. The two men checked that the plutonium dust monitor No.2 (Room 108) was indicating a normal reading. |
| | 11:37 | The five task personnel inspected themselves with an α radiation surface contamination detector, confirming that they had all been contaminated. |
| | 11:54 | The facility management supervisor instructed that a greenhouse be set up in the corridor at Room 108. At 12:00, the Oarai Local Countermeasures Headquarters was established. |
| | 13:15 | Five greenhouse installation personnel (2 from the Fuel Experiment Department, 3 from other facilities) enter controlled area and begin to set up the greenhouse at the entrance to Room 108. |
| | 14:29 | Completion of greenhouse at entrance to Room 108. |
| | 14:30 | Task personnel begin retreat from Room 108 (carrying out a body contamination test). |
| | 14:44~ | Task personnel member A contamination test conducted: Max 0.33 Bq/cm ² (α radiation, special work hat). After removal of protective clothing, no body contamination. Nasal smear contamination test result: No abnormality. |
| | 14:59~ | Task personnel member B contamination test conducted: Max 9.7 Bq/cm ² (α radiation, special work clothing). Result of contamination test after removal of protective clothing: body contamination present; ear 1.7 Bq/cm ² (α radiation). Nasal smear contamination test result: No abnormality. Shower taken. |
| | 15:25~ | Task personnel member C contamination test conducted: Max 3.3 Bq/cm ² (α radiation, special work hat). Nasal smear contamination test result: 13 Bq (α radiation). Shower taken. |
| | 16:00~ | Task personnel member D contamination test conducted: Max 5.8 Bq/cm ² (α radiation, special work clothing). Nasal smear contamination test result: 3 Bq (α radiation). Shower taken. |
| | 16:07~ | Task personnel member E contamination test conducted: Max 322 Bq/cm ² or more (α radiation, special work clothing). Nasal smear contamination test result: 24 Bq (α radiation). Shower taken. |
| | 18:52 | Completion of decontamination for all five task personnel. 18:55: All five task personnel complete retreat from controlled area. |
| | 19:05 | All five task personnel depart for Nuclear Fuel Cycle Engineering Labs in Tokai Village. Measurement by lung monitor begun on arrival. |
| 22:05 | Administration of chelating agent to task personnel to encourage plutonium elimination. | |
| 23:33 | Max 22,000 Bq of Pu-239 and 220 Bq Am-241 confirmed as detected by lung monitor measurement of all five task personnel (as of June 6). | |
| 7 June | 1:05 | Chelating agent administration ended for all five task personnel. |
| | 1:42 | All five task personnel return to Oarai Research and Development Center. |
| | 10:00 | All five task personnel depart Oarai Research and Development Center for hospital of the National Institute of Radiological Sciences (NIRS). |
| | 11:55 | All five task personnel arrive at NIRS. After body contamination test and decontamination, measurement by lung monitor begins. |
| | 13:27 | Report that it had been judged necessary to make a legal report to the Nuclear Regulation Authority (NRA) (Time of judgment: 13:00) |
| | 16:41 | Two personnel enter controlled area to take contamination test (smear samples) in Room 108. |
| 18:55 | Completion of smear sample measurements. Room 108 contamination test results confirm max 55 Bq/cm ² (α radiation), 3.1 Bq/cm ² (β , γ radiation). | |
| 13 June | 11:51 | All five task personnel discharged from NIRS and depart for Oarai Research and Development Center. Arrival at 13:52. After arrival, all five task personnel are interviewed. |
| | 14:58 | Optically stimulated luminescence (OSL) dosimeters recovered. |
| 14 June | 14:37 | Digital camera SD card removed from controlled area. |
| 16 June | | Blood samples taken from all five task personnel at NIRS. Recommended that all five be rehospitalized due to detection of plutonium in urine of all five |
| 18 June | | All five task personnel rehospitalized at NIRS by June 18. |