Result of investigation of APD loss

N o .	Date	Time from lending to return(estimation) of APD	Place	Duration	Work	Atmosphere doze of radioactivity [mSv/h]	Place of loss (Estimation)	Cause	Radiation doze [mSv]	Evaluation method	Age	Sex
1 - 1	June 22, 2011	6:41 ~ 16:11	Sea side of Unit 4	Approx. 3hrs	Emergency vehicle installation work	0.25 Max.1.6	Fukushima Daiichi	Emergency vehicle installation work	0.72	Estimated from result of same activity	40s	М
1 - 2	July 12, 2011	Approx.7:00 ~ 11:00	Welfare building of Fukishima Diichi	Approx. 4hrs	Construction management of welfare building rest place	0.003 ~ 0.009		Putting APD with a string of quick cell batch by a clip, but it was lost due to loose fitting. He thought it was lost when he put off Tyvek and looked for it, but it was not found. (Discover next day)	0.01	Estimated from result of same activity	50s	М
1 - 3	July 13, 2011	6:24 ~ 12:24	Soil disposal Place	Approx. 5hrs	Maintenance of heavy equipment	0.01	Seismic isolated building of Fukushima Daiichi	When changing underwear	0.05	Estimated from result of same activity	50s	М
1 - 4	July 18, 2011	7:00 ~ 13:00	Forest for wild birds	Approx. 2hrs	laying cable to install contaminated water treatment facility	Max. 0.04	Fukushima Daiichi	When changing underwear	0.05	Estimated from result of same activity	50s	М
1 - 5	August 3, 2011	6:57 ~ 11:00	Tank Area H1 East	Approx. 3hrs	loading of logged timber	0.03	Fukushima Daiichi	When he changed underwear at 1st floor of Seismic isolated building, he throw APD away with underwear.	0.08	Estimated from result of same activity	50s	М
1 - 6	August 13, 2011	5:23 ~ 19:42	Water treatment vapor facility	Approx. 6hrs	Test operation of vapor facility	0.05	Rest place of Fukushima Daiichi	When changing underwear	0.30	Employed PD data	30s	М
1 - 7	August 18, 2011	7:48 ~ 11:13	Surround of reactor building, Unit 4	Approx. 1hr	Installation of power supply car for alternative cooling of SFP	Max. 0.5	Fukushima Daiichi ~ J village	After work, he put APD on the desk when he changed clothes. He lost it when he did another work.	0.03	Estimated from result of same activity	40s	М
1 - 8	August 26, 2011	22:20, August 25 ~ 15:45, August 26	seaborne of Hirono thermal offshore	Approx. 2hrs	Transport of cavering cover of Unit 1	0.04	seaborne of Hirono thermal offshore	When he tried to put APD in his breast pocket, he accidentally dropped it on the ship deck, then doropped into sea.	0.04	Employed PD data, as the worker prepared self PD and grass badge other than APD from TEPCO	20s	М
1 - 9	August 27, 2011	5:00 ~ 14:00	Tank Area H2 tank yard	Approx. 5hrs30mins	Tank assembly	0.01	Fukushima Daiichi	When he changed tyvek at welfare building in 1F, the clip which connected with strap of ID card was loosed and throw it away with tyvec.	0.04	Estimated from result of same activity	50s	М
1 - 10	October 7, 2011	7:27 ~ 17:46	J village	Approx. 5hrs	Waste material separating work	~ 0.001	J village	Estimate that APD was dropped from choker chain (Discover next day)	0.01	Estimated from result of same activity	20s	М

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1 - 11	2011/10/25	Approx. 6:35 ~ 15:30 lost recognized.	Futaba Street	6hrs.	Road repairment: subgrade	0.01	Fukushima Daiichi	Lost by dropping it during work by mistake.	0.05	Estimated from result of same activity	50s	М
1 - 12	2011/11/8	6:22 ~ 12:44	Construction site for Sludge Storage Facility	Approx. 4hrs.	blacksmith	0.03	Fukushima Daiichi (estimated as Sludge Construction Area)	Not yet cleard (suspected to lost during work or during changing cloths)	0.03	Estimated from result of same activity	20s	М
1 - 13	2011/11/10	5:58 ~ 17:06	Construction site for Sludge Storage Facility	Approx. 7hrs30mins.	Transportation of materials	0.03	Fukushima Daiichi (estimated as Sludge Construction Area)	Not yet cleard (suspected to lost during work or during changing cloths)	0.04	Estimated from result of same activity	50s	М
1 - 14	2011/12/9	7:05 ~ 12:15	G2 Area (Construction site for Sludge Storage Facility)	Approx. 4hrs.	Installation of machinery and ducts	0.003 ~ 0.01	Protection wear changing area in J Village body screening area (estimated)	Estiamted to lost during wearing off Tyvek protective clothing	0.02	Estimated from result of same activity	20s	М
1 - 15	2011/12/13	10:09 ~ 14:13	High temperature calcinator building's western empty lot (eastern side of common pool	Approx. 6hrs.	Leveling land for sediment creasing segregation	0.06	Seismic isolated building of Fukushima Daiichi	Lost during wear changing at 1F Seismic isolated building (later found at the rest room).	0.32	Estimated from result of same activity	50s	М
1 - 16	2011/12/14	7:52 ~ 14:28	Fukushima Daiichi (Solid WasteStorage Building)	Approx. 4hrs.	Supervising demolition work of scaffold for outside wall painting	Max. 0.05	Fukushima Daiichi	Lost between J village and the site of afternoon-work.	0.08	Estimated from result of same activity	50s	М
1 - 17	2012/2/4	7:18 ~ 15:00	Reactor Building of Unit 4	Approx. 2hrs.	Demolition work of Unit 4's reactor building	0.05 ~ 1.0	Reactor building of Unit 4	Lost during work, though attaching APD by tape at outside the protection equipment so that he could check the radiation dose shown at APD.	0.59	Employed PD data, as the worker prepared self PD and grass badge other than APD from TEPCO	40s	М
1 - 18	2012/6/6	8:04 ~ 15:21	Fukushima Daiichi (southern empty lot)	Approx. 1hrs.	Function inspection of 300-ton-mobile cranes	0.007 ~ 0.03	Fukushima Daiichi	Recognized APD loss between 1F and J village	0.01	Estimated from result of same activity	30s	М
1 - 19	2012/7/31	8:50 ~ 13:00	Surrounding Partner company building	Approx. 3hrs30mins.	Inspection of vehicles	~ 0.05	Fukushima Daiichi	Returned after task completion (report from the worker himself)	0.04	Estimated from result of same activity and from his report	40s	М
1 - 20 (Previously announced	2012/8/16	1:55 ~ 12:16	polynuclear species removal facility	Approx. 45mins.	Inspetion of heavy machinery (crane)	0.01	Rest place in welfare building	At rest place after removing protection cloths.	0.02	Estimated from result of same activity	30s	М

Result of investigation of APD unequipped case

N o .	Date	Place	ace Duration Work		Atmosphere doze of radioactivity [mSv/h]	Casue	Radiation doze [mSv]	Evaluation method	Age	Sex		
2-1	June 29, 2011	Centralized Envirnomental Facilities	Approx. 2hrs30mins	Cesium adsorption facilities (Curion) valve switching operation	Max. 1.0	Forget to borrow	0.70	Estimated from result of same activity.	30s	М		
2-2 (Previously announced)	January 13, 2012	Instrumentation spare warehouse / 1/2u switching station / Communication station building	Approx. 1hr30mins	Site inspection and photography of electricity cable	Max. 0.1	Forget to borrow APD as was already late for the meeting and hurried to 1F from 2F by car due to being late for the site inspection. Then, self-judged to use GB as alternate for AP.	0.09	Estimated from site atmosphere radiation doze and work duration.	20s	М		
2-3	April 9, 2012	Administration building rest area meeting space	Approx. 9hrs30mins	Pre-work meeting of 4u reactor building cover.	0.01	Forget to borrow	0.08	Employed PD data, as the worker prepared self PD and grass badge other than APD from TEPCO.	50s	М		
2-4	April 11, 2012	Solid waste storehouse at north important anti seismic building	Approx. 6hrs	Radiation measuring work in and around 1u to 4u and centralized radioactive waste treatment facilities.		Forget to borrow	0.07	Estimated from result of same activity.	30s	М		
2-5	June 4, 2012	3/4u reactor building mountain side (outside)	Approx. 5hrs30mins	4u reactor building cover work.	Max. 0.9	Forget to borrow	0.07	Employed PD data, as the worker prepared self PD and grass badge other than APD from TEPCO.	50s	М		
2-6 (Correction)	This case was recategolized as unequipped case on August 28, to be corrected as lost number.											
2-7 (Previously announced)	2012/8/3	Administration building annex (old admin. building)	Approx. 4hrs30mins	1-4u H1 tank area to Buffer tank area transfer line PE piping work	0.1 ~ 0.2	Forget to borrow	0.16	Estimated from site atmosphere radiation doze and work duration.	20s	М		
2-8 (Previously announced)	2012/8/10	4u mountain side hill (G area)	Approx. 4hrs	Management of heavy machinary and vehicle at 1F.	Max. 0.2	Forget to borrow	0.03	Estimated from result of same activity.	50s	М		