2, 789 Pages

Group <u>CW</u>

(Records Withheld In Part) From: Sent: To: Subject: Skeen, David Friday, April 29, 2011 2:15 PM Morris, Scott; Hoc, PMT12 RE: DRAFT Document - Recommendation on Update to Travel Advisory - Official Use— -Only

Yes.

From: Morris, Scott Sent: Friday, April 29, 2011 2:00 PM To: Hoc, PMT12; Skeen, David Subject: RE: DRAFT Document - Recommendation on Update to Travel Advisory - Official Use Only—

Thanks ... Chairman's comments incorporated, yes?

From: Hoc, PMT12 Sent: Friday, April 29, 2011 1:59 PM To: Morris, Scott Subject: FW: DRAFT Document - Recommendation on Update to Travel Advisory - Official Use Only

Here it is.

K. Brock

From: Hoc, PMT12
Sent: Friday, April 29, 2011 11:21 AM
To: Hoc, PMT12; Bentz, Julie A.; veal.lee@epamail.epa.gov; Perciasepe.Bob@epamail.epa.gov; Dietrich.Debbie@epamail.epa.gov; Keith, Sam (ATSDR/DTEM/ATB); Tupin.Edward@epamail.epa.gov; boyd.mike@epa.gov
Cc: McDermott, Brian; Evans, Michele; Skeen, David; Milligan, Patricia; Brock, Kathryn
Subject: DRAFT Document - Recommendation on Update to Travel Advisory - Official Use-Only-

Sorry...here is the attachment.

From: Hoc, PMT12
Sent: Friday, April 29, 2011 11:09 AM
To: 'Bentz, Julie A.'; 'veal.lee@epamail.epa.gov'; 'Perciasepe.Bob@epamail.epa.gov'; 'Dietrich.Debbie@epamail.epa.gov'; 'Keith, Sam (ATSDR/DTEM/ATB)'; 'Tupin.Edward@epamail.epa.gov'; 'boyd.mike@epa.gov'
Cc: McDermott, Brian; Evans, Michele; Skeen, David; Milligan, Patricia
Subject: DRAFT Document - Recommendation on Update to Travel Advisory - Official-Use Only

Hello Interagency Partners,

The attached document provides draft language to assist with communications regarding a reduction in the US Government's recommended evacuation area for American citizens around the Fukushima Daiichi site, and provides considerations for the decision to endorse the reduction.

NRC wants to collect any critical comments (show-stoppers) from the Interagency (one set of comments per agency) by no later than COB on Monday 2MAY11 ET, so that NRC may integrate/resolve any issues raised and finalize the



document. Once the document is finalized, the NRC team in Japan will provide the document to the Ambassador and provide the team's current assessment of the decision considerations.

NRC would be happy to discuss your comments either individually or in a conference call, perhaps on Monday if there is interest. Please direct all replies/comments to PMT12, Kathryn Brock, and Brian McDermott (<u>pmt12.hoc@nrc.gov</u>, <u>Kathryn.brock@nrc.gov</u>, <u>brian.mcdermott@nrc.gov</u>). Or, we may be reached by telephone through the Operations Center at 301-816-5100.

Sincerely,

Kathryn Brock US Nuclear Regulatory Commission Protective Measures Team (PMT)

ς.



Assessments and recommendations are based on the best available technical information and are subject to change or refinement.

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DRAFT as of 09:15 hrs 29 April 11

CW 3 of 2789

Assessments and recommendations are based on the best available technical information and are subject to change or refinement.

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CW 5 of 2789



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CW 7 of 2789

Assessments and recommendations are based on the best available technical information and are subject to change or refinement.

(b)(5)

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CW 8 of 2789

7

Assessments and recommendations are based on the best available technical information and are subject to change or refinement.

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CW 9 of 2789

From:	Tiburcio, Michelle <michelle_tiburcio@sra.com></michelle_tiburcio@sra.com>				
Sent:	Thursday, April 28, 2011 9:12 AM				
То:	brozowski.george@epa.gov; decair.sara@epa.gov; goodman.roger@epa.gov; jablonowski.eugene@epa.gov; liles.darrell@epa.gov; tupin.edward@epa.gov; veal.lee@epa.gov; gfn6@cdc.gov; Ferris.John@dol.gov; ver2@cdc.gov; george.allen@fda.hhs.gov; jva2@cdc.gov; asa4@cdc.gov; Brandon, Lou; mdb7 @cdc.gov; ozl6@cdc.gov; pac4@cdc.gov; james.cherniack@fda.hhs.gov; gordon.s.cleveland@aphis.usda.gov; ccc8@cdc.gov; william.cunningham@fda.hhs.gov; gyf7@cdc.gov; rachel.evans@fda.hhs.gov; rjf8@cdc.gov; ron.graham@fsis.usda.gov				
	patricia.hansen@fda.hhs.gov; scotty.hargrave@fda.hhs.gov; ezh7@cdc.gov;				
	vinetta.howardking@fda.hhs.gov; john.jensen@dm.usda.gov; terri.jones@fda.hhs.gov;				
	ldk4@cdc.gov; wgl0@cdc.gov; Scott.Lough@ams.usda.gov;				
	carmen.maher@fda.hhs.gov; menarm@nv.doe.gov; (b)(6);;				
	ellen.morrison@fda.hhs.gov; jfn1@cdc.gov; michael.noska@fda.hhs.gov;				
	john.pavek@wdc.usda.gov;				
	mark.russo@fda.hhs.gov; karen.smallwood@fda.hhs.gov; byw3@cdc.gov;				
	_albert.wiley@orise.orau.gov; eoc_environmental_unit@epa.gov;				
	(b)(6) Hoc, PMT12; LIA11 Hoc; patrick.simmons@dhs.gov;				
	paul.ward@fema.gov; stephen.chase@dhs.gov; james.williams@dot.gov;				
	ira.s.reese@cbp.dhs.gov;(b)(6); Timothy.Greten@dhs.gov; Dixon,				
	Teri; Brennan, Inga; Matthews, Denise - OSHA; Menon, Ramesh - OSHA;				
	michael.howe@dhs.gov; cmw6@cdc.gov; (b)(6) Sincek, Jeffrey;				
	(b)(6) ; Lodwick, Jeffrey - OSHA				
Subject:	4/26 ATeam notes and 214 attached				
Attachments:	A Team Meeting 4-26-2011.docx; 4 26 11 Japan Earthquake Tracking.docx				

Also available on the FTP site.

Please follow the instructions below to access the documents found on this site.

To access the A-Team files on the secure FTP site:

Use FTP software (Win FTP, Filezilla, etc.) or internet browser (Windows Explorer, Firefox, etc.)

If you have FTP software, just enter the following: FTP Username: <u>ATEAM@epaaspect2.net</u> Password: (b)(6) FTP Server: <u>ftp.epaaspect2.net</u> FTP Server Port: 21

If you are using your internet browser, in the address field, enter " <u>ftp://ftp.epaaspect2.net/</u>"; do not use http:// or www. A window will appear asking for a username and password (see above)

Michelle A. Tiburcio

SRA International, Inc.

CW 10 of 2789

3434 Washington Blvd., 2185 Arlington, VA 22201 (703) 284-6094

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UNIT LOG		1. Incident Name	2. Date Prepared	3. Time Prepared	
		Japan Earthquake 04/26/2011		1621	
4. Unit Name/Desi	gnators	5. Unit Leader (Name and Positie	on)	6. Operational Period	
Federal Advisory Team on Environment Food and Health		Ed Tupin, EPA		04/26/2011	
7			anal Deator Assigned	1	
/	Namo			Homo Baso	
	Name				
			FDA		
			NRC		
,			USDA		
8.		Activity	y Log	· · · · · · · · · · · · · · · · · · ·	
Time			Major Events		
1151	Agenda for 1400 call was distributed to the Advisory Team				
	ION FIDetto and	via a mail attachment			
· · · · · · · · · · · · · · · · · · ·		via e-mail attachment			
	Ed Tupin will co	via e-mail attachment Additional	ction Items: Iss the official handshake	/handoff of the A Team bac	
	Ed Tupin will co to CDC.	via e-mail attachment Additional	ction Items: Iss the official handshake	/handoff of the A Team bac	

1							
2	MEETING DATE: April 26, 2011						
3		· · · · · · · · · · · · · · · · · · ·					
4 5	Advisory Team (A Team) conference call was moderated by Edward Tupin (EPA).						
6 7 8	1. R	coll Call: Some names were not recorded due to noise issues and others joined after oll call.					
0		CDC/ATSDD/MICSII Jon Anderson Davi Cham Carol Connell John Diver					
9 10	•	CDC/AISDR/NIOSH – Jeff Anderson, Paul Charp, Carol Connell, John Dixon,					
10		Lynn Evans, Sann Kenn, C.W. WOOU DUC/FEMA Stars Change Miles Helevich Levice Methols					
11	•	DHS/FEMA – Steve Chase, Mike Holwith, Janice Michale					
12	•	EPA – Ed Tupin, Dan Schultneisz, Mike Boyd, Darrell Liles					
13	٠	FDA – George Allen, Jim Cherniack, Bill Cunningham, Rachel Evans, Mark					
14		Russo, Terri Jones, Mike Noska, Karen Smallwood, others					
15	•	USDA – Gordon Cleveland, Peter Petch, Scott Lough, John Pavek,					
16	٠	NRC – Jack Bolton?					
17	•	DoD – John Cuellar					
18							
19	2. A	ction Item Tracking Process and FTP Site:					
20							
21	•	Continue to forward all Advisory Team requests, e-mails, talking points and					
22		internal documents relating to the Fukushima Daiichi reactors to Ed Tupin					
23		(<u>tupin.edward@epa.gov</u>) and the EPA EOC (<u>eoc_environmental_unit@epa.gov</u>)					
24		for recording and tracking purposes. EPA will archive the Advisory Team					
25		materials with the other materials for this incident.					
26							
27	3. <i>A</i>	Agenda Items:					
28							
29		a. Operational Guides Technical (OGT) Workgroup Support Request:					
30		Background: Mike Noska's report out can be found in the April 11, 2011					
31		conference call summary. The OGT analysis on rice growing was distributed					
32		to the A Team prior to today's call. The document has not been shared with					
33		the Japanese since it has not yet been requested.					
34							
35		This item is closed.					
36							
37		b. Habitability Assessment:					
38		No update on status of document.					
39							
40		Background: As reported during the April 11, 2011 meeting, the Advisory					
41		Team participated in the April 8, 2011 conference call with DOE CMHT.					
42		Based on these discussions, a document was developed for review by senior					
43		levels of management. A second draft was developed by Navy staff. At this					
44		time there is no action necessary for the A Team. The Advisory Team should					

CW 13 of 2789

Advisory Team for Environmental Food and Health Japanese Nuclear Response

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1			be aware of the document in case future action is requested.
2			Townson Deserte (Deserte interimention of the sector)
3 1		c.	Temporary Re-entry/Permanent Re-entry into Evacuation Zone:
5			The Return (aka permanent re-entry) policy is being redrafted by the NRC A
6			new draft is expected to be distributed for multi agency review on Friday
7			April 29, 2011. Once this document is final, it may be released as a travel
8			advisory.
9			,
10		d.	Japanese Government Enforcement of 20km Evacuation ("No Go") Zone
11			The government of Japan is converting the voluntary evacuation area around
12			the plant to a mandatory evacuation "no go" zone. In addition, the GOJ is
13			planning to euthanize livestock that are too sick or malnourished to be moved
14			from within the 20km "no go" zone. Japan is also looking into future potential
15			evacuations/relocations and possibly extending the 20km area in the north
16			western corridor where the radioactive material deposition has been greatest.
17			
18		e.	Report-out on Japan Deployment (Mike Noska)
19			Mike Noska's role at the embassy consisted of advising on general conditions.
20			FDA is still working closely with the embassy on food issues. A for of time
21			was spent conducting our each activities with the 0.5. cutzens in Japan.
22			The NRC Protective Measures Team and Reactor Team were also deployed to
23			Japan and worked with their counterparts in Japan. The NRC Headquarters
25			(HO) Operations Center has been staffed 24/7 to support the deployed
26			personnel.
27			1
28		f.	Conference Call Schedule: It was suggested that there should be no more
29			scheduled A Team calls. The EPA is standing down their Emergency
30			Operations Center (EOC) at COB Friday, April 29, 2011. Additional
31			Advisory Team calls may be scheduled as there are issues or topics to discuss.
32			
33			ACTION ITEM: Ed Tupin will contact Charles Miller to discuss the official
34			handshake/handoff of the A Team back to CDC.
35			
36		g.	Other:
51			Large debris field from the fsunami as long as /0 miles in the sea is headed
30 20			the tot this time there is no further action recorder: from the A Torre
39 40			that at this time there is no further action necessary from the A ream.
40 41	Δ	No fu	ture Advisory Team meetings are scheduled at this time
TT	٦.	110 10	wite individual a cana incomingo are senerated at this time.

From: Sent: To: Subject: Attachments: LIA01 Hoc Wednesday, April 27, 2011 8:31 AM LIA08 Hoc; LIA11 Hoc FW: [METI Japan](Apr_19)Update on Seismic and Tsunami Damage Information [METI] Apr 19_0800_Seismic Damages to the NPSs.pdf; Apr_19 Radioactivity Level Map Chart.pdf

-----Original Message-----From: meti-info@meti.go.jp [mailto:meti-info@meti.go.jp] Sent: Tuesday, April 19, 2011 10:59 AM To: meti-info@meti.go.jp Subject: [METI Japan](Apr_19)Update on Seismic and Tsunami Damage Information

For your reference, Ministry of Economy, Trade and Industry of Japan (METI) is providing latest information on the seismic and tsunami damages to the nuclear power stations (NPSs) in Japan, including those caused to Fukushima Daiichi NPS.

This Tuesday, the following information has been updated.

---- Today's news ----

1. Tokyo Electric Power Company (TEPCO) announced that it started transfer of high level radioactive wastewater to the Centralized Radiation Waste Treatment Facility.

---- Updates from METI ----

2. [METI] Apr 19_0800_Seismic Damages to the NPSs [Please refer to the attached file]

3. [METI] Apr 19_Radioactivity Level Map Chart [Please refer to the attached file]

---- Updates from NISA ----

4. [NISA] Apr 19 1500_Current Situation of Onagawa, Fukushima Dai-ichi, Fukushima Dai-ni, Tokai Dai-ni NPSs (only Japanese version is now available. English version will be uploaded.) http://www.meti.go.jp/press/2011/04/20110419007/20110419007-1.pdf

[NISA] Apr 14 1500_Current Situation of Onagawa, Fukushima Dai-ichi, Fukushima Dai-ni, Tokai Dai-ni NPSs (English versioin) <u>http://www.nisa.meti.go.jp/english/files/en20110416-8-1.pdf</u>

5. [NISA] Apr 18 0600_Fukushima Dai-ichi Major Parameters of the Plant (English version) http://www.nisa.meti.go.jp/english/files/en20110418-1-3.pdf

---- Major Updates from other agencies of Japanese Government --- 6. [MLIT] Apr 19 PM_Measurement of Radiation Doses in the Ports around Tokyo Bay <u>http://www.mlit.go.jp/kowan/kowan_fr1_000041.html</u>

CW 15 of 2789

Currently, the level of radiation in Tokyo City, Yokohama City, Kawaski City and Ichikawa City (Chiba) were as shown in the attachment at very safe level to health.

7. [MLIT] Apr 19 PM_Measurement of radiation doses around the Metropolitan Airports http://www.mlit.go.jp/koku/koku_tk7_000003.html The current level of radiation does not have any effects on human health.

---- Other Updates ----

8. [TEPCO] Apr 19 Transfer of high level radioactive wastewater to the Centralized Radiation Waste Treatment Facility http://www.tepco.co.jp/en/press/corp-com/release/11041903-e.html

If you need to add other e-mail address to this mailing list or do not need our information mail any more, please contact at <u>meti-info@meti.go.jp</u>

International Public Relations Team

Ministry of Economy, Trade and Industry (METI) 1-3-1 Kasumigaseki, Chiyoda-ku, Tokyo 100-8901, Japan E-mail : <u>meti-info@meti.go.jp</u>

(See attached file: [METI] Apr 19_0800_Seismic Damages to the NPSs.pdf)

(See attached file: Apr_19 Radioactivity Level Map Chart.pdf)

CW 16 of 2789

CW 17 of 2789

Tohoku Pacific Earthquake and the seismic damage to the NPSs

As of 8:00am April 19th, 2011 (JST) Ministry of Economy, Trade and industry

Earthquake and automatic shut-down of nuclear reactors

The Tohoku Pacific Earthquake of historic magnitude 9.0 struck the northeastern part of Japan at 14:46 on March 11th, 2011.

At the time of the earthquake occurrence, 3 reactors (Units 4, 5 and 6 at Fukushima Dai-ichi (I) Nuclear Power Station (NPS)) were under periodic inspection outage, and 11 reactors (Units 1, 2 and 3 at Onagawa NPS; Units 1, 2 and 3 at Fukushima I NPS; Units 1, 2, 3 and 4 of Fukushima Dai-ni (II) NPS; and an unit of Tokai Dai-ni (II) NPS) were automatically shut-down.

Tsunami damaged the emergency generators and the cooling systems at the Fukushima Dai-ichi (I)

Since the external power supply was cut off upon the earthquake occurrence, the emergency diesel power generators at Fukushima I automatically started generating electricity and the cooling systems began their operation.

Then, the massive earthquake triggered the devastating Tsunami wiping away houses, buildings, cars along the widespread areas of the northeast coast. The emergency diesel power generators and the pumps supplying seawater to the cooling system were halted at 15:41 on March 11th due to the Tsunami estimated more than 14 meters high from the seawater level.

CW 18 of 2789

Report concerning incidents at the Fukushima Dai-ichi (I)

Unit 1 Fresh water is being injected to the spent fuel pool and the reactor.

After the reactor was automatically shut-down and the Tsunami disabled the equipments. The pressure of containment vessel unusually increased and the water level inside the reactor pressure vessel dropped. Vent of the primary containment vessel was operated at 10:17am on March 12th; thereafter, hydrogen explosion occurred at the upper-part of the reactor building at 15:36.

Water injection to the reactor pressure vessel-

- Seawater had been injected into the reactor pressure vessel since March 12th; thereafter, fresh water has been injected since March 25th, instead of seawater.

Water injection to the spent fuel pool

- On March 31st, spray of fresh water over the spent fuel pool of Unit 1 using the concrete pump truck was carried out.

Power supply

 Lighting in the main control room was recovered on March 24th. And the power supply for the fresh water injection to the reactor pressure vessel was switched to the external power supply on April 3rd.

Stagnant water

- As the result of concentration measurement in the stagnant water on the basement floor of the turbine building, 2.1×10⁵Bq/cm³ of ¹³¹I (Iodine) and 1.8×10⁶Bq/cm³ of ¹³⁷Cs (Caesium) were detected as major radioactive nuclides. Since March 24th, the stagnant water has been transferred to the condenser until it was fulfilled.
- In order to prepare to transfer the stagnant water in the turbine building to the condenser, the water in the condensate storage tank was transferred to the surge tank of suppression pool water and finished on April 2nd. The transfer of the water in the condenser to the condensate storage tank was completed on April 10th.

Nitrogen injection

- Aiming at reducing the possibility of hydrogen combustion in the primary containment vessel of Unit 1, the operations for the injection of nitrogen to the vessel were started at 22:30 on April 6th. The start of nitrogen injection to the primary containment vessel of Unit 1 was confirmed. (1:31am April 7th)

Confirmation by unmanned robots

- Confirmation of situation, etc. was carried out by unmanned robots at the reactor building for Unit 1 on April 17th.

CW 19 of 2789

Unit 2 Fresh water is being injected to the spent fuel pool and the reactor.

After the automatic shut-down of the reactor, the water injection function was sustained. And vent of the primary containment vessel was operated at 11:00am on March 13th and at 0:02am on March 15th. But the reactor water level tended to decrease. At 6:10am on March 15th, there was an explosion sound at Unit 2. Given the fact that the pressure in the suppression chamber decreased, it is presumed that there is possibility of certain damage on the suppression chamber.

Water injection to the reactor pressure vessel

Seawater had been injected into the reactor pressure vessel since March 14th; thereafter, fresh water has been injected since March 26th, instead of seawater.

Water injection to the spent fuel pool

The seawater injection to the spent fuel pool using the fire pump truck started on March 20th. On March 29th, the injection was switched to the fresh water injection using the temporary motor-driven pump.

Power supply

On March 26th, lighting of the main control room was recovered. And the power supply for the fresh water injection to the reactor pressure vessel was switched to the external power supply on April 3rd.

Stagnant water

In order to prepare for transferring the stagnant water on the basement floor of turbine building to the condenser, the water in the condensate storage tank was transferred to the surge tank of suppression pool water from March 29th till April 1st. Thereafter, the water in the condenser was transferred to the condensate storage tank and completed on April 9th. The stagnant water in the trench of the turbine building was transferred to the condenser from April 12th till 13th.

Water in the pit

- The water, of which the dose rate was at the level of more than 1,000 mSv/h, was The water, of which the dose rate was at the level of more than 1,000 mSv/h, was confirmed to be collected in the pit (a vertical portion of an underground structure) located near the intake channel of Unit 2. In addition, the outflow from the crack with a length of around 20 cm in the concrete portion of the lateral surface of the pit into the sea was confirmed on April 2nd. In order to stop the outflow, concrete was put inside, then high polymer absorbent etc. was used , but the outflow did not stop. After the coagulant (soluble glass) started to be injected from the holes around the pit on April 5th, the outflow of the water was confirmed to stop on April 6th. Furthermore, the measures to stop water by means of rubber board and jig (prop) were implemented at the outflowing point. (Finished on April 6th)

Confirmation by unmanned robots

Confirmation of situation, etc. was carried out by unmanned robots at the reactor building for Unit 2 on April 18th.

CW 20 of 2789

Unit 3 Fresh water is being injected to the spent fuel pool and the reactor.

After the automatic shut-down of the reactor, fresh water and subsequently seawater were injected into the reactor pressure vessel. And vent of the primary containment vessel was operated on March 13th and 14th. However, the pressure in the primary containment vessel rose up unusually and the explosion took place around the reactor building at 11:01am on March 14th.

Water injection to the reactor pressure vessel

 The seawater had been injected into the reactor pressure vessel since March 13th, thereafter; fresh water has been injected since March 25th, instead of seawater. On March 28th, the pump for the fresh water injection was switched from the fire pump truck to the temporary motor-driven pump.

Water injection to the spent fuel pool

In order to pour water into the spent fuel pool, helicopters, water cannon trucks, fire engines and concrete pump trucks discharged water to the spent fuel pool of Unit 3 from sky and ground. Since March 29th till April 18th, fresh water spray over the spent fuel pool using the concrete pump truck had been carried out.

Power supply

 On March 22nd, lighting in the main control room was recovered. And the power supply for the fresh water injection to the reactor pressure vessel was switched to the external power supply on April 3rd.

Stagnant water

 In order to prepare for transferring the stagnant water on the basement floor of turbine building to the condenser, the water in the condensate storage tank is being transferred to the surge tank of suppression pool water from March 28th till March 31st.

Confirmation by unmanned robots

 Confirmation of situation, etc. was carried out by unmanned robots at the reactor building for Unit 3 on April 17th.

CW 21 of 2789

Unit 4 No fuel is in the reactor. Fresh water is being injected to the spent fuel pool.

There is no fuel in the reactor pressure vessel due to replacement of the shroud. It was confirmed that a part of wall of the operation floor of the reactor building of Unit 4 was damaged at 6:14am on March 15th. A fire took place at Unit 4 at 9:38am March 15th, but the fire was extinguished spontaneously as of 11:00am. Another fire took place on March 16th, but no fire could be confirmed from the ground.

Water injection to spent fuel pool

- Water spray using fire engine with seawater over the spent fuel pool of Unit 4 was carried out from March 20th till March 21st. And water spray using a concrete pump truck had been carried out five times with seawater from March 22nd till March 27th and nine times with fresh water from March 30th till April 17th.

Power supply

- On March 29th, lighting in the main control room was recovered.

Stagnant water

From April 2nd, the stagnant water in the main building of radioactive waste treatment facilities was being transferred to the turbine building of Unit 4. As the water level in the vertical portion of the trench for Unit 3 rose from April 3rd, by way of precaution, the transfer was suspended notwithstanding that the path of the water was not clear.(9:22am April 4th)

CW 22 of 2789

Unit 5&6 Unit 5 & 6 is under cold shut down.

One of the emergency generators for Unit 6 was operating and supplying electricity to Unit 5 and Unit 6. Fresh water was being injected into the reactor pressure vessels and the spent fuel pools by make-up water condensate system.

Cold shut down

- The pump for residual heat removal system (RHR) for Unit 5 and the pump for RHR for Unit 6 started up on March 19th and recovered heat removal function.
- Unit 5 was under cold shut down at 14:30 on March 20th and Unit 6 was under cold shut down at 19:27 on the same day.

Power supply

- Unit 5 and 6 received electricity reached to the starting transformer on March 20th.
 The power supply of Unit 5 and 6 was switched from the emergency diesel generators to the external power supply on March 21st and March 22nd.
- Power supply for the temporary pumps for RHR seawater system of Unit 5 and 6 were switched from the temporary to the permanent on March 24th and 25th.

Low-level radioactivity water discharge

The groundwater with low-level radioactivity in the sub drain pits of Units 5 and 6 (around 1,300t) was discharged through the water discharge canal to the sea from April 4th till 9th in order to protect the critical safety facilities of the reactors. The water was beginning to leak out to the reactor building and other buildings of Unit 6 and there was no further capacity to accommodate it.

CW 23 of 2789

Common Spent Fuel Pool

- The power supply was started at 15:37 on March 24th and cooling was also started at 18:05 on the same day.
- The power supply was stopped due to short-circuiting of the end of the power supply circuit. (14:34 April 17th) Thereafter the facility inspection was carried out and the power supply was recovered. (17:30 April 17th)

Other

Nuclide analysis at water discharge canal

As the result of nuclide analysis at around the southern water discharge canal, 7.4×10^{1} Bq/cm³ of ¹³¹I (1850.5 times higher than the limit of consentration of water outside the Environmental Monitoring Area) was detected on March 26th. (As the result of measurement on March 29th, it was detected as 3355.0 times higher than the limit in water.)

As the result of the analysis at the northern water discharge canal, 4.6×10^{1} Bq/ cm³ of ¹³¹I (1262.5 times higher) was detected on March 29th.

Water in the trenches

The water was confirmed to be collected in the vertical parts of the trenches (an underground structure for laying pipes, shaped like a tunnel) outside of the turbine building of Units 1 to 3. The dose rates on the water surface were 0.4 mSv/h of the Unit 1's trench and 1,000 mSv/h of the Unit 2's trench on March 27th. The rate of the Unit 3's trench could not measure because of the rubble.

Nuclide analysis of soil

- In the samples of soil collected on March 21st, 22nd, 25th, 28th, 31nd and April 4th on the site of Fukushima I, ²³⁸Pu (Plutonium), ²³⁹Pu and ²⁴⁰Pu were detected. The concentration of the detected plutonium was at the equivalent level of the fallout

that was observed in Japan concerning the past atmospheric nuclear testing, i.e. at the equivalent level of the normal condition of environment, and was not at the level of having harmful influence on human body.

Stagnant water

- On March 28th, the stagnant water was confirmed in the main building of radioactive waste treatment facilities. As the result of analysis of radioactivity, the total amount of the radioactivity 1.2×10^{1} Bq/cm³ in the controlled area and that of 2.2×10^{1} Bq/cm³ in the non-controlled area were detected in March 29th.

Barges loading fresh water

Two barges of the US armed forces carrying fresh water for cooling reactors, etc. landed in the exclusive port of the power station, being towed by the ships of Japan Maritime Self-Defense Force on March 31st and April 2nd. The transfer of fresh water from the barges to the filtrate tank was started.

Low-level radioactive water discharge

- The wastewater with high concentration of radioactive materials was trapped on the basement floor of the turbine building of Unit2 and it was necessary to immediately be transferred to another location as it was leaking out to the surrounding environment. But there was no further capacity to accommodate it.
- In order to use the main building of radioactive waste treatment facilities for accommodating the wastewater of the turbine building of Unit2, the stagnant water with low-level radioactivity in the radioactive waste treatment facilities was started to be discharged from the southern side of the water discharge canal to the sea from April 4th till 10th.Confirmation of the remaining water is being carried out. (Total amount of discharged water is around 9,070t.)
- The stagnant water with low-level radioactivity in the building of miscellaneous solid waste volume reduction processing was discharged from the southern side of the water discharge canal to the sea using 5 pumps. (From April 6th till 7th)
- The watertight measures in the buildings of the radioactive waste treatment facilities were completed. (April 18th)

Other

- In order to prevent the contaminated water from outflowing from the exclusive port, the work for stopping water by means of large-sized sandbags was implemented around the seawall on the south side of the NPS on April 5th.
- 3 sandbags filled with Zeolite were placed between the inlet screen pump room of Unit 3 and that of Unit 4 on April 15th. Thereafter, 2 sandbags were placed between the inlet screen pump room of Unit 1 and that of Unit 2, and 5 sandbags were placed between that of Unit 2 and that of Unit 3 on April 17th.
- The silt fences to prevent the contaminated water from being scattered were completed to be doubly installed at the appropriate part of the seawall on the south side of the NPS on April 11th. Other silt fences were installed in front of the screen of Units 3 and 4 on April 13th, and at the curtain wall and in front of the screen of Unit 1 and 2 on April 14th.
- The test scattering of anti-scattering agent to prevent the radioactive materials on the ground surface from being scattered was carried out on the mountain-side of the Common Pool and other areas from April 1st till 18th.
- Removal of the rubble using remote-control heavy machineries was carried out from April 10th till 18th.
- On the ocean-side of the inlet bar screen of Unit 2, temporary boards to stop water were installed on April 12th, 13th and 15th.

Countermeasures for Tsunami

 The distribution boards, etc. for the pumps injecting water to the reactors of Units 1 to 3 were transferred to a hill on April 15th. Current Situation

- Evacuation as far as 20 kilometers from Fukushima I NPS and 10 kilometers from Fukushima II NPS was almost completed (see the diagram "Fukushima prefecture").
 The residents in the areas from 20 kilometers to 30 kilometers radius from Fukushima I NPS are directed to stay in-house.
- On March 16th, the Local Emergency Response Headquarter issued "the direction to administer the stable Iodine during evacuation from the evacuation area (20 km radius)" to the Prefecture Governors and the heads of cities, towns and villages.

Monitoring Data

1) The data of Monitoring Post out of 20 kilometers zone of Fukushima I NPS is available on the following website:

http://www.mext.go.jp/a_menu/saigaijohou/syousai/1303726.htm

2) The real-time radiation data collected via the System for Prediction of Environment Emergency Dose Information (SPEEDI) is available on the following website: <u>http://www.bousai.ne.jp/eng/</u>

Location of Fukushima I and II in Japan

*Distance between Three Mile Island and Washington D.C. : 140km, 88mle

CW 27 of 2789

From: Sent: To: Subject: Attachments: LIA01 Hoc Wednesday, April 27, 2011 8:31 AM LIA08 Hoc; LIA11 Hoc FW: USNRC Earthquake-Tsunami Update 041911 DRAFT 1200EDT USNRC Earthquake-Tsunami Update 041911 DRAFT 1200EDT.pdf

From: LIA08 Hoc

Sent: Tuesday, April 19, 2011 11:45 AM

To: A Green; A Rock; Al Coons; Aleshia Duncan; alexancg; Anthony Herbold; Appleman Binkert; B Green; B Russo; Bill King; Bill King2; Bruce Howard; C Lay; C Noser; C Ops; Charles Burrows; Charles Donnell; Christopher Meadow; Clinton Carroll; Conrad Burnside; D Drakeley; D May; D Murakami; D Webb; Damian Peko; Dan Feighert; Darrell Hammons; DHS Ops; DOE NIT; DOT; DTRA; DTRA; Dudek; E Wright; Elmer Naples; EOP; EPA; EPA2; Eric Sinibaldi; F Lewis; G Szeto; G Whitmire; George Higdon; gregopk; Gregory Simonson; Gretchen McCoy; H; Harry Sherwood; HHS; I Clark; Intel DIA; J Barnes; J Bartlett; J Moeller; J Noonkester; J Szymanski; J Tippets; James Purvis; Japan Embassy Task Force; Japan Pentagon; Jason CIA; Jason Pepin; Jeffrey Conran; Jeremy Demott; Jeremy Morrow; Jeremyft1; Jim Kish; Johanna Berkey; John Holdren; Joyce Connery; K Donald; K Gonzalez; K Ousley; Karyn Keller; Kyle Viayra; L Mayer; Lee Nickel; Lee-Jake Strunk; Lisa; Lisa Hammond; Lukas McMichael; M Huchla; M Kerber; M Lansley; M Thon; M Thon2; maceck; MARFORPAC CAT All Hazards Div; MARFORPAC CAT G2; Mark Shaffer; markwb2; Marshall Shull; Michelle Ralston; Nan Calhoun; Navy; NICC; NMIC; NOC; NOC Duty Director; Nulcear SSA; P Gardner; pentagon; Peter Lyons; Phillip Barks; R Roesler; R Schueneman; Rebecca Thomson; roberhh; Ron Cherry; Ron McCabe; S Basile; S Buntman; S Levy; scotc1; Seamus O'Boyle; seiden; state; Stephen Trautman; Steve Colman; Steve Horwitz; T Gatling; T Roberts; Thomas Conran; Thomas Zerr; Tim Greten; Timothy Hitzelberger; Trent Hughes; Troy Heytens; USDA, John; USMC; Vanessa Quinn; Victoria Kinsey; W Cluff; W Young; Will Friese; William Harding; William Webb; A Aviles; A Brown; A Estes; A Hough; A Tribble; B goldberg; B Moffat; B Perry; B Woo; Beavers, Shane; Brinser, Andrew; Brooks, Andrae; Brown, Michael; C Fiore; C Good; C Kim; Carlos Islas; CPF CATN5; Craig Gaddis; D Fletcher; D Putthoff; D Scully; D Smith; D Souza; D Wade; D Williams; David Graves; DOE DART; E Fiser; E kaye; E Price; E Shelland; E Train; Elder, Troy M SGT MIL USA USARPAC; Eric Wright; F Bantell; Fossum, Sgt Zachary; Guathier, Ronald; H Zito; Hickam; Hickam; J Blankenburg; J Kreykes; J McCallister; J Rhodes; J Rivera; J Scarbrough; J Soderbeck; J Stewart; J Trussler; James Williams; JR Haley; JTF505-MAIN-JOC-J2; JTF505-MAIN-JOC-J2-INTEL-ANAY; K Bollow; K Bollow; K Tomlinson; Koluch, SSqt Eric; L Bolling; L Elkins; L Heinrich; L Walter; M Howsare; M Kabbur; M Nguyen; M Opfer; M Taafe; M Thon; M Thon; Marina Llewellyn; Michael Anderson; Michael Eberlein; Monaghan, Dylan; N Albritton; N Albritton; NCMI Ops; Office of Secretary of Defense Watch Officer; Olson, Niels; P Almquist; P Higginbotham; P Higgins; P Lyons; P Smalley; P Somboonpakron; PACOM; PACOM; Pasit Sombookpakron; Powers, Jeffrey; R Backley; R Fisher; R Garrett; R Neff; R Stephenson; R Tashma; Richard, Sgt William; Robert Duke; Robert P; RST01 Hoc; RST01B Hoc; RST03 Hoc; S Aoki; S Jerabek; Sean Basile; Shirey, Sgt Eric; Simmers, Keith; Spencer Nordgran; Spurlock, Kenneth; Stephen Greco; T Baden; T Lowman; T Miller: T Reeves: T Reeves: T True: Tovar, SSat Eric: (b)(6) ; USFJ; USFJ Intel; V Raphael; Valerie Makino; Vaughn, Sqt Jerrod; Walter Hokett; Wanda Ayuso; William Brysacz; Andersen, James; Anderson, Joseph; Ash, Darren; Baggett, Steven; Barker, Allan; Batkin, Joshua; Boger, Bruce; Borchardt, Bill; Bradford, Anna; Brenner, Eliot; Breskovic, Clarence; Smith, Brooke; Brown, Frederick; Brown, Milton; Bubar, Patrice; Burns, Stephen; Camper, Larry; Carpenter, Cynthia; Castleman, Patrick; Ader, Charles; Casto, Chuck; Coggins, Angela; Collins, Elmo; ConE Resource; Copeland, Douglas; Correia, Richard; Craffey, Ryan; Dapas, Marc; Dean, Bill; Decker, David; Diaz-Sanabria, Yoira; Dickman-Disabled-11/14/2010, Paul; Dorman, Dan; Droggitis, Spiros; Dyer, Jim; English, Lance; ET02 Hoc; Evans, Michele; Franovich, Mike; Frye, Timothy; Garmon, David; Apostolakis, George; Gibbs, Catina; Giitter, Joseph; Gott, William; Grobe, Jack; Hahn, Matthew; Haney, Catherine; Harrington, Holly; Hipschman, Thomas; Hoc, PMT12; Holahan, Gary; Holahan, Patricia; HOO Hoc; Howe, Allen; Howell, Art; Howell, Linda; Issa, Alfred; Itzkowitz, Marvin; Foster, Jack; Jackson, Donald; Jaczko, Gregory; Johnson, Andrea; Johnson, Michael; Jones, Cynthia; Kahler, Robert; King, Mark; Foggie, Kirk; Kock, Andrea; Kozal, Jason; Leeds, Eric; LIA01 Hoc; LIA02 Hoc; LIA03 Hoc; LIA06 Hoc; LIA08 Hoc: LIA11 Hoc; Logaras, Harral; Loyd, Susan; Magwood, William; Maier, Bill; Marshall, Jane; Marshall, Michael; McCree, Victor; McDermott, Brian; McIntosh, Angela; McNamara, Nancy; Michalak, Paul; Miller, Charles; Miller, Chris; Monninger, John; Morris, Scott; Nease, Rebecca; Nieh, Ho; NRCHQ; NSIR_DDSP_ILTAB_Distribution; Ordaz, Vonna; Orders, William; OST05

CW 28 of 2789

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Hoc; Ostendorff, William; Pace, Patti; Patel, Jay; Pearson, Laura; Pederson, Cynthia; Plisco, Loren; Powell, Amy;
Quichocho, Jessie; R1 IRC; R2 IRC; R3 IRC; R4 IRC; Reddick, Darani; Reyes, Luis; Devercelly, Richard; Nelson, Robert;
ROO hoc; Rothschild, Trip; Satorius, Mark; Schmidt, Rebecca; Sharkey, Jeffry; Sheron, Brian; Sigmon, Rebecca;
Snodderly, Michael; Sosa, Belkys; Speiser, Herald; Svinicki, Kristine; Tabatabai, Omid; Thoma, John; Thomas, Eric; Tifft,
Doug; Kolb, Timothy; Ulses, Anthony; Nakanishi, Tony; Tracy, Glenn; Trapp; Trapp, James; Trojanowski, Robert; Turtil,
Richard; Uhle, Jennifer; Virgilio, Martin; Warnick, Greg; Warren, Roberta; Weber, Michael; Westreich, Barry; Wiggins, Jim;
Cook, William; Williams, Kevin; Wittick, Brian; Woodruff, Gena; Zimmerman, Roy; Zimmerman, Roy; Zorn, Jason;
Borchardt, Bill; Cohen, Shari; Cooper, LaToya; Dyer, Jim; ET07 Hoc; Flory, Shirley; Hudson, Sharon; Schwarz, Sherry;
Sprogeris, Patricia; Taylor, Renee; Virgilio, Martin; Walker, Dwight; Walls, Lorena; Weber, Michael
Subject: USNRC Earthquake-Tsunami Update 041911 DRAFT 1200EDT

From: Sent: To: Subject: Attachments: LIA01 Hoc Wednesday, April 27, 2011 8:31 AM LIA08 Hoc; LIA11 Hoc FW: USNRC Earthquake-Tsunami Update 041911 Revision 1, 1300 EDT USNRC Earthquake-Tsunami Update 041911 Revision 1, 1300 EDT.pdf

From: LIA08 Hoc

Sent: Tuesday, April 19, 2011 12:52 PM

To: OST01 HOC; A Green; A Rock; Al Coons; Aleshia Duncan; alexancq; Anthony Herbold; Appleman Binkert; B Green; B Russo; Bill King; Bill King2; Bruce Howard; C Lay; C Noser; C Ops; Charles Burrows; Charles Donnell; Christopher Meadow; Clinton Carroll; Conrad Burnside; D Drakeley; D May; D Murakami; D Webb; Damian Peko; Dan Feighert; Darrell Hammons; DHS Ops; DOE NIT; DOT; DTRA; DTRA; Dudek; E Wright; Elmer Naples; EOP; EPA; EPA2; Eric Sinibaldi; F Lewis; G Szeto; G Whitmire; George Higdon; gregopk; Gregory Simonson; Gretchen McCoy; H; Harry Sherwood; HHS; I Clark; Intel DIA; J Barnes; J Bartlett; J Moeller; J Noonkester; J Szymanski; J Tippets; James Purvis; Japan Embassy Task Force; Japan Pentagon; Jason CIA; Jason Pepin; Jeffrey Conran; Jeremy Demott; Jeremy Morrow; Jeremyft1; Jim Kish; Johanna Berkey; John Holdren; Joyce Connery; K Donald; K Gonzalez; K Ousley; Karyn Keller; Kyle Viayra; L Mayer; Lee Nickel; Lee-Jake Strunk; Lisa; Lisa Hammond; Lukas McMichael; M Huchla; M Kerber; M Lansley; M Thon; M Thon2; maceck; MARFORPAC CAT All Hazards Div; MARFORPAC CAT G2; Mark Shaffer; markwb2; Marshall Shull; Michelle Ralston; Nan Calhoun; Navy; NICC; NMIC; NOC; NOC Duty Director; Nulcear SSA; P Gardner; pentagon; Peter Lyons; Phillip Barks: R Roesler: R Schueneman; Rebecca Thomson; roberhh; Ron Cherry; Ron McCabe; S Basile: S Buntman; S Levy; scotc1; Seamus O'Boyle; seiden; state; Stephen Trautman; Steve Colman; Steve Horwitz; T Gatling; T Roberts; Thomas Conran; Thomas Zerr; Tim Greten; Timothy Hitzelberger; Trent Hughes; Troy Heytens; USDA, John; USMC; Vanessa Quinn; Victoria Kinsey; W Cluff; W Young; Will Friese; William Harding; William Webb; A Aviles; A Brown; A Estes; A Hough; A Tribble; B goldberg; B Moffat; B Perry; B Woo; Beavers, Shane; Brinser, Andrew; Brooks, Andrae; Brown, Michael; C Fiore; C Good; C Kim; Carlos Islas; CPF CATN5; Craig Gaddis; D Fletcher; D Putthoff; D Sculiv; D Smith; D Souza; D Wade; D Williams; David Graves; DOE DART; E Fiser; E kaye; E Price; E Shelland; E Train; Elder, Troy M SGT MIL USA USARPAC; Eric Wright; F Bantell; Fossum, Sgt Zachary; Guathier, Ronald; H Zito; Hickam; Hickam; J Blankenburg; J Kreykes; J McCallister; J Rhodes; J Rivera; J Scarbrough; J Soderbeck; J Stewart; J Trussler; James Williams; JR Haley; JTF505-MAIN-JOC-J2; JTF505-MAIN-JOC-J2-INTEL-ANAY; K Bollow; K Tomlinson; Koluch, SSqt Eric; L Bolling; L Elkins; L Heinrich; L Walter; M Howsare; M Kabbur; M Nguyen; M Opfer; M Taafe; M Thon; M Thon; Marina Llewellyn; Michael Anderson; Micheael Eberlein; Monaghan, Dylan; N Albritton; N Albritton; NCMI Ops; Office of Secretary of Defense Watch Officer; Olson, Niels; P Almquist; P Higginbotham; P Higgins; P Lyons; P Smalley; P Somboonpakron; PACOM; PACOM; Pasit Sombookpakron; Powers, Jeffrey; R Backley; R Fisher; R Garrett; R Neff; R Stephenson; R Tashma; Richard, Sgt William; Robert Duke; Robert P; RST01 Hoc; RST01B Hoc; RST03 Hoc; S Aoki; S Jerabek; Sean Basile; Shirey, Sgt Eric; Simmers, Keith; Spencer Nordgran; Spurlock, Kenneth; Stephen Greco; T Baden; T Lowman; T Miller; T Reeves; T Reeves; T True; Tovar, SSgt Eric; (b)(6) USFJ; USFJ Intel; V Raphael: Valerie Makino; Vaughn, Sqt Jerrod; Walter Hokett; Wanda Ayuso; William Brysacz; Andersen, James; Anderson, Joseph; Ash, Darren; Baggett, Steven; Barker, Allan; Batkin, Joshua; Boger, Bruce; Borchardt, Bill; Bradford, Anna; Brenner, Eliot; Breskovic, Clarence; Smith, Brooke; Brown, Frederick; Brown, Milton; Bubar, Patrice; Burns, Stephen; Camper, Larry; Carpenter, Cynthia; Castleman, Patrick; Ader, Charles; Casto, Chuck; Coggins, Angela; Collins, Elmo; ConE Resource; Copeland, Douglas; Correia, Richard; Craffey, Ryan; Dapas, Marc; Dean, Bill; Decker, David; Diaz-Sanabria, Yoira; Dickman-Disabled-11/14/2010, Paul; Dorman, Dan; Droggitis, Spiros; Dyer, Jim; English, Lance; ET02 Hoc; Evans, Michele; Franovich, Mike; Frye, Timothy; Garmon, David; Apostolakis, George; Gibbs, Catina; Giitter, Joseph; Gott, William; Grobe, Jack; Hahn, Matthew; Haney, Catherine; Harrington, Holly; Hipschman, Thomas; Hoc, PMT12; Holahan, Gary; Holahan, Patricia; HOO Hoc; Howe, Allen; Howell, Art; Howell, Linda; Issa, Alfred; Itzkowitz, Marvin; Foster, Jack; Jackson, Donald: Jaczko, Gregory: Johnson, Andrea: Johnson, Michael: Jones, Cynthia: Kahler, Robert: King, Mark: Foggie, Kirk; Kock, Andrea; Kozal, Jason; Leeds, Eric; LIA01 Hoc; LIA02 Hoc; LIA03 Hoc; LIA06 Hoc; LIA08 Hoc; LIA11 Hoc; Logaras, Harral; Loyd, Susan; Magwood, William; Maier, Bill; Marshall, Jane; Marshall, Michael; McCree, Victor; McDermott, Brian; McIntosh, Angela; McNamara, Nancy; Michalak, Paul; Miller, Charles; Miller, Chris; Monninger, John; Morris, Scott; Nease, Rebecca; Nieh, Ho; NRCHQ; NSIR_DDSP_ILTAB_Distribution; Ordaz, Vonna; Orders, William; OST05 Hoc; Ostendorff, William; Pace, Patti; Patel, Jay; Pearson, Laura; Pederson, Cynthia; Plisco, Loren; Powell, Amy;
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Cook, William; Williams, Kevin; Wittick, Brian; Woodruff, Gena; Zimmerman, Roy; Zimmerman, Roy; Zorn, Jason;
Borchardt, Bill; Cohen, Shari; Cooper, LaToya; Dyer, Jim; ET07 Hoc; Flory, Shirley; Hudson, Sharon; Schwarz, Sherry;
Sprogeris, Patricia; Taylor, Renee; Virgilio, Martin; Walker, Dwight; Walls, Lorena; Weber, Michael
Subject: USNRC Earthquake-Tsunami Update 041911 Revision 1, 1300 EDT

CW 31 of 2789

From: Sent: To: Subject: LIA01 Hoc Wednesday, April 27, 2011 8:31 AM LIA08 Hoc; LIA11 Hoc FW: Press Releases: Commemorating the 25th Anniversary of Chornobyl

From: U.S. Department of State [mailto:usstatebpa@subscriptions.fcg.gov]
Sent: Tuesday, April 19, 2011 2:52 PM
To: LIA01 Hoc
Subject: Press Releases: Commemorating the 25th Anniversary of Chornobyl

Press Releases: Commemorating the 25th Anniversary of Chornobyl Tue, 19 Apr 2011 13:01:53 -0500

Commemorating the 25th Anniversary of Chornobyl

Press Statement Hillary Rodham Clinton Secretary of State Washington, DC April 19, 2011

On behalf of President Obama and the people of the United States, I reaffirm the commitment of the United States to stand with Ukraine and the forty-four other nations participating in the Kyiv Summit as we mark the 25th anniversary of the Chornobyl nuclear disaster and complete Chornobyl's transition to an environmentally-safe site. The completion of two nuclear safety projects, construction of a new safe confinement shelter, and a storage facility for spent fuel will help finally close this difficult chapter for the people of Ukraine and the region.

Nearly two decades of cooperation between Ukraine and the United States on nuclear energy and safety, health, and nonproliferation has made a lasting contribution to nuclear safety in the region and throughout the world. The United States has already contributed \$240 million to this international effort, and today we are announcing a pledge of \$123 million in new funding.

As we remember this anniversary, we are also following the grave situation at Japan's Fukushima-Daiichi nuclear power plant. It is a reminder that nuclear safety requires the global community to work together. This is why today the United States joins Ukraine and the rest of the international community in renewing our support for the government and people of Japan.

As we pause to reflect on the events that took place at Chornobyl twenty-five years ago, we must recommit ourselves to ensuring the safe use of nuclear power for generations to come.

PRN: 2011/603

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CW 33 of 2789

From: Sent: To: Subject: Attachments: LIA01 Hoc Wednesday, April 27, 2011 8:31 AM LIA08 Hoc; LIA11 Hoc FW: [METI Japan](Apr_21)Update on Seismic and Tsunami Damage Information [METI] Apr 21_0800_Seismic Damages to the NPSs.pdf; Apr_21 Radioactivity Level Map Chart.pdf

-----Original Message-----From: meti-info@meti.go.jp [mailto:meti-info@meti.go.jp] Sent: Thursday, April 21, 2011 12:46 PM To: meti-info@meti.go.jp Subject: [METI Japan](Apr_21)Update on Seismic and Tsunami Damage Information

For your reference, Ministry of Economy, Trade and Industry of Japan (METI) is providing latest information on the seismic and tsunami damages to the nuclear power stations (NPSs) in Japan, including those caused to Fukushima Daiichi NPS.

This Thursday, the following information has been updated.

---- Today's news ----

1. Ministry of Health, Labor and Welfare (MHLW) sent out press release on restriction of distribution and consumption of Juvenile sand lance landed at Fukushima Prefecture, in relation to the accident at Fukushima Nuclear Power Plant. [Please refer to 9.]

2. OECD Secretary-General Angel Gurria visited Japan and met with Japan's Foreign Minister Matsumoto. [Please refer to 10.]

---- Updates from METI ----

3. [METI] Apr 21_0800_Seismic Damages to the NPSs [Please refer to the attached file]

4. [METI] Apr 21_Radioactivity Level Map Chart [Please refer to the attached file]

---- Updates from NISA ----

5. [NISA] Apr 21 0800_Current Situation of Onagawa, Fukushima Dai-ichi, Fukushima Dai-ni, Tokai Dai-ni NPSs (only Japanese version is now available. English version will be uploaded.) http://www.meti.go.jp/press/2011/04/20110421001/20110421001-3.pdf

[NISA] Apr 15 1500_Current Situation of Onagawa, Fukushima Dai-ichi, Fukushima Dai-ni, Tokai Dai-ni NPSs (English versioin) <u>http://www.nisa.meti.go.jp/english/files/en20110416-11-1.pdf</u>

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CW 34 of 2789

6. [NISA] Apr 20 1300_Fukushima Dai-ichi Major Parameters of the Plant (English version) http://www.nisa.meti.go.jp/english/files/en20110421-1-3.pdf

---- Major Updates from other agencies of Japanese Government --- 7. [MLIT] Apr 21 AM_Measurement of Radiation Doses in the Ports around Tokyo Bay <u>http://www.mlit.go.jp/kowan/kowan_fr1_000041.html</u> Currently, the level of radiation in Tokyo City, Yokohama City, Kawaski City and Ichikawa City (Chiba) were as shown in the attachment at very safe level to health.

8. [MLIT] Apr 21 PM_Measurement of radiation doses around the Metropolitan Airports <u>http://www.mlit.go.jp/koku/koku_tk7_000003.html</u> The current level of radiation does not have any effects on human health.

9. [MHLW] Apr 20 Restriction of distribution and consumption of Juvenile sand lance landed at Fukushima Prefecture, in relation to the accident at Fukushima Nuclear Power Plant. http://www.mhlw.go.jp/english/topics/2011eg/dl/food-110420.pdf

10. [MOFA] Apr 21 OECD Secretary-General Angel Gurria visited Japan and met with Japan's Foreign Minister Matsumoto. (only Japanese version is now available) http://www.mofa.go.jp/mofaj/kinkyu/2/20110421_224241.html

If you need to add other e-mail address to this mailing list or do not need our information mail any more, please contact at <u>meti-info@meti.go.jp</u>

International Public Relations Team Ministry of Economy, Trade and Industry (METI) 1-3-1 Kasumigaseki, Chiyoda-ku, Tokyo 100-8901, Japan E-mail : <u>meti-info@meti.go.jp</u>

(See attached file: [METI] Apr 21_0800_Seismic Damages to the NPSs.pdf)

(See attached file: Apr_21 Radioactivity Level Map Chart.pdf)

CW 35 of 2789


CW 36 of 2789

Great East Japan Earthquake and the seismic damage to the NPSs

As of 8:00am April 21st, 2011 (JST) Ministry of Economy, Trade and industry

Earthquake and automatic shut-down of nuclear reactors

The Great East Japan Earthquake of historic magnitude 9.0 struck the northeastern part of Japan at 14:46 on March 11th, 2011.

At the time of the earthquake occurrence, 3 reactors (Units 4, 5 and 6 at Fukushima Dai-ichi (I) Nuclear Power Station (NPS)) were under periodic inspection outage, and 11 reactors (Units 1, 2 and 3 at Onagawa NPS; Units 1, 2 and 3 at Fukushima I NPS; Units 1, 2, 3 and 4 of Fukushima Dai-ni (II) NPS; and an unit of Tokai Dai-ni (II) NPS) were automatically shut-down.



Tsunami damaged the emergency generators and the cooling systems at the Fukushima Dai-ichi (I)

Since the external power supply was cut off upon the earthquake occurrence, the emergency diesel power generators at Fukushima I automatically started generating electricity and the cooling systems began their operation.

Then, the massive earthquake triggered the devastating Tsunami wiping away houses, buildings, cars along the widespread areas of the northeast coast. The emergency diesel power generators and the pumps supplying seawater to the cooling system were halted at 15:41 on March 11th due to the Tsunami estimated more than 14 meters high from the seawater level.

CW 37 of 2789

Report concerning incidents at the Fukushima Dai-ichi (I)

Unit 1 Fresh water is being injected to the spent fuel pool and the reactor.

After the reactor was automatically shut-down and the Tsunami disabled the equipments. The pressure of containment vessel unusually increased and the water level inside the reactor pressure vessel dropped. Vent of the primary containment vessel was operated at 10:17am on March 12th; thereafter, hydrogen explosion occurred at the upper-part of the reactor building at 15:36.

Water injection to the reactor pressure vessel

- Seawater had been injected into the reactor pressure vessel since March 12th; thereafter, fresh water has been injected since March 25th, instead of seawater.

Water injection to the spent fuel pool

- On March 31st, spray of fresh water over the spent fuel pool of Unit 1 using the concrete pump truck was carried out.

Power supply

 Lighting in the main control room was recovered on March 24th. And the power supply for the fresh water injection to the reactor pressure vessel was switched to the external power supply on April 3rd.

Stagnant water

- As the result of concentration measurement in the stagnant water on the basement floor of the turbine building, 2.1×10⁵Bq/cm³ of ¹³¹I (Iodine) and 1.8×10⁶Bq/cm³ of ¹³⁷Cs (Caesium) were detected as major radioactive nuclides. Since March 24th, the stagnant water has been transferred to the condenser until it was fulfilled.
- In order to prepare to transfer the stagnant water in the turbine building to the condenser, the water in the condensate storage tank was transferred to the surge tank of suppression pool water and finished on April 2nd. The transfer of the water in the condenser to the condensate storage tank was completed on April 10th.

Nitrogen injection

- Aiming at reducing the possibility of hydrogen combustion in the primary containment vessel of Unit 1, the operations for the injection of nitrogen to the vessel were started at 22:30 on April 6th. The start of nitrogen injection to the primary containment vessel of Unit 1 was confirmed. (1:31am April 7th)



CW 38 of 2789

Unit 2 Fresh water is being injected to the spent fuel pool and the reactor.

After the automatic shut-down of the reactor, the water injection function was sustained. And vent of the primary containment vessel was operated at 11:00am on March 13th and at 0:02am on March 15th. But the reactor water level tended to decrease. At 6:10am on March 15th, there was an explosion sound at Unit 2. Given the fact that the pressure in the suppression chamber decreased, it is presumed that there is possibility of certain damage on the suppression chamber.

Water injection to the reactor pressure vessel

- Seawater had been injected into the reactor pressure vessel since March 14th; thereafter, fresh water has been injected since March 26th, instead of seawater.

Water injection to the spent fuel pool

- The seawater injection to the spent fuel pool using the fire pump truck started on March 20th. On March 29th, the injection was switched to the fresh water injection using the temporary motor-driven pump.
- The work of sampling water that flowed out in the skimmer surge tank from the spent fuel pool of Unit 2 was carried out in order to grasp the condition of water in the pool. (April 16th) As a result of nuclide analysis of radioactive materials regarding the sampled water of the pool, 4.1×10³Bq/cm³ of ¹³I (Iodine), 1.6×10:Bq/cm³ of ¹³Cs (Cesium), 1.5×10:Bq/cm³ of ¹³Cs (Cesium) were detected. (April 17th)

Power supply

 On March 26th, lighting of the main control room was recovered. And the power supply for the fresh water injection to the reactor pressure vessel was switched to the external power supply on April 3rd.

Stagnant water

After transferring the water in the condenser to the condensate storage tank, the stagnant water in the trench of the turbine building was transferred to the condenser from April 12th till 13th. Then, stagnant water (stagnant water with high-level radioactivity) in the turbine building of Unit 2 was started to be transferred to the radioactive waste treatment facilities at 10:08am on April 19th.

Water in the pit

- The water, of which the dose rate was at the level of more than 1,000 mSv/h, was confirmed to be collected in the pit (a vertical portion of an underground structure) located near the intake channel of Unit 2. In addition, the outflow from the crack(20cm) in the concrete portion of the lateral surface of the pit into the sea was confirmed on April 2nd. In order to stop the outflow the coagulant (soluble glass) was injected from the holes around the pit from April 5th, the outflow was confirmed to stop on 6th. Furthermore, the measures to stop water by means of rubber board and jig (prop) were implemented at the outflowing point. (April 6th)
- Injection of the coagulant to the power cable trench of Unit 2 was carried out on April 18th and 19th.



Unit 3 Fresh water is being injected to the spent fuel pool and the reactor.

After the automatic shut-down of the reactor, fresh water and subsequently seawater were injected into the reactor pressure vessel. And vent of the primary containment vessel was operated on March 13th and 14th. However, the pressure in the primary containment vessel rose up unusually and the explosion took place around the reactor building at 11:01am on March 14th.

Water injection to the reactor pressure vessel

 The seawater had been injected into the reactor pressure vessel since March 13th, thereafter; fresh water has been injected since March 25th, instead of seawater. On March 28th, the pump for the fresh water injection was switched from the fire pump truck to the temporary motor-driven pump.

Water injection to the spent fuel pool

In order to pour water into the spent fuel pool, helicopters, water cannon trucks, fire engines and concrete pump trucks discharged water to the spent fuel pool of Unit 3 from sky and ground. Since March 29th till April 18th, fresh water spray over the spent fuel pool using the concrete pump truck had been carried out.

Power supply

 On March 22nd, lighting in the main control room was recovered. And the power supply for the fresh water injection to the reactor pressure vessel was switched to the external power supply on April 3rd.

Stagnant water

 In order to prepare for transferring the stagnant water on the basement floor of turbine building to the condenser, the water in the condensate storage tank is being transferred to the surge tank of suppression pool water from March 28th till March 31st.



Unit 4 No fuel is in the reactor. Fresh water is being injected to the spent fuel pool.

There is no fuel in the reactor pressure vessel due to replacement of the shroud. It was confirmed that a part of wall of the operation floor of the reactor building of Unit 4 was damaged at 6:14am on March 15th. A fire took place at Unit 4 at 9:38am March 15th, but the fire was extinguished spontaneously as of 11:00am. Another fire took place on March 16th, but no fire could be confirmed from the ground.

Water injection to spent fuel pool

- Water spray using fire engine with seawater over the spent fuel pool of Unit 4 was carried out from March 20th till March 21st. And water spray using a concrete pump truck had been carried out five times with seawater from March 22nd till March 27th and eleven times with fresh water from March 30th till April 20th.

Power supply

- On March 29th, lighting in the main control room was recovered.

Stagnant water

From April 2nd, the stagnant water in the main building of radioactive waste treatment facilities was being transferred to the turbine building of Unit 4. As the water level in the vertical portion of the trench for Unit 3 rose from April 3rd, by way of precaution, the transfer was suspended notwithstanding that the path of the water was not clear.(9:22am April 4th)



CW 41 of 2789

Unit 5&6 Unit 5 & 6 is under cold shut down.

One of the emergency generators for Unit 6 was operating and supplying electricity to Unit 5 and Unit 6. Fresh water was being injected into the reactor pressure vessels and the spent fuel pools by make-up water condensate system.

Cold shut down

- The pump for residual heat removal system (RHR) for Unit 5 and the pump for RHR for Unit 6 started up on March 19th and recovered heat removal function.
- Unit 5 was under cold shut down at 14:30 on March 20th and Unit 6 was under cold shut down at 19:27 on the same day.

Power supply

- Unit 5 and 6 received electricity reached to the starting transformer on March 20th. The power supply of Unit 5 and 6 was switched from the emergency diesel generators to the external power supply on March 21st and March 22nd.
- Power supply for the temporary pumps for RHR seawater system of Unit 5 and 6 were switched from the temporary to the permanent on March 24th and 25th.

Low-level radioactivity water discharge

The groundwater with low-level radioactivity in the sub drain pits of Units 5 and 6 (around 1,300t) was discharged through the water discharge canal to the sea from April 4th till 9th in order to protect the critical safety facilities of the reactors. The water was beginning to leak out to the reactor building and other buildings of Unit 6 and there was no further capacity to accommodate it.

Stagnant water

- The stagnant water in the basement floor of the turbine building of Unit 6 was transferred to the condenser. (From 11:00 till 15:00 April 19th)





<u>Common Spent Fuel Pool</u>

- The power supply was started at 15:37 on March 24th and cooling was also started at 18:05 on the same day.
- The power supply was stopped due to short-circuiting of the end of the power supply circuit. (14:34 April 17th) Thereafter the facility inspection was carried out and the power supply was recovered. (17:30 April 17th)

Other

Nuclide analysis at water discharge canal

As the result of nuclide analysis at around the southern water discharge canal, 7.4×10^{11} Bq/cm³ of ¹³¹ I (1850.5 times higher than the limit of consentration of water outside the Environmental Monitoring Area) was detected on March 26th. (As the result of measurement on March 29th, it was detected as 3355.0 times higher than the limit in water.)

As the result of the analysis at the northern water discharge canal, 4.6×10^{1} Bq/ cm³ of ¹³¹I (1262.5 times higher) was detected on March 29th.

Water in the trenches

The water was confirmed to be collected in the vertical parts of the trenches (an underground structure for laying pipes, shaped like a tunnel) outside of the turbine building of Units 1 to 3. The dose rates on the water surface were 0.4 mSv/h of the Unit 1's trench and 1,000 mSv/h of the Unit 2's trench on March 27th. The rate of the Unit 3's trench could not measure because of the rubble.

Nuclide analysis of soil

In the samples of soil collected on March 21st, 22nd, 25th, 28th, 31nd and April 4th on the site of Fukushima I, ²³⁸Pu (Plutonium), ²³⁹Pu and ²⁴⁰Pu were detected. The concentration of the detected plutonium was at the equivalent level of the fallout that was observed in Japan concerning the past atmospheric nuclear testing, i.e. at

the equivalent level of the normal condition of environment, and was not at the level of having harmful influence on human body.

Stagnant water

- On March 28th, the stagnant water was confirmed in the main building of radioactive waste treatment facilities. As the result of analysis of radioactivity, the total amount of the radioactivity 1.2×10^{1} Bq/cm³ in the controlled area and that of 2.2×10^{1} Bq/cm³ in the non-controlled area were detected in March 29th.

Barges loading fresh water

Two barges of the US armed forces carrying fresh water for cooling reactors, etc. landed in the exclusive port of the power station, being towed by the ships of Japan Maritime Self-Defense Force on March 31st and April 2nd. The transfer of fresh water from the barges to the filtrate tank was started.

Low-level radioactive water discharge

- The wastewater with high concentration of radioactive materials was trapped on the basement floor of the turbine building of Unit2 and it was necessary to immediately be transferred to another location as it was leaking out to the surrounding environment. But there was no further capacity to accommodate it.
- In order to use the main building of radioactive waste treatment facilities for accommodating the wastewater of the turbine building of Unit2, the stagnant water with low-level radioactivity in the radioactive waste treatment facilities was started to be discharged from the southern side of the water discharge canal to the sea from April 4th till 10th.Confirmation of the remaining water is being carried out. (Total amount of discharged water is around 9,070t.)
- The stagnant water with low-level radioactivity in the building of miscellaneous solid waste volume reduction processing was discharged from the southern side of the water discharge canal to the sea using 5 pumps. (From April 6th till 7th)
- The watertight measures in the buildings of the radioactive waste treatment facilities were completed. (April 18th)

Countermeasures for Tsunami

- The distribution boards, etc. for the pumps injecting water to the reactors of Units 1 to 3 were transferred to a hill on April 15th.

Other

- In order to prevent the contaminated water from outflowing from the exclusive port, the work for stopping water by means of large-sized sandbags was implemented around the seawall on the south side of the NPS on April 5th.
- 3 sandbags filled with Zeolite were placed between the inlet screen pump room of Unit 3 and that of Unit 4 on April 15th. Thereafter, 2 sandbags were placed between the inlet screen pump room of Unit 1 and that of Unit 2, and 5 sandbags were placed between that of Unit 2 and that of Unit 3 on April 17th.
- The silt fences to prevent the contaminated water from being scattered were completed to be doubly installed at the appropriate part of the seawall on the south side of the NPS on April 11th. Other silt fences were installed in front of the screen of Units 3 and 4 on April 13th, and at the curtain wall and in front of the screen of Unit 1 and 2 on April 14th.
- The test scattering of anti-scattering agent to prevent the radioactive materials on the ground surface from being scattered was carried out on the mountain-side of the Common Pool and other areas from April 1st till 20th.
- Removal of the rubble using remote-control heavy machineries was carried out from April 10th till 20th.
- On the ocean-side of the inlet bar screen of Unit 2, temporary boards to stop water were installed on April 12th, 13th and 15th.
- Work of strengthening connection of the power supplies between Units 1 and 2 and Units 3 and 4 was completed. (10:23 April 19th)
- Confirmation of situation, etc. was carried out by unmanned robots at the reactor building for Unit 1, 2 and 3 on April 17th and 18th.

Current Situation

- Evacuation as far as 20 kilometers from Fukushima I NPS and 10 kilometers from Fukushima II NPS was almost completed (see the diagram "Fukushima prefecture"). The residents in the areas from 20 kilometers to 30 kilometers radius from Fukushima I NPS are directed to stay in-house.
- On March 16th, the Local Emergency Response Headquarter issued "the direction to administer the stable Iodine during evacuation from the evacuation area (20 km radius)" to the Prefecture Governors and the heads of cities, towns and villages.

Monitoring Data

1) The data of Monitoring Post out of 20 kilometers zone of Fukushima I NPS is available on the following website:

http://www.mext.go.jp/a_menu/saigaijohou/syousai/1303726.htm

2) The real-time radiation data collected via the System for Prediction of Environment Emergency Dose Information (SPEEDI) is available on the following website: <u>http://www.bousai.ne.jp/eng/</u>

Location of Fukushima I and II in Japan



^{*}Distance between Three Mile Island and Washington D.C. : 140km, 88mile



CW 46 of 2789

From: Sent: To: Subject: Attachments: LIA01 Hoc Wednesday, April 27, 2011 8:31 AM LIA08 Hoc; LIA11 Hoc FW: [METI Japan](Apr_22)Update on Seismic and Tsunami Damage Information [METI] Apr 22_0800_Seismic Damages to the NPSs.pdf; Apr_22 Radioactivity Level Map Chart.pdf

-----Original Message-----From: meti-info@meti.go.jp [mailto:meti-info@meti.go.jp] Sent: Friday, April 22, 2011 2:24 PM To: meti-info@meti.go.jp Subject: [METI Japan](Apr_22)Update on Seismic and Tsunami Damage Information

For your reference, Ministry of Economy, Trade and Industry of Japan (METI) is providing latest information on the seismic and tsunami damages to the nuclear power stations (NPSs) in Japan, including those caused to Fukushima Daiichi NPS.

This Friday, the following information has been updated.

---- Today's news ----

1. Australian Prime Minister Gillard had a talk with Japanese Prime Minister Kan in Tokyo. Tomorrow, Prime Minister Gillard will be visiting Fukushima Prefecture where Nuclear Power Station is located. [Please refer to 10.]

2. Japanese Prime Minister Kan issued the instruction to prohibit access to the 20km radius area from Fukushima Daiichi [Please refer to 11.]

3. Ministry of Land, Infrastructure, Transport, and Tourism released the guideline to measure the radiation level of containers and ships at ports in Japan [Please refer to 12.]

4. Ministry of Economy, Trade and Industry has uploaded a presentation on the current situation of Fukushima Dai-ichi Nuclear Power Station and Japanese Government's challenges and efforts toward it. [Please refer to 5.]

---- Updates from METI ----

5. [METI] Ministry of Economy, Trade and Industry has uploaded a presentation on the current situation of Fukushima Dai-ichi Nuclear Power Station and Japanese Government's challenges and efforts toward it. http://www.meti.go.jp/english/earthquake/nuclear/japan-challenges/index.html

6. [METI] Apr 22_0800_Seismic Damages to the NPSs [Please refer to the attached file]

7. [METI] Apr 22_Radioactivity Level Map Chart [Please refer to the attached file]

---- Updates from NISA ----

CW 47 of 2789

8. [NISA] Apr 22 1530_Current Situation of Onagawa, Fukushima Dai-ichi, Fukushima Dai-ni, Tokai Dai-ni NPSs (only Japanese version is now available. English version will be uploaded.) http://www.meti.go.jp/press/2011/04/20110422008/20110422008-1.pdf

[NISA] Apr 16 0800_Current Situation of Onagawa, Fukushima Dai-ichi, Fukushima Dai-ni, Tokai Dai-ni NPSs (English versioin) <u>http://www.nisa.meti.go.jp/english/files/en20110416-12-1.pdf</u>

9. [NISA] Apr 21 0700_Fukushima Dai-ichi Major Parameters of the Plant (English version) http://www.nisa.meti.go.jp/english/files/en20110421-5-3.pdf

---- Major Updates from other agencies of Japanese Government --- 10. Australian Prime Minister Gillard had a talk with Japanese Prime Minister Kan in Tokyo. Tomorrow, Prime Minister Gillard will be visiting Fukushima Prefecture where Nuclear Power Station is located.

http://www.kantei.go.jp/foreign/kan/statement/201104/21australia_e.html

11. [PM] Japanese Prime Minister Kan issued the instruction to prohibit access to the 20km radius area from Fukushima Dai-ichi <u>http://www.nisa.meti.go.jp/english/files/en20110422-3-1.pdf</u>

12. [MLIT] Ministry of Land, Infrastructure, Transport, and Tourism released the guideline to measure the radiation level of containers and ships at ports in Japan (only Japanese version is now available. English version will be uploaded.) http://www.mlit.go.jp/report/press/kaiji01 hh 000101.html

13. [MLIT] Apr 22 PM_Measurement of Radiation Doses in the Ports around Tokyo Bay

http://www.mlit.go.jp/kowan/kowan_fr1_000041.html

Currently, the level of radiation in Tokyo City, Yokohama City, Kawaski City and Ichikawa City (Chiba) were as shown in the attachment at very safe level to health.

14. [MLIT] Apr 22 AM_Measurement of radiation doses around the Metropolitan Airports <u>http://www.mlit.go.jp/koku/koku_tk7_000003.html</u> The current level of radiation does not have any effects on human health.

15. [NSC] Apr 22 1645_Assessment of the result of environment monitoring (Only Japanese version is available) <u>http://www.nsc.go.jp/nsc_mnt/110422_1.pdf</u>

If you need to add other e-mail address to this mailing list or do not need our information mail any more, please contact at <u>meti-info@meti.go.jp</u>

International Public Relations Team Ministry of Economy, Trade and Industry (METI) 1-3-1 Kasumigaseki, Chiyoda-ku, Tokyo 100-8901, Japan E-mail : <u>meti-info@meti.go.jp</u>

(See attached file: [METI] Apr 22_0800_Seismic Damages to the NPSs.pdf) (See attached file: Apr_22 Radioactivity Level Map Chart.pdf)



CW 49 of 2789

Great East Japan Earthquake and the seismic damage to the NPSs

As of 8:00am April 22nd, 2011 (JST) Ministry of Economy, Trade and industry

Earthquake and automatic shut-down of nuclear reactors

The Great East Japan Earthquake of historic magnitude 9.0 struck the northeastern part of Japan at 14:46 on March 11th, 2011.

At the time of the earthquake occurrence, 3 reactors (Units 4, 5 and 6 at Fukushima Dai-ichi (I) Nuclear Power Station (NPS)) were under periodic inspection outage, and 11 reactors (Units 1, 2 and 3 at Onagawa NPS; Units 1, 2 and 3 at Fukushima I NPS; Units 1, 2, 3 and 4 of Fukushima Dai-ni (II) NPS; and an unit of Tokai Dai-ni (II) NPS) were automatically shut-down.



Tsunami damaged the emergency generators and the cooling systems at the Fukushima Dai-ichi (I)

Since the external power supply was cut off upon the earthquake occurrence, the emergency diesel power generators at Fukushima I automatically started generating electricity and the cooling systems began their operation.

Then, the massive earthquake triggered the devastating Tsunami wiping away houses, buildings, cars along the widespread areas of the northeast coast. The emergency diesel power generators and the pumps supplying seawater to the cooling system were halted at 15:41 on March 11th due to the Tsunami estimated more than 14 meters high from the seawater level.

CW 50 of 2789

Report concerning incidents at the Fukushima Dai-ichi (I)

Unit 1 Fresh water is being injected to the spent fuel pool and the reactor.

After the reactor was automatically shut-down and the Tsunami disabled the equipments. The pressure of containment vessel unusually increased and the water level inside the reactor pressure vessel dropped. Vent of the primary containment vessel was operated at 10:17am on March 12th; thereafter, hydrogen explosion occurred at the upper-part of the reactor building at 15:36.

Water injection to the reactor pressure vessel

- Seawater had been injected into the reactor pressure vessel since March 12th; thereafter, fresh water has been injected since March 25th, instead of seawater.

Water injection to the spent fuel pool

 On March 31st, spray of fresh water over the spent fuel pool of Unit 1 using the concrete pump truck was carried out.

Power supply

 Lighting in the main control room was recovered on March 24th. And the power supply for the fresh water injection to the reactor pressure vessel was switched to the external power supply on April 3rd.

Stagnant water

- As the result of concentration measurement in the stagnant water on the basement floor of the turbine building, 2.1×10⁵Bq/cm³ of ¹³¹I (Iodine) and 1.8×10⁶Bq/cm³ of ¹³⁷Cs (Caesium) were detected as major radioactive nuclides. Since March 24th, the stagnant water has been transferred to the condenser until it was fulfilled.
- In order to prepare to transfer the stagnant water in the turbine building to the condenser, the water in the condensate storage tank was transferred to the surge tank of suppression pool water and finished on April 2nd. The transfer of the water in the condenser to the condensate storage tank was completed on April 10th.

Nitrogen injection

- Aiming at reducing the possibility of hydrogen combustion in the primary containment vessel of Unit 1, the operations for the injection of nitrogen to the vessel were started at 22:30 on April 6th. The start of nitrogen injection to the primary containment vessel of Unit 1 was confirmed. (1:31am April 7th)



Unit 2 Fresh water is being injected to the spent fuel pool and the reactor.

After the automatic shut-down of the reactor, the water injection function was sustained. And vent of the primary containment vessel was operated at 11:00am on March 13th and at 0:02am on March 15th. But the reactor water level tended to decrease. At 6:10am on March 15th, there was an explosion sound at Unit 2. Given the fact that the pressure in the suppression chamber decreased, it is presumed that there is possibility of certain damage on the suppression chamber.

Water injection to the reactor pressure vessel

- Seawater had been injected into the reactor pressure vessel since March 14th; thereafter, fresh water has been injected since March 26th, instead of seawater.

Water injection to the spent fuel pool

- The seawater injection to the spent fuel pool using the fire pump truck started on March 20th. On March 29th, the injection was switched to the fresh water injection using the temporary motor-driven pump.
- Match 20th. On Match 25th, the injection was swhened to the resh water injection using the temporary motor-driven pump.
 The work of sampling water that flowed out in the skimmer surge tank from the spent fuel pool of Unit 2 was carried out in order to grasp the condition of water in the pool. (April 16th) As a result of nuclide analysis of radioactive materials regarding the sampled water of the pool, 4.1×10³Bq/cm³ of ¹³I (Iodine), 1.6×10:Bq/cm³ of ¹³Cs (Cesium), 1.5×10:Bq/cm³ of ¹³Cs (Cesium) were detected. (April 17th)

Power supply

 On March 26th, lighting of the main control room was recovered. And the power supply for the fresh water injection to the reactor pressure vessel was switched to the external power supply on April 3rd.

Stagnant water

After transferring the water in the condenser to the condensate storage tank, the stagnant water in the trench of the turbine building was transferred to the condenser from April 12th till 13th. Then, stagnant water (stagnant water with high-level radioactivity) in the turbine building of Unit 2 was started to be transferred to the radioactive waste treatment facilities at 10:08am on April 19th.

Water in the pit

- The water, of which the dose rate was at the level of more than 1,000 mSv/h, was confirmed to be collected in the pit (a vertical portion of an underground structure) located near the intake channel of Unit 2. In addition, the outflow from the crack(20cm) in the concrete portion of the lateral surface of the pit into the sea was confirmed on April 2nd. In order to stop the outflow the coagulant (soluble glass) was injected from the holes around the pit from April 5th, the outflow was confirmed to stop on 6th. Furthermore, the measures to stop water by means of rubber board and jig (prop) were implemented at the outflowing point. (April 6th)
- Injection of the coagulant to the power cable trench of Unit 2 was carried out on April 18th and 19th.



Unit 3 Fresh water is being injected to the spent fuel pool and the reactor.

After the automatic shut-down of the reactor, fresh water and subsequently seawater were injected into the reactor pressure vessel. And vent of the primary containment vessel was operated on March 13th and 14th. However, the pressure in the primary containment vessel rose up unusually and the explosion took place around the reactor building at 11:01am on March 14th.

Water injection to the reactor pressure vessel

The seawater had been injected into the reactor pressure vessel since March 13th, thereafter; fresh water has been injected since March 25th, instead of seawater. On March 28th, the pump for the fresh water injection was switched from the fire pump truck to the temporary motor-driven pump.

Water injection to the spent fuel pool

In order to pour water into the spent fuel pool, helicopters, water cannon trucks, fire engines and concrete pump trucks discharged water to the spent fuel pool of Unit 3 from sky and ground. Since March 29th till April 18th, fresh water spray over the spent fuel pool using the concrete pump truck had been carried out.

Power supply

 On March 22nd, lighting in the main control room was recovered. And the power supply for the fresh water injection to the reactor pressure vessel was switched to the external power supply on April 3rd.

Stagnant water

 In order to prepare for transferring the stagnant water on the basement floor of turbine building to the condenser, the water in the condensate storage tank is being transferred to the surge tank of suppression pool water from March 28th till March 31st.



CW 53 of 2789

Unit 4 No fuel is in the reactor. Fresh water is being injected to the spent fuel pool.

There is no fuel in the reactor pressure vessel due to replacement of the shroud. It was confirmed that a part of wall of the operation floor of the reactor building of Unit 4 was damaged at 6:14am on March 15th. A fire took place at Unit 4 at 9:38am March 15th, but the fire was extinguished spontaneously as of 11:00am. Another fire took place on March 16th, but no fire could be confirmed from the ground.

Water injection to spent fuel pool

Water spray using fire engine with seawater over the spent fuel pool of Unit 4 was carried out from March 20th till March 21st. And water spray using a concrete pump truck had been carried out with seawater from March 22nd till March 27th and with fresh water from March 30th till April 21st.

Power supply

- On March 29th, lighting in the main control room was recovered.

Stagnant water

From April 2nd, the stagnant water in the main building of radioactive waste treatment facilities was being transferred to the turbine building of Unit 4. As the water level in the vertical portion of the trench for Unit 3 rose from April 3rd, by way of precaution, the transfer was suspended notwithstanding that the path of the water was not clear.(9:22am April 4th)



Unit 5&6 Unit 5 & 6 is under cold shut down.

One of the emergency generators for Unit 6 was operating and supplying electricity to Unit 5 and Unit 6. Fresh water was being injected into the reactor pressure vessels and the spent fuel pools by make-up water condensate system.

Cold shut down

- The pump for residual heat removal system (RHR) for Unit 5 and the pump for RHR for Unit 6 started up on March 19th and recovered heat removal function.
- Unit 5 was under cold shut down at 14:30 on March 20th and Unit 6 was under cold shut down at 19:27 on the same day.

Power supply

- Unit 5 and 6 received electricity reached to the starting transformer on March 20th. The power supply of Unit 5 and 6 was switched from the emergency diesel generators to the external power supply on March 21st and March 22nd.
- Power supply for the temporary pumps for RHR seawater system of Unit 5 and 6 were switched from the temporary to the permanent on March 24th and 25th.

Low-level radioactivity water discharge

The groundwater with low-level radioactivity in the sub drain pits of Units 5 and 6 (around 1,300t) was discharged through the water discharge canal to the sea from April 4th till 9th in order to protect the critical safety facilities of the reactors. The water was beginning to leak out to the reactor building and other buildings of Unit 6 and there was no further capacity to accommodate it.

Stagnant water

- The stagnant water in the basement floor of the turbine building of Unit 6 was transferred to the condenser. (From 11:00 till 15:00 April 19th)





Common Spent Fuel Pool

- The power supply was started at 15:37 on March 24th and cooling was also started at 18:05 on the same day.
- The power supply was stopped due to short-circuiting of the end of the power supply circuit. (14:34 April 17th) Thereafter the facility inspection was carried out and the power supply was recovered. (17:30 April 17th)

<u>Other</u>

Nuclide analysis at water discharge canal

- As the result of nuclide analysis at around the southern water discharge canal, 7.4×10¹Bq/cm³ of ¹³¹I (1850.5 times higher than the limit of consentration of water outside the Environmental Monitoring Area) was detected on March 26th. (As the result of measurement on March 29th, it was detected as 3355.0 times higher than the limit in water.)

As the result of the analysis at the northern water discharge canal, 4.6×10^{1} Bq/ cm³ of ¹³¹I (1262.5 times higher) was detected on March 29th.

Water in the trenches

The water was confirmed to be collected in the vertical parts of the trenches (an underground structure for laying pipes, shaped like a tunnel) outside of the turbine building of Units 1 to 3. The dose rates on the water surface were 0.4 mSv/h of the Unit 1's trench and 1,000 mSv/h of the Unit 2's trench on March 27th. The rate of the Unit 3's trench could not measure because of the rubble.

Nuclide analysis of soil

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the equivalent level of the normal condition of environment, and was not at the level of having harmful influence on human body.

Stagnant water

- On March 28th, the stagnant water was confirmed in the main building of radioactive waste treatment facilities. As the result of analysis of radioactivity, the total amount of the radioactivity 1.2×10^1 Bq/cm³ in the controlled area and that of 2.2×10^1 Bq/cm³ in the non-controlled area were detected in March 29th.

Barges loading fresh water

 Two barges of the US armed forces carrying fresh water for cooling reactors, etc. landed in the exclusive port of the power station, being towed by the ships of Japan Maritime Self-Defense Force on March 31st and April 2nd. The transfer of fresh water from the barges to the filtrate tank was started.

Low-level radioactive water discharge

- The wastewater with high concentration of radioactive materials was trapped on the basement floor of the turbine building of Unit2 and it was necessary to immediately be transferred to another location as it was leaking out to the surrounding environment. But there was no further capacity to accommodate it.
- In order to use the main building of radioactive waste treatment facilities for accommodating the wastewater of the turbine building of Unit2, the stagnant water with low-level radioactivity in the radioactive waste treatment facilities was started to be discharged from the southern side of the water discharge canal to the sea from April 4th till 10th.Confirmation of the remaining water is being carried out. (Total amount of discharged water is around 9,070t.)
- The stagnant water with low-level radioactivity in the building of miscellaneous solid waste volume reduction processing was discharged from the southern side of the water discharge canal to the sea using 5 pumps. (From April 6th till 7th)
- The watertight measures in the buildings of the radioactive waste treatment facilities were completed. (April 18th)

Countermeasures for Tsunami

- The distribution boards, etc. for the pumps injecting water to the reactors of Units 1 to 3 were transferred to a hill on April 15th.

Other

- In order to prevent the contaminated water from outflowing from the exclusive port, the work for stopping water by means of large-sized sandbags was implemented around the seawall on the south side of the NPS on April 5th.
- 3 sandbags filled with Zeolite were placed between the inlet screen pump room of Unit 3 and that of Unit 4 on April 15th. Thereafter, 2 sandbags were placed between the inlet screen pump room of Unit 1 and that of Unit 2, and 5 sandbags were placed between that of Unit 2 and that of Unit 3 on April 17th.
- The silt fences to prevent the contaminated water from being scattered were completed to be doubly installed at the appropriate part of the seawall on the south side of the NPS on April 11th. Other silt fences were installed in front of the screen of Units 3 and 4 on April 13th, and at the curtain wall and in front of the screen of Unit 1 and 2 on April 14th.
- The test scattering of anti-scattering agent to prevent the radioactive materials on the ground surface from being scattered was carried out on the mountain-side of the Common Pool and other areas from April 1st till 21st.
- Removal of the rubble using remote-control heavy machineries was carried out from April 10th till 21st.
- On the ocean-side of the inlet bar screen of Unit 2, temporary boards to stop water were installed on April 12th, 13th and 15th.
- Work of strengthening connection of the power supplies between Units 1 and 2 and Units 3 and 4 was completed. (10:23 April 19th)
- Confirmation of situation, etc. was carried out by unmanned robots at the reactor building for Unit 1, 2 and 3 on April 17th and 18th.

Current Situation

- Evacuation as far as 20 kilometers from Fukushima I NPS and 10 kilometers from Fukushima II NPS was almost completed (see the diagram "Fukushima prefecture"). The residents in the areas from 20 kilometers to 30 kilometers radius from Fukushima I NPS are directed to stay in-house.
- On March 16th, the Local Emergency Response Headquarter issued "the direction to administer the stable Iodine during evacuation from the evacuation area (20 km radius)" to the Prefecture Governors and the heads of cities, towns and villages.

Monitoring Data

1) The data of Monitoring Post out of 20 kilometers zone of Fukushima I NPS is available on the following website:

http://www.mext.go.jp/a_menu/saigaijohou/syousai/1303726.htm

2) The real-time radiation data collected via the System for Prediction of Environment Emergency Dose Information (SPEEDI) is available on the following website: <u>http://www.bousai.ne.jp/eng/</u>

Location of Fukushima I and II in Japan



*Distance between Three Mile Island and Washington D.C. : 140km, 88mile



CW 59 of 2789

From: Sent: To: Subject: Attachments: LIA01 Hoc Wednesday, April 27, 2011 8:30 AM LIA08 Hoc; LIA11 Hoc FW: [METI Japan](Apr_24)Update on Seismic and Tsunami Damage Information 110424JOINT STATEMENT.pdf

-----Original Message-----From: meti-info@meti.go.jp [mailto:meti-info@meti.go.jp] Sent: Sunday, April 24, 2011 8:47 AM To: meti-info@meti.go.jp Subject: [METI Japan](Apr_24)Update on Seismic and Tsunami Damage Information

For your reference, Ministry of Economy, Trade and Industry of Japan (METI) is providing latest information on the seismic and tsunami damages to the nuclear power stations (NPSs) in Japan, including those caused to Fukushima Daiichi NPS.

This weekend, the following information has been updated.

---- Today's news ----

1. The Economic & Trade Ministers' Meeting among Japan, the People's Republic of China and the Republic of Korea was held in Tokyo. Three Ministers arrive at the common understanding that it is important to continue to secure the prompt and smooth flow of goods and persons in the Asian region. [Please refer to 2. and the attached file]

---- Updates from METI -----

2. The Economic & Trade Ministers' Meeting among Japan, the People's Republic of China and the Republic of Korea was held in Tokyo. Three Ministers arrive at the common understanding that it is important to continue to secure the prompt and smooth flow of goods and persons in the Asian region. Three Ministers are also reminded at this juncture that the maintenance and development of free and open trade system will not only enormously support the recovery process of the stricken region of Japan but also effectively secure vigorous and sustainable growth of all three countries. [Please refer to the attached file]

---- Updates from NISA ----

3. [NISA] Apr 24 1500_Current Situation of Onagawa, Fukushima Dai-ichi, Fukushima Dai-ni, Tokai Dai-ni NPSs (only Japanese version is now available. English version will be uploaded.) <u>http://www.meti.go.jp/press/2011/04/20110424001/20110424001-1.pdf</u>

[NISA] Apr 18 1500_Current Situation of Onagawa, Fukushima Dai-ichi, Fukushima Dai-ni, Tokai Dai-ni NPSs (English versioin) <u>http://www.nisa.meti.go.jp/english/files/en20110418-2-1.pdf</u>

4. [NISA] Apr 23 0200_Fukushima Dai-ichi Major Parameters of the Plant (English version) http://www.nisa.meti.go.jp/english/files/en20110423-4-3.pdf

CW 60 of 2789

---- Major Updates from other agencies of Japanese Government --- 5. [MLIT] Apr 24 AM_Measurement of Radiation Doses in the Ports around Tokyo Bay <u>http://www.mlit.go.jp/kowan/kowan_fr1_000041.html</u> Currently, the level of radiation in Tokyo City, Yokohama City, Kawaski City and Ichikawa City (Chiba) were as shown in the attachment at very safe level to health.

6. [MLIT] Apr 24 PM_Measurement of radiation doses around the Metropolitan Airports <u>http://www.mlit.go.jp/koku/koku_tk7_000003.html</u> The current level of radiation does not have any effects on human health.

7. [NSC] Apr 24 1645_Assessment of the result of environment monitoring (Only Japanese version is available) <u>http://www.nsc.go.jp/nsc_mnt/110424_1.pdf</u>

If you need to add other e-mail address to this mailing list or do not need our information mail any more, please contact at <u>meti-info@meti.go.jp</u>

International Public Relations Team Ministry of Economy, Trade and Industry (METI) 1-3-1 Kasumigaseki, Chiyoda-ku, Tokyo 100-8901, Japan E-mail : <u>meti-info@meti.go.jp</u>

(See attached file: 110424JOINT STATEMENT.pdf)

The Eighth Economic & Trade Ministers' Meeting among Japan, the People's Republic of China and the Republic of Korea

April 24, 2011, Tokyo, Japan

JOINT STATEMENT

We, the Economic and Trade Ministers of Japan, the People's Republic of China and the Republic of Korea convened in Tokyo, Japan, on April 24, 2011, to hold the Eighth Economic and Trade Ministers' Meeting among Japan, the People's Republic of China and the Republic of Korea.

We would like to express our deep condolences toward the victims of the Great East Japan Earthquake of March 11, 2011 and the aftermath.

The Minister of Japan is deeply grateful to the People's Republic of China and the Republic of Korea for their support to assist Japan in dealing with this unprecedented adversity, such as emergency rescue teams, water, food, non-food items and energy related supplies. Ministers of the People's Republic of China and the Republic of Korea take careful note of the explanation by the Minister of Japan on the measures taken so far by the Government of

CW 62 of 2789

Japan to cope with the disastrous aftermaths of the aforementioned Earthquakes and Tsunami. They express their hope and conviction for Japan's quick recovery. Ministers of People's Republic of China and the Republic of Korea express their willingness to continue their support upon request from Japan.

We have observed disruption of the sophisticated supply chains which have developed across the three countries and globally, involving the region and the people seriously affected by the Earthquake, Tsunami and the aftermath. Bearing this in mind, we share the view that the recovery of the stricken region as well as Japan as a whole is in the interests of all the three countries. We arrive at the common understanding that it is important to continue to secure the prompt and smooth flow of goods and persons in the Asian region.

We, the Economic and Trade Ministers of Japan, the People's Republic of China and the Republic of Korea, are also reminded at this juncture that the maintenance and development of a free and open trade system will not only enormously support the recovery process of the stricken region of Japan but also effectively secure vigorous and sustainable growth of all three countries. Therefore, we hereby agree on the following.

We acknowledge the growing importance of a trilateral investment framework for further strengthening the economic partnership among the three countries. In this respect, we share the view of the need to make further efforts to reach a substantive agreement in the Trilateral Investment Agreement negotiation as early as possible.

We welcome the progress to date reported by the Joint Study Committee (JSC) involving government officials, business and academic participants for an FTA among the three countries. Taking into consideration the recovery process of Japan from the disasters and recognizing the importance of cooperation for closer economic integration among the three countries, we share the view of the need for accelerating the work of the JSC and have decided to report this consensus to the coming Trilateral Summit Meeting.

Furthermore, we agree to solidify trilateral cooperation in major global and regional fora such as G20, the WTO, APEC, ASEAN Plus Three Summit and East Asian Summit (EAS). We reaffirm to support and strengthen a free, open and rule-based multilateral trading system as well as to resist protectionism in all forms. We are concerned that there has not been sufficient progress at this critical juncture of the Doha negotiations. We are resolved to make further efforts and agree that all WTO members should work together to find a way out of the current impasse, keeping in mind that 2011 is a critically important "window of opportunity" for concluding the

CW 64 of 2789

Doha Development Agenda, with ambitious, balanced, comprehensive and successful outcomes.

We take note with great pleasure trilateral cooperation is being actively undertaken on plenty of issues.

We welcome that trilateral economic cooperation mechanism is further reinforced by holding the Trilateral Economic and Trade Ministers' Meeting independently. In this context, we agree to hold the next independent Trilateral Economic and Trade Ministers' Meeting in the hosting country of the 2012 Trilateral Summit Meeting.

CW 65 of 2789

LIST OF MINISTERS

1. H.E. Banri Kaieda,

Minister, Ministry of Economy, Trade and Industry, Japan

2. H.E. Chen Deming, Minister, Ministry of Commerce, the People's Republic of China

 H.E. Kim Jong-hoon,
 Minister for Trade, Ministry of Foreign Affairs and Trade, the Republic of Korea



From: Sent: To: Subject: Attachments: LIA01 Hoc Wednesday, April 27, 2011 8:30 AM LIA08 Hoc; LIA11 Hoc FW: [METI Japan](Apr_25)Update on Seismic and Tsunami Damage Information Apr_25 Radioactivity Level Map Chart.pdf

-----Original Message-----From: meti-info@meti.go.jp [mailto:meti-info@meti.go.jp] Sent: Monday, April 25, 2011 9:39 AM To: meti-info@meti.go.jp Subject: [METI Japan](Apr_25)Update on Seismic and Tsunami Damage Information

For your reference, Ministry of Economy, Trade and Industry of Japan (METI) is providing latest information on the seismic and tsunami damages to the nuclear power stations (NPSs) in Japan, including those caused to Fukushima Daiichi NPS.

This Monday, the following information has been updated.

---- Today's news ----We have regular updates as follow.

---- Updates from METI ----1. [METI] Apr 25_Radioactivity Level Map Chart [Please refer to the attached file]

---- Updates from NISA ----

2. [NISA] Apr 25 1130_Current Situation of Onagawa, Fukushima Dai-ichi, Fukushima Dai-ni, Tokai Dai-ni NPSs (only Japanese version is now available. English version will be uploaded.) http://www.meti.go.jp/press/2011/04/20110425006/20110425006-1.pdf

[NISA] Apr 20 0800_Current Situation of Onagawa, Fukushima Dai-ichi, Fukushima Dai-ni, Tokai Dai-ni NPSs (English version) <u>http://www.nisa.meti.go.jp/english/files/en20110420-3-1.pdf</u>

3. [NISA] Apr 25 0800_Fukushima Dai-ichi Major Parameters of the Plant (only Japanese version is available. English version will be uploaded.) <u>http://www.meti.go.jp/press/2011/04/20110425006/20110425006-3.pdf</u>

[NISA] Apr 20 0600_Fukushima Dai-ichi Major Parameters of the Plant (English version) http://www.nisa.meti.go.jp/english/files/en20110420-3-2.pdf

---- Major Updates from other agencies of Japanese Government --- 4. [MLIT] Apr 25 PM_Measurement of Radiation Doses in the Ports around Tokyo Bay <u>http://www.mlit.go.jp/kowan/kowan_fr1_000041.html</u>

CW 67 of 2789

Currently, the level of radiation in Tokyo City, Yokohama City, Kawaski City and Ichikawa City (Chiba) were as shown in the attachment at very safe level to health.

5. [MLIT] Apr 25 PM_Measurement of radiation doses around the Metropolitan Airports <u>http://www.mlit.go.jp/koku/koku_tk7_000003.html</u> The current level of radiation does not have any effects on human health.

6. [NSC] Apr 24 1645_Assessment of the result of environment monitoring (only Japanese version is available) <u>http://www.nsc.go.jp/nsc_mnt/110424_1.pdf</u>

If you need to add other e-mail address to this mailing list or do not need our information mail any more, please contact at <u>meti-info@meti.go.jp</u>

International Public Relations Team

Ministry of Economy, Trade and Industry (METI)

1-3-1 Kasumigaseki, Chiyoda-ku, Tokyo 100-8901, Japan E-mail : meti-info@meti.go.jp

(See attached file: Apr_25 Radioactivity Level Map Chart.pdf)

CW 68 of 2789



CW 69 of 2789

From:	LIA01 Hoc
Sent:	Wednesday, April 27, 2011 8:30 AM
То:	LIA08 Hoc; LIA11 Hoc
Subject:	FW: IT/IM Resources: Introduction to Controlled Unclassified Information Course Available April 25, 2011
Attachments:	~WRD000.jpg; image001.jpg; image002.jpg; image003.jpg; image004.jpg

From: NRC Announcement [mailto:nrc.announcement@nrc.gov]
Sent: Monday, April 25, 2011 10:56 AM
To: NRC Announcement
Subject: IT/IM Resources: Introduction to Controlled Unclassified Information Course Available April 25, 2011

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Friday April 22, 2011	Hea	dquarters Edition		

IT/IM Resources: Introduction to Controlled Unclassified Information Course Available April 25, 2011

IT/IM Resources: Introduction to Controlled Unclassified Information Course Available April 25, 2011

The Office of Information Services (OIS) is pleased to announce the availability of the "Introduction to Controlled Unclassified Information (CUI)" course in iLearn on April 25, 2011.

This very short course is not mandatory but all employees and contractors are encouraged to take it to become familiar with CUI because the NRC is participating in the Federal-wide initiative to implement the CUI program, which will be phased in over the next few years. OIS will provide additional information and training as it becomes available.

Office IT Coordinators should ensure that contractors supporting their office have an iLearn account to access this training. Offsite users should not use CITRIX to access iLearn as this may cause completion issues. Offsite users should navigate to the <u>iLearn Web site</u>.

For help with issues regarding access to the course, please contact the iLearn help desk at 301-415-1234 (Option #4). Questions regarding course content should be directed to <u>Donna Sealing</u> by e-mail or by telephone at 301-415-5804.

CW 70 of 2789

	(2011-04-22 00:00:00.0)	View item in a new window
The la	test Announcements are alwa	ys on the <u>NRC@WORK Home Page</u> .
	Announcements by Date	Announcements by Category
	Search Announceme	ents: term term [Go]
Freque	nuy Asked Questions About t	ne NRC Daily Announcements Email

CW 71 of 2789
From: Sent: To: Subject: Attachments: LIA01 Hoc Wednesday, April 27, 2011 8:30 AM LIA08 Hoc; LIA11 Hoc FW: Daily: 7 New Items from Monday, April 25, 2011 ~WRD000.jpg; image001.jpg; image002.jpg; image003.jpg; image004.jpg

From: NRC Announcement [mailto:nrc.announcement@nrc.gov]
Sent: Monday, April 25, 2011 9:00 PM
To: NRC Announcement
Subject: Daily: 7 New Items from Monday, April 25, 2011

Monday April 25, 2011 -- Headquarters Edition

Health/Wellness: National Prescription Drug Take-Back Day, 2011

Employee Resources: Rotational Opportunity - ADM/DAS/RADB, Policy Analyst, GG-9/10/11/12/13

- Employee Resources: Rotational Opportunity ADM/ADSA, Management Analyst, GG-13/14/15 Two Positions
- Event: RES Seminar 25th Anniversary of Chernobyl Bridgeline and Webinar Information

General Interest: NRC's Hope for Japan Bracelets

Event: Asian American and Pacific Islander Heritage Month

Event: National Administrative Professionals Week

Health/Wellness: National Prescription Drug Take-Back Day, 2011

The NRC headquarters Health Center will be serving as a collection site for the 2011 National Prescription Drug Take-Back Day. Employees may drop off their expired, unneeded, or unused prescription drugs **between 10:00 a.m. to 2:00 p.m. on Friday, April 29 and Monday, May 2**. This is a great opportunity for anyone who has accumulated expired, unneeded, or unused prescription drugs to dispose of them safely and responsibly.

The Office of Personnel Management, the Office of National Drug Control Policy, and the U.S. Drug Enforcement Agency (DEA) are working together to encourage Federal employees to participate in and to invite others – friends, family and neighbors to take part in <u>National Take-Back Day</u>.

The National Prescription Drug Take-Back Day will be held on Saturday, April 30th 2011. Information on how to find the nearest collection site can be found online at the <u>DEA Web</u> <u>site</u>.

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(2011-04-25 00:00:00.0)

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Employee Resources: Rotational Opportunity - ADM/DAS/RADB, Policy Analyst, GG-9/10/11/12/13

The Office of Administration, Division of Administrative Services, Rules, Announcements, and Directives Branch, has one rotational opportunity for a Policy Analyst for employees at the GG-9/10/11/12/13 level. This rotation will last for 3-6 months, beginning in June 2011.

Detailed information is available on the <u>NRC internal Web page</u>.

If you have difficulty accessing a Web link in this announcement, contact the <u>NRC Announcement</u> <u>Coordinator</u>, Beverly Martin, ADM/DAS, 301-492-3674.

(2011-04-25 00:00:00.0)	View item in a new window	

Employee Resources: Rotational Opportunity - ADM/ADSA, Management Analyst, GG-13/14/15 - Two Positions

The Office of Administration, Associate Directorate for Strategic Acquisition, Strategic Acquisition Branch, is soliciting interest from employees interested in a Rotational opportunity. Employees must currently be at the **GG-13/14/15 level**. There are two Rotational opportunities open for Management Analysts in support of the Agency's 21st Century Strategic Acquisition program.

Detailed information is available on the <u>NRC internal Web page</u>.

If you have difficulty accessing a Web link in this announcement, contact the <u>NRC Announcement</u> <u>Coordinator</u>, Beverly Martin, ADM/DAS, 301-492-3674.

(2011-04-25 00:00:00.0)

View item in a new window

CW 73 of 2789

Event: RES Seminar - 25th Anniversary of Chernobyl - Bridgeline and Webinar Information

The seminar on April 26, 2011, will be accessible by bridgeline and webinar. The bridgeline's capacity is limited, so RES asks that only teleworkers and off-site personnel use it.

Bridgeline Call-In Number: 888-324-2911 Passcode: 23071

Webinar: https://www1.gotomeeting.com/register/327260448

(2011-04-25 00:00:00.0)	View item in a new window

General Interest: NRC's Hope for Japan Bracelets

In response to the tragic events in Japan, several NRC team members have decided to take steps toward providing further assistance to the relief efforts. There will be several fundraising events, which will occur in the near future. The first of these is the selling of "HOPE FOR JAPAN" bracelets. All proceeds will be going to Habitat Japan. This organization is a branch of Habitat for Humanity, and all funding from the agency will be used in order to purchase supplies to assist with the rebuilding of what has been lost. Attached you will find the NRC's <u>HOPE FOR JAPAN</u> <u>BRACELET Flyer</u> for additional information.

The goal is to receive \$2.00 for EACH bracelet or 3 bracelets for \$5.00.

\$2.00 per bracelet is a little that could amount to a lot!

Contact: Stanley Freeman, NRR (301-415-3169)

"We make a living by what we get, but we make a life by what we give." - Winston Churchill

(2011-04-25 00:00:00.0)	View item in a new window	

Event: Asian American and Pacific Islander Heritage Month

Yellow Announcement No. 056, "Asian American and Pacific Islander Heritage Month," is now available on the <u>internal Web site</u> under Yellow Announcements.

This announcement can also be found in the ADAMS 2011 Yellow Announcements folder in the

Main Library of the ADAMS Document Manager. In the folder, Yellow Announcements are arranged in report number order.

If you have difficulty accessing a Web link in this announcement, contact the <u>NRC Announcement</u> <u>Coordinator</u>, Beverly Martin, ADM/DAS, 301-492-3674.



Event: National Administrative Professionals Week

Yellow Announcement No. 055, "National Administrative Professionals Week," is now available on the <u>internal Web site</u> under Yellow Announcements.

This announcement can also be found in the ADAMS 2011 Yellow Announcements folder in the Main Library of the ADAMS Document Manager. In the folder, Yellow Announcements are arranged in report number order.

If you have difficulty accessing a Web link in this announcement, contact the <u>NRC Announcement</u> <u>Coordinator</u>, Beverly Martin, ADM/DAS, 301-492-3674.



From: Sent: To: Subject: LIA01 Hoc Wednesday, April 27, 2011 8:30 AM LIA08 Hoc; LIA11 Hoc FW: Declined: Regarding the Consortium call -- 2000

-----Original Appointment-----From: Nielsen, Rick M (INPO) [mailto:NielsenFM@INPO.org] Sent: Tuesday, April 26, 2011 8:28 AM To: LIA01 Hoc Subject: Declined: Regarding the Consortium call -- 2000 When: Occurs every day effective 3/30/2011 from 8:00 PM to 9:00 PM America/New_York. Where:

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From: Sent: To: Subject: Attachments: LIA01 Hoc Wednesday, April 27, 2011 8:30 AM LIA08 Hoc; LIA11 Hoc FW: [METI Japan](Apr_26)Update on Recovery from Seismic and Tsunami Damage [METI] Apr 25_1130_Seismic Damage to the NPSs.pdf; Apr_26 Radioactivity Level Map Chart.pdf

-----Original Message-----From: meti-info@meti.go.jp [mailto:meti-info@meti.go.jp] Sent: Tuesday, April 26, 2011 2:12 PM To: meti-info@meti.go.jp Subject: [METI Japan](Apr_26)Update on Recovery from Seismic and Tsunami Damage

From today, Ministry of Economy, Trade and Industry will be providing information focusing on recovery from Great East Japan Earthquake based on the fact that there are many important symptoms of restoration from the Earthquake.

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This Monday, the following information has been updated.

---- Today's news ----

1. METI released a report on the impact of Great East Japan Earthquake on supply chain. [Please refer to 2. and the attached file]

---- Updates from METI ----2. [METI] Apr 26_METI released a report on the impact of Great East Japan Earthquake on supply chain. (only Japanese version is now available. English version will be uploaded.) http://www.meti.go.jp/press/2011/04/20110426005/20110426005.html

3. [METI] Apr 25_1130_Seismic Damage to the NPSs [Please refer to the attached file]

4. [METI] Apr 26_Radioactivity Level Map Chart [Please refer to the attached file]

---- Updates from NISA ----5. [NISA] Apr 26 1300_Current Situation of Onagawa, Fukushima Dai-ichi, Fukushima Dai-ni, Tokai Dai-ni NPSs (only Japanese version is now available. English version will be uploaded.) <u>http://www.meti.go.jp/press/2011/04/20110426009/20110426009-1.pdf</u>

[NISA] Apr 21 1530_Current Situation of Onagawa, Fukushima Dai-ichi, Fukushima Dai-ni, Tokai Dai-ni NPSs (English version) <u>http://www.nisa.meti.go.jp/english/files/en20110421-5-1.pdf</u>

6. [NISA] Apr 25 0800_Fukushima Dai-ichi Major Parameters of the Plant http://www.nisa.meti.go.jp/english/files/en20110426-1-3.pdf

CW 77 of 2789

---- Major Updates from other agencies of Japanese Government --- 7. [MLIT] Apr 26 PM_Measurement of Radiation Doses in the Ports around Tokyo Bay http://www.mlit.go.jp/kowan/kowan_fr1_000041.html Currently, the level of radiation in Tokyo City, Yokohama City, Kawaski City and Ichikawa City (Chiba) were as shown in the attachment at very safe level to health.

8. [MLIT] Apr 26 PM_Measurement of radiation doses around the Metropolitan Airports <u>http://www.mlit.go.jp/koku/koku_tk7_000003.html</u> The current level of radiation does not have any effects on human health.

9. [NSC] Apr 26 1645_Assessment of the result of environment monitoring (only Japanese version is available) http://www.nsc.go.jp/nsc_mnt/110426_1.pdf

If you need to add other e-mail address to this mailing list or do not need our information mail any more, please contact at <u>meti-info@meti.go.jp</u>

International Public Relations Team Ministry of Economy, Trade and Industry (METI) 1-3-1 Kasumigaseki, Chiyoda-ku, Tokyo 100-8901, Japan E-mail : <u>meti-info@meti.go.jp</u>

(See attached file: [METI] Apr 25_1130_Seismic Damage to the NPSs.pdf)

(See attached file: Apr_26 Radioactivity Level Map Chart.pdf)

CW 78 of 2789



CW 79 of 2789

Great East Japan Earthquake and the seismic damage to the NPSs

As of 11:30am April 25th, 2011 (JST) Ministry of Economy, Trade and industry

Earthquake and automatic shut-down of nuclear reactors

The Great East Japan Earthquake of historic magnitude 9.0 struck the northeastern part of Japan at 14:46 on March 11th, 2011.

At the time of the earthquake occurrence, 3 reactors (Units 4, 5 and 6 at Fukushima Dai-ichi (I) Nuclear Power Station (NPS)) were under periodic inspection outage, and 11 reactors (Units 1, 2 and 3 at Onagawa NPS; Units 1, 2 and 3 at Fukushima I NPS; Units 1, 2, 3 and 4 of Fukushima Dai-ni (II) NPS; and an unit of Tokai Dai-ni (II) NPS) were automatically shut-down.



Tsunami damaged the emergency generators and the cooling systems at the Fukushima Dai-ichi (I)

Since the external power supply was cut off upon the earthquake occurrence, the emergency diesel power generators at Fukushima I automatically started generating electricity and the cooling systems began their operation.

Then, the massive earthquake triggered the devastating Tsunami wiping away houses, buildings, cars along the widespread areas of the northeast coast. The emergency diesel power generators and the pumps supplying seawater to the cooling system were halted at 15:41 on March 11th due to the Tsunami estimated more than 14 meters high from the seawater level.

CW 80 of 2789

Unit 1 Fresh water is being injected to the spent fuel pool and the reactor.

After the reactor was automatically shut-down and the Tsunami disabled the equipments. The pressure of containment vessel unusually increased and the water level inside the reactor pressure vessel dropped. Vent of the primary containment vessel was operated at 10:17am on March 12th; thereafter, hydrogen explosion occurred at the upper-part of the reactor building at 15:36.

Water injection to the reactor pressure vessel

- Seawater had been injected into the reactor pressure vessel since March 12th; thereafter, fresh water has been injected since March 25th, instead of seawater.

Water injection to the spent fuel pool

- On March 31st, spray of fresh water over the spent fuel pool of Unit 1 using the concrete pump truck was carried out.

Power supply

 Lighting in the main control room was recovered on March 24th. And the power supply for the fresh water injection to the reactor pressure vessel was switched to the external power supply on April 3rd.

Stagnant water

- As the result of concentration measurement in the stagnant water on the basement floor of the turbine building, 2.1×10⁵Bq/cm³ of ¹³¹I (Iodine) and 1.8×10⁶Bq/cm³ of ¹³⁷Cs (Caesium) were detected as major radioactive nuclides. Since March 24th, the stagnant water has been transferred to the condenser until it was fulfilled.
- In order to prepare to transfer the stagnant water in the turbine building to the condenser, the water in the condensate storage tank was transferred to the surge tank of suppression pool water and finished on April 2nd. The transfer of the water in the condenser to the condensate storage tank was completed on April 10th.

Nitrogen injection

- Aiming at reducing the possibility of hydrogen combustion in the primary containment vessel of Unit 1, the operations for the injection of nitrogen to the vessel were started at 22:30 on April 6th. The start of nitrogen injection to the primary containment vessel of Unit 1 was confirmed. (1:31am April 7th)



Unit 2 Fresh water is being injected to the spent fuel pool and the reactor.

After the automatic shut-down of the reactor, the water injection function was sustained. And vent of the primary containment vessel was operated at 11:00am on March 13th and at 0:02am on March 15th. But the reactor water level tended to decrease. At 6:10am on March 15th, there was an explosion sound at Unit 2. Given the fact that the pressure in the suppression chamber decreased, it is presumed that there is possibility of certain damage on the suppression chamber.

Water injection to the reactor pressure vessel

- Seawater had been injected into the reactor pressure vessel since March 14th; thereafter, fresh water has been injected since March 26th, instead of seawater.

Water injection to the spent fuel pool

- The seawater injection to the spent fuel pool using the fire pump truck started on March 20th. On March 29th, the injection was switched to the fresh water injection using the temporary motor-driven pump.
- The work of sampling water that flowed out in the skimmer surge tank from the spent fuel pool of Unit 2 was carried out in order to grasp the condition of water in the pool. (April 16th) As a result of nuclide analysis of radioactive materials regarding the sampled water of the pool, 4.1×10³Bq/cm³ of ¹³¹I (Iodine), 1.6×10:Bq/ cm³ of ¹³⁴Cs (Cesium), 1.5×10:Bq/ cm³ of ¹³⁷Cs (Cesium) were detected. (April 17th)

Power supply

 On March 26th, lighting of the main control room was recovered. And the power supply for the fresh water injection to the reactor pressure vessel was switched to the external power supply on April 3rd.

Stagnant water

After transferring the water in the condenser to the condensate storage tank, the stagnant water in the trench of the turbine building was transferred to the condenser from April 12th till 13th. Then, stagnant water (stagnant water with high-level radioactivity) in the turbine building of Unit 2 was started to be transferred to the radioactive waste treatment facilities at 10:08am on April 19th.

Water in the pit

- The water, of which the dose rate was at the level of more than 1,000 mSv/h, was confirmed to be collected in the pit (a vertical portion of an underground structure) located near the intake channel of Unit 2. In addition, the outflow from the crack(20cm) in the concrete portion of the lateral surface of the pit into the sea was confirmed on April 2nd. In order to stop the outflow the coagulant (soluble glass) was injected from the holes around the pit from April 5th, the outflow was confirmed to stop on 6th. Furthermore, the measures to stop water by means of rubber board and jig (prop) were implemented at the outflowing point. (April 6th)
- Injection of the coagulant to the power cable trench of Unit 2 was carried out on April 18th and 19th.



Unit 3 Fresh water is being injected to the spent fuel pool and the reactor.

After the automatic shut-down of the reactor, fresh water and subsequently seawater were injected into the reactor pressure vessel. And vent of the primary containment vessel was operated on March 13th and 14th. However, the pressure in the primary containment vessel rose up unusually and the explosion took place around the reactor building at 11:01am on March 14th.

Water injection to the reactor pressure vessel

 The seawater had been injected into the reactor pressure vessel since March 13th, thereafter; fresh water has been injected since March 25th, instead of seawater. On March 28th, the pump for the fresh water injection was switched from the fire pump truck to the temporary motor-driven pump.

Water injection to the spent fuel pool

- In order to pour water into the spent fuel pool, helicopters, water cannon trucks, fire engines and concrete pump trucks discharged water to the spent fuel pool of Unit 3 from sky and ground. Since March 29th till April 22th, fresh water spray over the spent fuel pool using the concrete pump truck had been carried out.
- Test injection of fresh water to the spent fuel pool using fuel pool coolant clean-up system for Unit 3 was carried out on April 22nd.

Power supply

 On March 22nd, lighting in the main control room was recovered. And the power supply for the fresh water injection to the reactor pressure vessel was switched to the external power supply on April 3rd.

Stagnant water

 In order to prepare for transferring the stagnant water on the basement floor of turbine building to the condenser, the water in the condensate storage tank is being transferred to the surge tank of suppression pool water from March 28th till March 31st.



Unit 4 No fuel is in the reactor. Fresh water is being injected to the spent fuel pool.

There is no fuel in the reactor pressure vessel due to replacement of the shroud. It was confirmed that a part of wall of the operation floor of the reactor building of Unit 4 was damaged at 6:14am on March 15th. A fire took place at Unit 4 at 9:38am March 15th, but the fire was extinguished spontaneously as of 11:00am. Another fire took place on March 16th, but no fire could be confirmed from the ground.

Water injection to spent fuel pool

Water spray using fire engine with seawater over the spent fuel pool of Unit 4 was carried out from March 20th till March 21st. And water spray using a concrete pump truck had been carried out with seawater from March 22nd till March 27th and with fresh water from March 30th till April 24th.

Power supply

- On March 29th, lighting in the main control room was recovered.

Stagnant water

From April 2nd, the stagnant water in the main building of radioactive waste treatment facilities was being transferred to the turbine building of Unit 4. As the water level in the vertical portion of the trench for Unit 3 rose from April 3rd, by way of precaution, the transfer was suspended notwithstanding that the path of the water was not clear.(9:22am April 4th)



Unit 5&6 Unit 5 & 6 is under cold shut down.

One of the emergency generators for Unit 6 was operating and supplying electricity to Unit 5 and Unit 6. Fresh water was being injected into the reactor pressure vessels and the spent fuel pools by make-up water condensate system.

Cold shut down

- The pump for residual heat removal system (RHR) for Unit 5 and the pump for RHR for Unit 6 started up on March 19th and recovered heat removal function.
- Unit 5 was under cold shut down at 14:30 on March 20th and Unit 6 was under cold shut down at 19:27 on the same day.

Power supply

- Unit 5 and 6 received electricity reached to the starting transformer on March 20th. The power supply of Unit 5 and 6 was switched from the emergency diesel generators to the external power supply on March 21st and March 22nd.
- Power supply for the temporary pumps for RHR seawater system of Unit 5 and 6 were switched from the temporary to the permanent on March 24th and 25th.

Low-level radioactivity water discharge

The groundwater with low-level radioactivity in the sub drain pits of Units 5 and 6 (around 1,300t) was discharged through the water discharge canal to the sea from April 4th till 9th in order to protect the critical safety facilities of the reactors. The water was beginning to leak out to the reactor building and other buildings of Unit 6 and there was no further capacity to accommodate it.

Stagnant water

- The stagnant water in the basement floor of the turbine building of Unit 6 was transferred to the condenser. (From 11:00 till 15:00 April 19th)





Common Spent Fuel Pool

- The power supply was started at 15:37 on March 24th and cooling was also started at 18:05 on the same day.
- The power supply was stopped due to short-circuiting of the end of the power supply circuit. (14:34 April 17th) Thereafter the facility inspection was carried out and the power supply was recovered. (17:30 April 17th)

<u>Other</u>

Nuclide analysis at water discharge canal

As the result of nuclide analysis at around the southern water discharge canal, 7.4×10^{1} Bq/cm³ of ¹³¹I (1850.5 times higher than the limit of consentration of water outside the Environmental Monitoring Area) was detected on March 26th. (As the result of measurement on March 29th, it was detected as 3355.0 times higher than the limit in water.)

As the result of the analysis at the northern water discharge canal, 4.6×10^{1} Bq/ cm³ of ¹³¹I (1262.5 times higher) was detected on March 29th.

Water in the trenches

The water was confirmed to be collected in the vertical parts of the trenches (an underground structure for laying pipes, shaped like a tunnel) outside of the turbine building of Units 1 to 3. The dose rates on the water surface were 0.4 mSv/h of the Unit 1's trench and 1,000 mSv/h of the Unit 2's trench on March 27th. The rate of the Unit 3's trench could not measure because of the rubble.

Nuclide analysis of soil

In the samples of soil collected on March 21st, 22nd, 25th, 28th, 31nd and April 4th on the site of Fukushima I, ²³⁸Pu (Plutonium), ²³⁹Pu and ²⁴⁰Pu were detected. The concentration of the detected plutonium was at the equivalent level of the fallout that was observed in Japan concerning the past atmospheric nuclear testing, i.e. at

the equivalent level of the normal condition of environment, and was not at the level of having harmful influence on human body.

Stagnant water

- On March 28th, the stagnant water was confirmed in the main building of radioactive waste treatment facilities. As the result of analysis of radioactivity, the total amount of the radioactivity 1.2×10^{1} Bq/cm³ in the controlled area and that of 2.2×10^{1} Bq/cm³ in the non-controlled area were detected in March 29th.

Barges loading fresh water

 Two barges of the US armed forces carrying fresh water for cooling reactors, etc. landed in the exclusive port of the power station, being towed by the ships of Japan Maritime Self-Defense Force on March 31st and April 2nd. The transfer of fresh water from the barges to the filtrate tank was started.

Low-level radioactive water discharge

- The wastewater with high concentration of radioactive materials was trapped on the basement floor of the turbine building of Unit2 and it was necessary to immediately be transferred to another location as it was leaking out to the surrounding environment. But there was no further capacity to accommodate it.
- In order to use the main building of radioactive waste treatment facilities for accommodating the wastewater of the turbine building of Unit2, the stagnant water with low-level radioactivity in the radioactive waste treatment facilities was started to be discharged from the southern side of the water discharge canal to the sea from April 4th till 10th.Confirmation of the remaining water is being carried out. (Total amount of discharged water is around 9,070t.)
- The stagnant water with low-level radioactivity in the building of miscellaneous solid waste volume reduction processing was discharged from the southern side of the water discharge canal to the sea using 5 pumps. (From April 6th till 7th)
- The watertight measures in the buildings of the radioactive waste treatment facilities were completed. (April 18th)

Countermeasures for Tsunami

- The distribution boards, etc. for the pumps injecting water to the reactors of Units 1 to 3 were transferred to a hill on April 15th.

Other

- In order to prevent the contaminated water from outflowing from the exclusive port, the work for stopping water by means of large-sized sandbags was implemented around the seawall on the south side of the NPS on April 5th.
- 3 sandbags filled with Zeolite were placed between the inlet screen pump room of Unit 3 and that of Unit 4 on April 15th. Thereafter, 2 sandbags were placed between the inlet screen pump room of Unit 1 and that of Unit 2, and 5 sandbags were placed between that of Unit 2 and that of Unit 3 on April 17th.
- The silt fences to prevent the contaminated water from being scattered were completed to be doubly installed at the appropriate part of the seawall on the south side of the NPS on April 11th. Other silt fences were installed in front of the screen of Units 3 and 4 on April 13th, and at the curtain wall and in front of the screen of Unit 1 and 2 on April 14th.
- The test scattering of anti-scattering agent to prevent the radioactive materials on the ground surface from being scattered was carried out on the mountain-side of the Common Pool and other areas from April 1st till 24th.
- Removal of the rubble using remote-control heavy machineries was carried out from April 10th till 24th.
- On the ocean-side of the inlet bar screen of Unit 2, temporary boards to stop water were installed on April 12th, 13th and 15th.
- Work of strengthening connection of the power supplies between Units 1 and 2 and Units 3 and 4 was completed. (10:23 April 19th)
- Confirmation of situation, etc. was carried out by unmanned robots at the reactor building for Unit 1, 2 and 3 on April 17th and 18th.

Current Situation

- Evacuation as far as 20 kilometers from Fukushima I NPS and 10 kilometers from Fukushima II NPS was almost completed (see the diagram "Fukushima prefecture"). The residents in the areas from 20 kilometers to 30 kilometers radius from Fukushima I NPS are directed to stay in-house.
- On March 16th, the Local Emergency Response Headquarter issued "the direction to administer the stable Iodine during evacuation from the evacuation area (20 km radius)" to the Prefecture Governors and the heads of cities, towns and villages.

Monitoring Data

1) The data of Monitoring Post out of 20 kilometers zone of Fukushima I NPS is available on the following website:

http://www.mext.go.jp/a_menu/saigaijohou/syousai/1303726.htm

2) The real-time radiation data collected via the System for Prediction of Environment Emergency Dose Information (SPEEDI) is available on the following website: <u>http://www.bousai.ne.jp/eng/</u>

Location of Fukushima I and II in Japan



*Distance between Three Mile Island and Washington D.C. : 140km, 88mile



CW 89 of 2789

From:	Tiburcio, Michelle <michelle_tiburcio@sra.com></michelle_tiburcio@sra.com>				
Sent:	Tuesday, April 26, 2011 11:51 AM				
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	Teri; Brennan, Inga; Matthews, Denise - OSHA; Menon, Ramesh - OSHA;				
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	(b)(6) ; Lodwick, Jeffrey - OSHA				
Subject:	Agenda Atteched: ATeam call today (4/26) @ 2PM EDT				
Attachments:	Draft A-team Agenda_4-26-11.docx				
Agenda attached.					

Date: April 26, 2011 Time: 1400 EDT Room: EV2 Call-in Number: 1-866-561-4509 Pass code: (b)(6)

Please follow the instructions below to access the documents found on this site.

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Use FTP software (Win FTP, Filezilla, etc.) or internet browser (Windows Explorer, Firefox, etc.)

If you have FTP software, just enter the following:

FTP Userna	me:		(b)(6)	
Password:	(b)(6)		
FTP Server:		(b)(6)	-	
FTP Server	Port:	21		

If you are using your internet browser, in the address field, enter " <u>ftp://ftp.epaaspect2.net/</u>"; do not use http:// or www. A window will appear asking for a username and password (see above)

Michelle A. Tiburcio

SRA International, Inc. 3434 Washington Blvd., 2185 Arlington, VA 22201 (703) 284-6094

From: Tiburcio, Michelle

Sent: Wednesday, April 13, 2011 11:38 AM

To: brozowski.george@epa.gov; decair.sara@epa.gov; goodman.roger@epa.gov; jablonowski.eugene@epa.gov; liles.darrell@epa.gov; tupin.edward@epa.gov; veal.lee@epa.gov; gfn6@cdc.gov; Ferris.John@dol.gov; ver2@cdc.gov; george.allen@fda.hhs.gov; jva2@cdc.gov; asa4@cdc.gov; lkb1@nrc.gov; mdb7@cdc.gov; ozl6@cdc.gov; pac4@cdc.gov; james.cherniack@fda.hhs.gov; gordon.s.cleveland@aphis.usda.gov; ccc8@cdc.gov; william.cunningham@fda.hhs.gov; gyf7@cdc.gov; rachel.evans@fda.hhs.gov; rjf8@cdc.gov; ron.graham@fsis.usda.gov; patricia.hansen@fda.hhs.gov; scotty.hargrave@fda.hhs.gov; ezh7@cdc.gov; vinetta.howardking@fda.hhs.gov; john.jensen@dm.usda.gov; terri.jones@fda.hhs.gov; ldk4@cdc.gov; wgl0@cdc.gov; Scott.Lough@ams.usda.gov; carmen.maher@fda.hhs.gov; ; 'ellen.morrison@fda.hhs.gov'; jfn1@cdc.gov; menarm@nv.doe.gov; (b)(6) michael.noska@fda.hhs.gov; john.pavek@wdc.usda.gov; pemberwj@nv.doe.gov; peter.a.petch@aphis.usda.gov; mark.russo@fda.hhs.gov; karen.smallwood@fda.hhs.gov; byw3@cdc.gov; albert.wiley@orise.orau.gov; pmt12.hoc@nrc.gov; lia11.hoc@nrc.gov; eoc_environmental_unit@epa.gov; (b)(6) patrick.simmons@dhs.gov; paul.ward@fema.gov; stephen.chase@dhs.gov; james.williams@dot.gov; ira.s.reese@cbp.dhs.gov; (b)(6); Timothy.Greten@dhs.gov; Dixon, Teri (DixonTL@nv.doe.gov); Brennan, Inga (BRENNAIV@nv.doe.gov); Matthews, Denise - OSHA (Matthews.Denise@dol.gov); Menon, Ramesh - OSHA (Menon.Ramesh@dol.gov); 'michael.howe@dhs.gov'; 'cmw6@cdc.gov'; (b)(6) : Sincek, Jeffrey (Jeffrev.Sincek@fda.hhs.gov): (b)(6) ; Lodwick, Jeffrey - OSHA (Lodwick.Jeffrey@dol.gov) Subject: Reminder: ATeam call today (4/13) @ 2PM EDT

Agenda to follow.

Date: April 13, 2011 Time: 1400 EDT Room: EV2 Call-in Number: 1-866-561-4509 Pass code: (b)(6)

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Use FTP software (Win FTP, Filezilla, etc.) or internet browser (Windows Explorer, Firefox, etc.)

If you have FTP software, just enter the following: FTP Username: ATEAM@epaaspect2.net Password: (b)(6) FTP Server: <u>ftp.epaaspect2.net</u> FTP Server Port: 21

If you are using your internet browser, in the address field, enter " <u>ftp://ftp.epaaspect2.net/</u>"; do not use http:// or www. A window will appear asking for a username and password (see above)

ι,

Michelle A. Tiburcio

SRA International, Inc. 3434 Washington Blvd., 2185 Arlington, VA 22201 (703) 284-6094



DRAFT

A Team Daily Interagency Call

Date: April 11, 2011 Time: 1400 EDT Room: EV2 Call-in Number: 1-866-561-4509 Pass code: (b)(6)

Agenda

- Roll Call
- Operational Guides Technical (OGT) Workgroup Support Request
- Habitability Assessment
- Specific items (limited #) that you would want to be in place before allowing (1) temporary reentry and (2) permanent reentry into an evacuation zone
- Other Items

CW 93 of 2789



A Team Daily Interagency Call

Date: April 19, 2011 Time: 1400 EDT Room: EV2 Call-in Number: 1-866-561-4509 Pass code: (b)(6)

Agenda

Roll Call

Operational Guides Technical (OGT) Workgroup Support Request

- Habitability Assessment
- Specific items (limited #) that you would want to be in place before allowing (1) temporary reentry and (2) permanent reentry into an evacuation zone
- Other Items



Advisory Team for Environmental Food and Health Japanese Nuclear Response

DRAFT

A Team Daily Interagency Call

Date: April 26, 2011 Time: 1400 EDT Room: EV2 Call-in Number: 1-866-561-4509 Pass code: (b)(6)

Agenda

- Roll Call
- Operational Guides Technical (OGT) Workgroup Support Request Rice Growing Analysis
- Habitability Assessment
- Temporary Re-entry/Permanent Re-entry into US recommended Evacuation Zone
- Japanese government enforcement of 20 km evacuation zone ("No go") Zone
- Report out on Japan deployment (Mike Noska)
- Conference Call Schedule
- Other Items

From:	Tupin.Edward@epamail.epa.gov
Sent:	Monday, April 25, 2011 5:21 PM
To:	Brozowski George@epamail.epa.gov: DeCair Sara@epamail.epa.gov:
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	EOC_Environmental_Unit@epamail.epa.gov; EOC_Manager@epamail.epa.gov
Subject:	Fw: OGT Analysis
Attachments:	Radiological Assessment for the Japanese Nuclear Incident_4_18_2011.docx
	_
Advisory Team,	
The OGT analysis on rice growing	for the call tomorrow.
Ed	
Edward A. Tupin, MS, CHP	
tunin edward@ena.gov	
Health Physicist	
Center for Badiological Emergency	Management US Environmental Protection Agency, 66081 Washington, DC 20460
office: (202) 343-9383	Mundgement of Environmental Potection Agency oboos Washington, De 20400
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wasnington, DC 20005	
******	****************

----- Forwarded by Edward Tupin/DC/USEPA/US on 04/25/2011 05:20 PM -----

From:"Noska, Michael A" <Michael.Noska@fda.hhs.gov>To:Edward Tupin/DC/USEPA/US@EPADate:04/25/2011 05:07 PMSubject:OGT Analysis

Ed,

Sorry I didn't get around to this earlier. Could you please forward the OGT analysis of rice growing to the Advisory Team?

Thanks,

Mike

Michael A. Noska, M.S. Captain, USPHS Senior Advisor for Health Physics Environment, Safety and Strategic Initiatives Staff Office of the Commissioner Food and Drug Administration <u>301-796-8313</u> (Office) (b)(6) (Cell)

(See attached file: Radiological Assessment for the Japanese Nuclear Incident_4_18_2011.docx)

,

Preliminary Radiological Assessment for the Japanese Nuclear Incident:

Planting Rice and Eating Seafood

by

Argonne National Laboratory and U.S. Department of Energy

April 15, 2011

The two radiological assessment tasks analyzed are as follows:

- (1) Whether rice should be planted in the coming weeks in Japanese soils contaminated with Cs-137 and Sr-90?
- (2) What is the dose resulting from eating seafood contaminated with 2000 Bq/kg of I-131 using Japanese diet?

<u>Task 1</u>

For Task 1, the RESRAD-RDD Group G- Food Consumption, Subgroup 3 was used. The root uptake transfer factors used for this analysis are 0.6 and 0.1 for Cs-137 and Sr-90, respectively. The root uptake transfer factor is a dimensionless quantity that represents the equilibrium ratio of radioactivity in rice and in soil. The rice transfer factors are based on the data contained in 3 references and they are summarized below.

In IAEA TRS 472 (2010), Table 22 on page 79 lists the transfer factors from soil to rice. The mean value for Cs-137 ranges from 0.0075 to 0.059 for different soil types. Individual samples range from 0.00013 to 0.61. For Sr-90, the mean value ranges from 0.023 to 0.095 and the individual samples range from 0.0021 to 6.0.

In the paper published in Radioprotection (Shang and Leung, 2002) and the paper published in J. Environ. Radioactivity (Wang, et al. 1998), both cited the rice transfer factor data from Japan RWMC (1994, in Japanese). The rice transfer factor for Cs-137 ranges from 0.046 to 0.6. And for Sr-90, it ranges from 0.005 to 0.03. In the paper by Wang et al. (1998), it also cited the results from Taiwan RMC that the transfer factors for "polished rice" ranges from 0.03 – 0.188 (with a mean of 0.097) for Cs-137; and for Sr-90, it ranges from 0.005 – 0.088 (with a mean of 0.037).

The rice consumption rate for Japanese is estimated to be 66.2 kg per year. It is a conservatively (high) estimated intake rate based on Japanese national data collected in 2006 (Source: Report

of Survey on Health and Nutrition of National Public, Health Service Bureau, Ministry of Health, Labor and Welfare). In this report the rice intake per person per day ranges from 88 g for 1-6 year-olds to 181.3 g for age group 60-69, with an average rice intake rate of 164.8 g/day. Another source indicated that the Japanese per capita rice consumption is 58 kg.

For dose calculations, the ICRP 72 dose conversion factors were used. Group G subgroup 3 uses the Planning Values (PVs) to calculate the operational guidelines that give the soil concentrations of Cs-137 and Sr-90 that will result in rice concentrations equivalent to PVs if rice is planted. The PVs are essentially the same as FDA DILs but calculated using the updated (ICRP-72) dose conversion factors.

The operational guidelines calculated for Cs-137 and Sr-90 for planting/growing rice are $1.45 \times 10^7 \, \text{pCi/m}^2 (5.4 \times 10^5 \, \text{Bq/m}^2)$ and $6.76 \times 10^6 \, \text{pCi/m}^2 (2.5 \times 10^5 \, \text{Bq/m}^2)$, respectively. This means that if the surface soil concentrations are less than these operational guidelines, rice probably can be planted because the Cs-137 and Sr-90 concentrations in rice will be less than the PVs (or DILs). The PVs (and DILs) are derived on the basis of an annual dose of either 500 mrem (5 mSv) effective dose or 5000 mrem (50 mSv) committed dose to an organ or tissue, whichever is greater.

Task 2

For Task 2, spreadsheet calculations were performed using Japanese seafood ingestion rates for different age groups. It is assumed that I-131 is continuously released and that seafood reaches equilibrium concentration of 2000 Bq/kg. It is further assumed that seafood is consumed fresh and there is 0 storage time. Therefore, no decay adjustment is applied for calculating I-131 dose from consumption of seafood.

The ICRP-72 age-dependent dose conversion factors (DCFs) are used. There are 6 age-group DCFs listed in ICRP-72 for infant, 1 year-old, 5 year-old, 10 year-old, 15 year-old, and adult. The seafood ingestion rates are taken from Japanese national data collected in 2006 (Source: Report of Survey on Health and Nutrition of National Public, Health Service Bureau, Ministry of Health, Labor and Welfare), which listed the "fishes and shellfishes" intake per person per day for 9 different age groups (1-6, 7-14, 15-19, 20-29, 30-39, 40-49, 50-59, 60-69, and over 70).

The dose from eating seafood contaminated with I-131 2000 Bq/kg were calculated for 5 age groups (age 1, 5, 10, 15, and adult). The effective doses for I-131 from annual consumption of seafood were calculated as 580 mrem, 320 mrem, 250 mrem, 190 mrem, and 200 mrem, respectively. The dose for the 1-year-old child is probably overestimated because the seafood ingestion rate used was an average for the 1 to 6 year-old child. (44.8 g/day).

Discussion

The assessment results for both tasks presented above are considered to be conservative. Therefore, when making decisions for these tasks, this conservatism should be taken into account. For the first task, the transfer factors used for rice are on the high end of literature data range. If actual transfer factors are at the lower end of the data range, the calculated doses may be an order of magnitude higher than actual. Also it was assumed that the plowing depth is 15 cm and the rice plant root depth is 15 cm. If deep plowing method is used (as learned from the Chernobyl accident experience), it is expected that root uptake of radionuclides would be further reduced. Depending on the plowing depth, the dose from ingestion of rice can be reduced by a factor of 2-3 or more. Furthermore, rice crops are usually grown in flooded conditions with about 5-15 cm layer of water covered. Under flooded conditions, dust resuspension and deposition on rice crops are eliminated. This effect, although small (about 1-2 % for for nonleafy rice crops) will further reduce the radionuclide absorption in rice.

It should be noted that the operational guidelines derived for Task 1 is for making decisions on whether rice should be planted or not. It does not consider the dose to farmers, workers, or even residents living on the contaminated soil. By running RESRAD-RDD Group C—Relocation, it indicated that if people working or living on the land contaminated with Cs-137 1.45X10⁷ pCi/m^2 (5.4X10⁵ Bq/m²) and Sr-90 6.76X10⁶ pCi/m^2 (2.5X10⁵ Bq/m²), the potential dose to those people living or working on site is on the order of 500 mrem (5 mSv) in the first year resulting from external radiation exposure, inhalation of contaminated dust and incidental ingestion of soils.

For the second task, seafood consumption, the short half-life of I-131 (8.04 day) means that any delay between harvesting of the seafood and consumption will decrease the concentration and dose from radioactive decay. It also would be unlikely that the fixed contamination level of 2000 Bq/kg would remain for an entire year. For example, if the source of the contamination stops at some point, natural decay of I-131 will result in a reduction in the about 1% of the initial dose in about 54 days. Hence the annual dose may be overestimated by an order of magnitude.

From:	gordon.s.cleveland@aphis.usda.gov				
Sent:	Monday, April 25, 2011 3:57 PM				
То:	Tupin.Edward@epamail.epa.gov				
Cc:	albert.wiley@orise.orau.gov; asa4@cdc.gov; (b)(6)				
	BRENNAIV@nv.doe.gov; Brozowski.George@epamail.epa.gov; byw3@cdc.gov;				
	carmen.maher@fda.hhs.gov; ccc8@cdc.gov; (b)(6); cmw6				
	@cdc.gov; (b)(6) ; DeCair.Sara@epamail.epa.gov;				
	DixonTL@nv.doe.gov; ellen.morrison@fda.hhs.gov;				
	EOC_Environmental_Unit@epamail.epa.gov; ezh7@cdc.gov; Ferris.John@dol.gov;				
	george.allen@fda.hhs.gov; gfn6@cdc.gov; Goodman.Roger@epamail.epa.gov; gyf7				
	@cdc.gov; ira.s.reese@cbp.dhs.gov; Jablonowski.Eugene@epamail.epa.gov;				
	james.cherniack@fda.hhs.gov; james.williams@dot.gov; Jeffrey.Sincek@fda.hhs.gov;				
	jfn1@cdc.gov; (b)(6) ; john.jensen@dm.usda.gov;				
	john.pavek@wdc.usda.gov; (b)(6) ; jva2@cdc.gov;				
	karen.smallwood@fda.hhs.gov; ldk4@cdc.gov; LIA11 Hoc;				
	Liles.Darrell@epamail.epa.gov; Brandon, Lou; Lodwick.Jeffrey@dol.gov;				
	mark.russo@fda.hhs.gov; Matthews.Denise@dol.gov; mdb7@cdc.gov;				
	menarm@nv.doe.gov; Menon.Ramesh@dol.gov; michael.howe@dhs.gov;				
	michael.noska@fda.hhs.gov; michelle_tiburcio@sra.com; ozl6@cdc.gov; pac4@cdc.gov;				
	patricia.hansen@fda.hhs.gov; patrick.simmons@dhs.gov; paul.ward@fema.gov;				
	pemberwj@nv.doe.gov; peter.a.petch@aphis.usda.gov; Hoc, PMT12;				
	rachel.evans@fda.hhs.gov; rjf8@cdc.gov; ron.graham@fsis.usda.gov;				
	scotty.hargrave@fda.hhs.gov; Scott.Lough@ams.usda.gov; stephen.chase@dhs.gov;				
	terri.jones@fda.hhs.gov; Timothy.Greten@dhs.gov; Tupin.Edward@epamail.epa.gov;				
	Veal.Lee@epamail.epa.gov; ver2@cdc.gov; vinetta.howardking@fda.hhs.gov; wgl0				
	@cdc.gov; william.cunningham@fda.hhs.gov				
Subject:	Re: Your meeting is coming at an opportune time. 20-KM Dai-ichi zone declared a				
-	no-go zone				
Attachments:	pic07997.jpg				

MORE from MAFF

http://www.maff.go.jp/e/quake/press_110312-1.html

Gordon S. Cleveland Radiological Program Analyst USDA/APHIS VS NCAHEM 4700 River Rd. Unit 41 Riverdale, MD 20737 PH(301) 734-8091 FX(301) 734-7817 CL (b)(6)

Tupin.Edward@epamail.epa.gov

04/25/2011 03:44 PM

To Brozowski.George@epamail.epa.gov, DeCair.Sara@epamail.epa.gov, Goodman.Roger@epamail.epa.gov, Jablonowski.Eugene@epamail.epa.gov, Liles.Darrell@epamail.epa.gov, Tupin.Edward@epamail.epa.gov, Veal.Lee@epamail.epa.gov, <gfn6@cdc.gov>, <Ferris.John@dol.gov>, <ver2@cdc.gov>, <george.allen@fda.hhs.gov>, <jva2@cdc.gov>, <aaa4@cdc.gov>,



cc michelle_tiburcio@sra.com

Subject Fw: Your meeting is coming at an opportune time. 20-KM Dai-ichi zone declared a no-go zone

Advisory Team,

See the email below for an update on the "no go" zone in Japan. Looks like the Japanese are going to depopulate the area of livestock, as well as people. We can talk about this on the call tomorrow.

Ed

Edward A. Tupin, MS, CHP tupin.edward@epa.gov Health Physicist Center for Radiological Emergency Management US Environmental Protection Agency 6608J Washington, DC 20460 office: (202) 343-9383 cell: (b)(6) Office Location 1310 L. ST, NW Washington, DC 20005 ******

----- Forwarded by Edward Tupin/DC/USEPA/US on 04/25/2011 03:42 PM -----

From: "Evans, Lynn (CDC/ONDIEH/NCEH)" <gfn6@cdc.gov> To: Edward Tupin/DC/USEPA/US@EPA Date: 04/25/2011 02:54 PM Subject: FW: Your meeting is coming at an opportune time. 20-KM Dai-ichi zone declared a no-go zone

Hi, Ed!

Gordon Cleveland requests the information below be sent to the Advisory Team.

Thanks!

D. Lynn Evans, MS CAPT, USPHS Centers for Disease Control and Prevention NCEH/EHHE/Radiation Studies Branch Mail Stop F58 4770 Buford Highway NE Atlanta, GA 30341-3717 Phone: (770) 488-3656 Fax: (770) 488-1539 Email: gfn6@cdc.gov From: Miller, Charles W. (CDC/ONDIEH/NCEH) Sent: Monday, April 25, 2011 12:25 PM To: 'gordon.s.cleveland@aphis.usda.gov'; ' (b)(6) Cc: Evans, Lynn (CDC/ONDIEH/NCEH) Subject: Re: Your meeting is coming at an opportune time. 20-KM Dai-ichi zone declared a no-go zone Thanks, Gordon. Lynn, please forward to A Team. Charles W. Miller, PhD Chief, Radiation Studies Branch, CDC From: gordon.s.cleveland@aphis.usda.gov [mailto:gordon.s.cleveland@aphis.usda.gov] Sent: Monday, April 25, 2011 12:22 PM To: Miller, Charles < >; Miller, Charles W. (b)(6) (CDC/ONDIEH/NCEH) Cc: Evans, Lynn (CDC/ONDIEH/NCEH) Subject: Fw: Your meeting is coming at an opportune time. 20-KM Dai-ichi zone declared a no-go zone Hi Charles, YOu probably have this info but maybe should spam out to everyone else? See if anyone has heartburn... Gordon Gordon S. Cleveland Radiological Program Analyst USDA/APHIS VS NCAHEM 4700 River Rd. Unit 41 Riverdale, MD 20737 PH(301) 734-8091 FX(301) 734-7817 CL (b)(6) ----- Forwarded by Gordon S Cleveland/MD/APHIS/USDA on 04/25/2011 12:21 PM -----Kuniaki Suzuki/INTL/APH IS/USDA То Kelly Preston/INTL/APHIS/USDA@USDA 04/25/2011 CC 3

"Green, Dick" <dgreen@ifaw.org>, Gordon S Cleveland/MD/APHIS/USDA@USDA, Yohei Kiyose/INTL/APHIS/USDA@USDA

Subject .

Re: Your meeting is coming at an opportune time. 20-KM Dai-ichi zone declared a no-go zoneLink

[April 25, 2011, Mainichi shimbun newspaper] Fukushima dai-ichi: Euthanizing livestock within No-go zone starts with owners' consent On April 24, Fukushima prefectural government decided to euthanize debilitated and dying livestock within No-go zone (the 20-km radius area from Dai-ichi Plant) on and after April 25. Owners have been evacuated in the zone and therefore euthanized animals will be disinfected with slaked lime and wrapped in vinyl sheeting by official. In the zone, there are 376 livestock farming households with about 4 000 cattle, 30 000 pigs, 630 000 chickens and 100 horses, and most of which are seemed to be dead. Euthanizing livestock at nuclear disaster must be done with owners' fully consent because you cannot do it by compulsion based on the Act on Infectious Animal Disease Prevention which is for containment of foreign animal disease. Animals already dead will be also disinfected, however, treatment of bodies such as burial has not been decided. On the other hand, animals let off by owners or escaped by themselves will be able to returned to their barns if they are healthy. Methods of feeding and watering them must be considered hereafter. Prefectural government staff and veterinarians are in charge of this activity to be exposed to 50 mSv of radiation at a daily maximum. For the time being, they will not work in Towns of Okuma, Futaba and Namie with a relatively higher radiation level and consider how they do it there.

(Embedded image moved to file: pic07997.jpg)

Kuniaki Suzuki PhD Agricultural Scientist USDA-APHIS-IS US Embassy Tokyo Phone: +81 3 3224 5112 Fax: +81 3 3224 5291

From: Kelly Preston/INTL/APHIS/USDA To: "Green, Dick" <dgreen@ifaw.org>, Gordon S Cleveland/MD/APHIS/USDA@USDA Cc: Kuniaki Suzuki/INTL/APHIS/USDA@USDA Date: 04/22/2011 03:57 PM Subject: Your meeting is coming at an opportune time. 20-KM Dai-ichi zone declared a no-go zone

The Govt of Japan has declared the 20-Km zone around Dai-ichi to be a no-go zone.

Reportedly from the popular press, there are approximately 3,400 cattle, 31, 00 swine and 630, 000 chickens in this area that will be depopulated and the owners compensated.

We do not have any further details at this time.

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Thanks, k

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From: Sent: To: Subject: Attachments: HOO Hoc Tuesday, April 19, 2011 6:05 AM LIA07 Hoc; LIA08 Hoc; OST01 HOC FW: Radiation data by MEXT (English)20110419_08.pdf; (unofficial)(English)20110419_08.pdf; (English)20110419_ 09.pdf; (English)20110419_10.pdf; (English)20110419_11.pdf; (English)20110419_12.pdf; (English)20110419_13.pdf; (English)20110419_14.pdf; (unofficial)(English)20110419_ 14.pdf; (English)20110419_15.pdf

-----Original Message-----From: eda@mext.go.jp [mailto:eda@mext.go.jp] Sent: Tuesday, April 19, 2011 6:00 AM

То:	(b)(6)	
	(b)(6)	

1

Subject: Radiation data by MEXT

Dear Sir,

Please see attached the document.

Sincerely yours, Kei EDA EOC, Ministry of Education,Culture, Sports, Science & Technology (MEXT), Japan
News Release

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Readings at Monitoring Post out of 20 Km Zone of Fukushima Dai-ichi NPP

As of 19:00 April 1, 2011 Ministry of Education, Culture, Sports, Science and Technology (MEXT)

OMonitoring Outputs by MEXT ***Boldface and underlined readings are new.**

*1 measured by Geiger-Müller counter

 $\ensuremath{\ast}\,2\,$ measured by ionization chamber type survey meter

*3 measured by NaI scintillator detector

*4 variation range of the measuring data in

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measu	iring

Monitoring Post (length from NPP)	Monitoring Time	Reading (unit : μ Sv / h)	Weather	Reading by
Reading Point 【1】 (About60KmNorthWest)	2011/4/1 8:48	2.7 * ²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【2】 (About55KmNorthWest)	2011/4/1 9:18	3.8 ^{*2}	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【3】 (About45KmNorthWest)	2011/4/1 10:14	3.3 *²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【5】 (About45KmNorth)	2011/4/1 11:12	0.8 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【6】 (About45KmNorth)	2011/4/1 11:34	1.0 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【7】 (About45KmNorth)	2011/4/1 11:43	1.1 * ²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【10】 (About40KmNorthWest)	<u>2011/4/1 16:03 </u>	<u>1.6</u> *2	<u>No Rain</u>	MEXT
Reading Point 【12】 (About40KmWest)	2011/4/1 11:39	0.5 *²	No Rain	MEXT
Reading Point 【13】 (About40KmWest)	2011/4/1 11:53	0.5 *²	No Rain	MEXT
Reading Point 【14】 (About35KmWest)	2011/4/1 12:06	0.2 *2	No Rain	MEXT
Reading Point 【15】 (About35KmWest)	2011/4/1 12:19	0.6 *2	No Rain	MEXT

*1 measured by Geiger-Müller counter

*2 measured by ionization chamber type survey meter

* 3 measured by Nal scintillator detector

*4 variation range of the measuring data in

m	eas	uri	ng

Monitoring Post (length from NPP)	Monitoring Time	Reading (unit : μ Sv / h)	Weather	Reading by
Reading Point 【20】 (About45KmNorthWest)	2011/4/1 10:37	0.6 *2	No Rain	MEXT
Reading Point 【21】 (About30KrnWestNorthWest)	2011/4/1 11:09	2.3 *2	No Rain	MEXT
Reading Point 【22】 (About30KmWestNorthWest)	2011/4/1 11:00	0.6 *2	No Rain	MEXT
Reading Point [23] (About 30KmWestNorthWest)	2011/4/1 10:48	0.6 *2	No Rain	MEXT
Reading Point 【31】 (About30KrnWestNorthWest)	2011/4/1 10:33	15.4 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【32】 (About30KmNorthWest)	2011/4/1 10:56	36.2 * ²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【33】 (About30KmNorthWest)	2011/4/1 11:22	18.2 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【34】 (About30KmNorthWest)	2011/4/1 13:02	5.8 * ²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【36】 (About40KmNorthWest)	2011/4/1 10:08	5.7 *²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【37】 (About50kmNorthWest)	2011/4/1 9:57	4.6 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【38】 (About35kmSouth)	2011/4/1 11:37	1.0 *2	No Rain	MEXT
Reading Point. [39] (About45kmNorth)	2011/4/1 10:53	<u>1.3</u> *2	<u>No Rain</u>	JAEA (Japan Atomic Energy Agency)
Reading Point [51] (About40KmSouthWest)	<u>2011/4/1 13:45</u>	<u>0.3</u> *3	<u>No Rain</u>	<u>Fukushima Pref.</u>
Reading Point. [51] (About40KmSouthWest)	<u>2011/4/1 10:42</u>	<u>0.3</u> *3	<u>No Rain</u>	<u>Fukushima Pref.</u>
Reading Point. [52] (About40KmWest)	<u>2011/4/1 14:23</u>	<u>0.3</u> *3	<u>No Rain</u>	<u>Fukushima Pref.</u>
Reading Point 【52】 (About40KmWest)	2011/4/1 12:05	<u>0.3</u> *3	<u>No Rain</u>	<u>Fukushima Pref.</u>
Reading Point [61] (About40KmNorthWest)	<u>2011/4/1_14:59</u>	<u>6.1 *3</u>	<u>No Rain</u>	<u>Fukushima Pref.</u>

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*1 measured by Geiger-Müller counter

* 2 measured by ionization chamber type survey meter

* 3 measured by NaI scintillator detector

* 4 variation range of the measuring data in measuring

			medearing	
Monitoring Post (length from NPP)	Monitoring Time	Reading (unit : μ Sv / h)	Weather	Reading by
Reading Point [61] (About40KmNorthWest)	<u>2011/4/1 12:46</u>	<u>7.1 *3</u>	<u>No Rain</u>	<u>Fukushima Pref.</u>
Reading Point [62] (About40KmNorthWest)	<u>2011/4/1 15:15</u>	<u>7.4 *3</u>	<u>No Rain</u>	<u>Fukushima Pref.</u>
Reading Point [62] (About40KmNorthWest)	<u>2011/4/1 12:34</u>	<u>7.7 *3</u>	<u>No Rain</u>	<u>Fukushima Pref.</u>
Reading Point [63] (About45KmNorthWest)	<u>2011/4/1 15:49</u>	<u>3.2 *3</u>	<u>No Rain</u>	<u>Fukushima Pref.</u>
Reading Point [63] (About45KmNorthWest)	<u>2011/4/1 11:13</u>	<u>2.8</u> * ³	<u>No Rain</u>	<u>Fukushima Pref.</u>
Reading Point 【71】 (About25KmSouth)	2011/4/1 8:31	2.5 * ²	No Rain	Police(counter NBC operations unit)
Reading Point 【72】 (About30KmSouth)	2011/4/1 12:42	1.6 ^{*2}	No Rain	MEXT
Reading Point 【72】 (About30KmSouth)	2011/4/1 9:11	0.8 *2	No Rain	Police (counter NBC operations unit)
Reading Point 【73】 (About35KmSouth)	2011/4/1 11:57	1.4 *2	No Rain	MEXT
Reading Point 【73】 (About35KmSouth)	2011/4/1 9:27	0.7 ^{*2}	No Rain	Police(counter NBC operations unit)
Reading Point 【74】 (About35KmSouth)	2011/4/1 11:08	0.2 *2	No Rain	MEXT
Reading Point 【74】 (About35KmSouth)	2011/4/1 9:55	0.3 *2	No Rain	Police(counter NBC operations unit)
Reading Point 【75】 (About45KmSouth)	2011/4/1 10:30	0.8 *2	No Rain	MEXT
Reading Point 【75】 (About45KmSouth)	2011/4/1 7:00	0.8 *2	No Rain	Police(counter NBC operations unit)
Reading Point 【76】 (About25KmSouthWest)	2011/4/1 11:03	0.6 *2	No Rain	Police(counter NBC operations unit)
Reading Point 【77】 (About25KmSouthWest)	2011/4/1 10:45	2.2 * ²	No Rain	Police(counter NBC operations unit)
Reading Point 【78】 (About45KmNorthWest)	2011/4/1 7:47	0.8 *2	No Rain	Police (counter NBC operations unit)

CW 110 of 2789

*1 measured by Geiger-Müller counter

*2 measured by ionization chamber type survey meter

* 3 measured by NaI scintillator detector

 \star 4 variation range of the measuring data in

mea	suring

Monitoring Post (length from NPP)	Monitoring Time	Reading (unit : μ Sv / h)	Weather	Reading by
Reading Point 【79】 (About30KmNorthWest)	2011/4/1 12:26	16.5 *²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point [79] (About30KmNorthWest)	2011/4/1 9:56	15.5 * ²	No Rain	Police(counter NBC operations unit)
Reading Point 【80】 (About25KmNorth)	2011/4/1 12:33	0.7 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【80】 (About25KmNorth)	2011/4/1 12:02	0.7 *2	No Rain	Police(counter NBC operations unit)
Reading Point [81] (About30KmWestNorthWest)	2011/4/1 8:34	34.5 * ²	No Rain	Police(counter NBC operations unit)
Reading Point [83] (About20KmNorthWest)	2011/4/1 12:47	70.9 *²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【83】 (About20KmNorthWest)	2011/4/1 10:11	60.5 *²	No Rain	Police(counter NBC operations unit)
Reading Point 【84】 (About40kmSouthWest)	2011/4/1 9:50	0.5 *²	No Rain	MEXT
Reading Point [85] (About80kmNorthWest)	<u>2011/4/1 14:00</u>	<u>1.0 *2</u>	<u>No Rain</u>	Ministry of Defense
Reading Point 【85】 (About60kmNorthWest)	2011/4/1 6:00	0.3 ^{*2}	No Rain	Ministry of Defense
Reading Point 【86】 (About55kmWest)	<u>2011/4/1 14:00</u>	<u>1.1 ^{*2}</u>	<u>No Rain</u>	Ministry of Defense
Reading Point 【86】 (About55kmWest)	2011/4/1 6:00	1.3 *²	No Rain	Ministry of Defense
Reading Point [87] (About30kmWestSouthWest)	2011/4/1 14:00	<u>1.2</u> <u>*</u> 2	<u>No Rain</u>	Ministry of Defense
Reading Point 【87】 (About30kmWestSouthWest)	2011/4/1 6:00	1.0 *2	No Rain	Ministry of Defense



Readings at Monitoring Post out of Fukushima Dai-ichi NPP

Reading of environmental radioactivity level by prefecture

2011	.4.1 19:00															(<i>µ</i> Sv/h)
					3/31							4/1				
	Prefecture(City)	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-1	1-2	2-3	3-4	4-5	5-6	6-7	Usual Value Band
1	Hokkaido(Sappro)	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.02~0.105
2	Aomori (Aomori)	0.026	0.026	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.028	0.017~0.102
3	Iwate (Morioka)	0.026	0.029	0.027	0.026	0.026	0.026	0.027	0.027	0.027	0.027	0.028	0.027	0.027	0.028	0.014~0.084
4	Miyagi (Sendai)	0.088	0.086	0.086	0.085	0.085	0.084	0.083	0.083	0.083	0.082	0.082	0.081	0.080	0.081	0.0176~0.0513
5	Akita (Akita)	0.035	0.035	0.035	0.035	0.035	0.036	0.036	0.036	0.036	0.037	0.037	0.037	0.037	0.037	0.022~0.086
6	Yamagata (Yamagata)	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.064	0.064	0.064	0.064	0.063	0.064	0.064	0.025~0.082
7	Fukushima (Futaba)															0.037~0.071
8	Ibaraki(Mito)	0.195	0.194	0.194	0.194	0.194	0.193	0.193	0.193	0.192	0.193	0.192	0.191	0.192	0.191	0.036~0.056
9	Tochigi(Utsunomiya)	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.030~0.067
10	Gunma (Maebashi)	0.055	0,055	0.054	0.054	0.054	0.054	0.054	0.054	0.054	0.055	0.055	0.055	0.055	0.055	0.017~0.045
11	Saitama (Saitama)	0.080	0.080	0.080	0.080	0.080	0.080	0.080	0.080	0.079	0.079	0.079	0.080	0.080	0.080	0.031~0.060
12	Chiba (Ishihara)	0.072	0.071	0.071	0.070	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.070	0.071	0.071	0.022~0.044
13	Tokyo(Shinjyuku)	0.099	0.099	0.099	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.098	0.028~0.079
14	Kanagawa (Chigasaki)	0.073	0.070	0.069	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.068	0.035~0.069
15	Niigata (Niigata)	0.048	0.048	0.048	0.048	0.048	0.048	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.048	0.031~0.153
16	Tovama (Imizu)	0.048	0.049	0.048	0.048	0.048	0.048	0.049	0.049	0.049	0.050	0.049	0.050	0.049	0.050	0.029~0.147
17	Ishikawa (Kanazawa)	0.047	0.047	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.0291~0.1275
18	Fukui (Fukui)	0.045	0.046	0.046	0.046	0.046	0.046	0.047	0.046	0.047	0.046	0.047	0.047	0.047	0.047	0.032~0.097
19	Yamanashi (Kohu)	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.044	0.045	0.045	0.045	0.045	0.045	0.040~0.064
20	Nagano (Nagano)	0.047	0.046	0.045	0.045	0.045	0.045	0.046	0.046	0.046	0.047	0.047	0.047	0.048	0.048	0.0299~0.0974
21	Gifu(Kakamigahara)	0.060	0.060	0.060	0.060	0.061	0.061	0.061	0.061	0.062	0.062	0.062	0.062	0.063	0.063	0.057~0.110
22	Shizuoka (Shizuoka)	0.042	0.041	0.041	0.041	0.041	0.040	0.040	0.040	0.040	0.041	0.041	0.041	0.041	0.040	0.0281~0.0765
23	Aichi (Nagoya)	0.039	0.039	0.039	0.039	0.039	0.040	0.040	0.040	0.041	0.041	0.041	0.042	0.042	0.042	0.035~0.074
24	Mie (Yokkaichi)	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.047	0.047	0.0416~0.0789
25	Shiga (Otsu)	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.034	0.035	0.035	0.035	0.036	0.036	0.037	0.031~0.061
26	Kyoto (Kyoto)	0.038	0.038	0.038	0.038	0.038	0,038	0.038	0.039	0.039	0.039	0.039	0.039	0.040	0.040	0.033~0.087
27	Osaka(Osaka)	0.043	0.043	0.042	0.042	0.043	0.043	0.042	0.043	0.043	0.043	0.043	0.043	0.044	0.044	0.042~0.061
28	Hyogo(Kobe)	0.037	0.037	0.037	0.037	0.037	0.037	0.038	0.038	0.038	0.038	0.037	0.037	0.038	0.038	0.035~0.076
29	Nara (Nara)	0.047	0.047	0.048	0.048	0.048	0.048	0.048	0.049	0.049	0.049	0.049	0.050	0.050	0.050	0.046~0.08
30	Wakayama (Wakayama)	0.032	0.032	0.032	0.032	0.032	0.032	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.034	0.031~0.056
31	Tottori(Tohhaku)	0.063	0.063	0.063	0.063	0.064	0.064	0.063	0.063	0.064	0.064	0.064	0.064	0.064	0.064	0.035~0.11
32	Shimane (Matsue)	0.037	0.037	0.037	0.037	0.037	0.038	0.038	0.039	0.039	0.039	0.040	0.040	0.040	0.040	0.033~0.079
33	Okavama (Okavama)	0.049	0.048	0.049	0.049	0.049	0.049	0.050	0.050	0.051	0.051	0.051	0.051	0.051	0.052	0.043~0.104
34	Hiroshima (Hiroshima)	0.046	0.046	0.047	0.047	0.047	0.047	0.048	0.048	0.048	0.049	0.049	0.049	0.049	0.049	0.035~0.069
35	Yamaguchi (Yamaguchi)	0.091	0.092	0.092	0.092	0.092	0.092	0.093	0.093	0.094	0.095	0.094	0.094	0.095	0.096	0.084~0.128
36	Tokushima (Tokushima)	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.039	0.039	0.039	0.039	0.039	0.039	0.040	0.037~0.067
37	Kagawa (Takamastu)	0.059	0.062	0.063	0.063	0.064	0.066	0.068	0.069	0.070	0.070	0.071	0.067	0.069	0.071	0.051~0.077
38	Ehime (Matsuvama)	0.047	0.047	0.047	0.048	0.048	0.048	0.049	0.049	0.049	0.049	0.050	0.050	0.050	0.050	0.045~0.074
39	Kochi (Kochi)	0.025	0.025	0.025	0.025	0.026	0.026	0.026	0.026	0.027	0.027	0.027	0.027	0.027	0.027	0.023~0.076
40	Fukuoka (Dazaifu)	0.036	0.036	0.036	0.036	0.037	0.036	0.036	0.037	0.037	0.037	0.037	0.037	0.038	0.038	0.034~0.079
41	Saga(Saga)	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.041	0.041	0.041	0.041	0.041	0.037~0.086
42	Nagasaki(Ohmura)	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.027~0.069
43	Kumamoto(Uto)	0.027	0.027	0.027	0.027	0.027	0.028	0.027	0.027	0.028	0.028	0.029	0.029	0.029	0.029	0.021~0.067
44	Oita (Oita)	0.050	0.050	0,050	0.050	0.050	0.050	0.050	0.050	0.050	0.051	0.051	0.051	0.051	0.051	0.048~0.085
45	Miyazaki (Miyazaki)	0.026	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.0243~0.0664
46	Kagoshima (Kagoshima)	0.035	0.034	0.034	0.035	0.035	0.035	0.035	0.035	0.036	0.036	0.035	0.036	0.036	0.036	0.0306~0.0943
47	Okinawa (Uruma)	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.0133~0.0575

*Figures for Miyagi Prefecture are measured by transportable monitoring post.

*Refer to other title "Readings at Monitoring Post out of 20 Km Zone of Fukushima Dai-ichi NPP" for the datas in Fukushima. It could not be

measured by Monitoring Post since the radiation level around it is so high.

*Blanks are caused by device maintenance, but the area was measured by Monitoring Posts.

*These figures are estimated as 1μ Gy/h=1 μ Sv/h.

*The table was made by MEXT, based on the reports from prefectures.

Reading of environmental radioactivity level by prefecture

201	011.4.1 19:00 (μ Sv/h)											
						4,	/1					
	Prefecture(City)	7-8	8-9	<u>9-10</u>	<u>10-11</u>	<u>11-12</u>	<u>12-13</u>	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	Usual Value Band
1	Hokkaido(Sappro)	0.028	0.028	0.028	<u>0.028</u>	<u>0.028</u>	0.028	0.028	<u>0.028</u>	<u>0.028</u>	<u>0.028</u>	0.02~0.105
2	Aomori (Aomori)	0.028	0.027	<u>0.027</u>	<u>0.027</u>	<u>0.027</u>	<u>0.027</u>	<u>0.027</u>	<u>0.027</u>	0.027	<u>0.027</u>	0.017~0.102
3	Iwate (Morioka)	0.027	0.027	0.027	0.026	0.026	<u>0.026</u>	0.026	<u>0.025</u>	0.026	0.025	0.014~0.084
4	Miyagi (Sendai)	0.082	0.087	<u>0.091</u>	0.092	<u>0.091</u>	<u>0.091</u>	0.091	<u>0.091</u>	<u>0.090</u>	0.088	0.0176~0.0513
5	Akita (Akita)	0.036	0.036	0.036	<u>0.035</u>	0.035	0.035	0.035	<u>0.035</u>	0.035	<u>0.035</u>	0.022~0.086
6	Yamagata (Yamagata)	0.064	0.063	0.063	0.062	0.062	<u>0.062</u>	<u>0.062</u>	<u>0.062</u>	<u>0.062</u>	<u>0.062</u>	0.025~0.082
7	Fukushima (Futaba)											0.037~0.071
8	Ibaraki (Mito)	0.192	0.191	0.190	0.189	<u>0.189</u>	<u>0.189</u>	<u>0.189</u>	<u>0.188</u>	<u>0.188</u>	<u>0.188</u>	0.036~0.056
9	Tochigi (Utsunomiya)	0.091	0.091	0.090	<u>0.090</u>	0.090	0.090	0.090	0.089	<u>0.089</u>	<u>0.089</u>	0.030~0.067
10	Gunma (Maebashi)	0.055	0.054	<u>0.054</u>	<u>0.054</u>	<u>0.053</u>	0.053	0.053	0.053	<u>0.053</u>	0.052	0.017~0.045
11	Saitama (Saitama)	0.080	0.079	0.079	0.079	<u>0.078</u>	<u>0.078</u>	<u>0.078</u>	<u>0.078</u>	0.077	<u>0.078</u>	0.031~0.060
12	Chiba (Ishihara)	0.070	0.070	0.069	0.069	0.069	0.069	0.068	0.068	0.068	0.068	0.022~0.044
13	Tokyo(Shinjyuku)	0.098	0.099	0.099	0.099	0.098	0.098	0.098	<u>0.097</u>	<u>0.097</u>	<u>0.097</u>	0.028~0.079
14	Kanagawa (Chigasaki)	0.068	0.067	0.067	0.067	0.067	<u>0.066</u>	<u>0.067</u>	<u>0.066</u>	0.066	0.066	0.035~0.069
15	Niigata (Niigata)	0.048	0.047	<u>0.047</u>	<u>0.047</u>	<u>0.047</u>	0.047	0.046	0.046	<u>0.046</u>	<u>0.046</u>	0.031~0.153
16	Toyama (Imizu)	0.050	0.049	0.049	<u>0.049</u>	0.049	0.048	0.048	0.048	0.048	<u>0.048</u>	0.029~0.147
17	Ishikawa (Kanazawa)	0.048	0.048	0.048	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.0291~0.1275
18	Fukui(Fukui)	0.047	0.047	0.046	0.045	0.044	0.044	0.044	0.044	0.044	0.045	0.032~0.097
19	Yamanashi (Kohu)	0.045	0.045	0.044	0.044	0.044	0.044	0.044	0.044	0.043	0.044	0.040~0.064
20	Nagano(Nagano)	0.048	0.047	0.046	0.046	0.046	0.046	0.045	0.046	0.045	0.045	0.0299~0.0974
21	Gifu (Kakamigahara)	0.063	0.063	0.062	0.062	0.061	0.061	0.060	0.060	0.060	0.060	0.057~0.110
22	Shizuoka (Shizuoka)	0.040	0.040	0.042	0.043	0.043	0.044	0.043	0.042	0.042	0.041	0.0281~0.0765
23	Aichi(Nagoya)	0.043	0.043	0.043	0.041	0.040	0.040	0.039	0.039	0.039	0.039	0.035~0.074
24	Mie (Yokkaichi)	0.047	0.047	0.047	0.047	0.047	0.047	0.046	0.046	0.046	0.046	0.0416~0.0789
25	Shiga (Otsu)	0.037	0.036	0.035	0.035	0.034	0.033	0.032	0.032	0.032	0.032	0.031~0.061
26	Kyoto (Kyoto)	0.040	0.040	0.039	0.038	0.038	0.038	0.038	0.037	0.037	0.037	0.033~0.087
27	Osaka (Osaka)	0.044	0.043	0.043	0.043	0.042	0.042	0.042	0.042	0.042	0.042	0.042~0.061
28	Hyogo(Kobe)	0.039	0.038	0.037	<u>0.037</u>	0.037	0.036	0.037	0.037	0.037	<u>0.037</u>	0.035~0.076
29	Nara(Nara)	0.050	0,049	0.048	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.046~0.08
30	Wakayama (Wakayama)	0.033	0.033	0.033	0.032	0.032	0.032	0.032	0.031	0.032	<u>0.031</u>	0.031~0.056
31	Tottori(Tohhaku)	0.064	0.064	0.063	0.063	0.063	0.063	0.063	0.063	0.063	<u>0.063</u>	0.036~0.11
32	Shimane(Matsue)	0.040	0.040	0.039	0.038	0.038	0.037	0.037	0.037	0.036	<u>0.037</u>	0.033~0.079
33	Okayama (Okayama)	0.052	0.051	0.050	0.050	0.050	0.049	0.049	0.049	0.049	0.048	0.043~0.104
34	Hiroshima (Hiroshima)	0.050	0.050	0.049	0.048	0.047	<u>0.047</u>	0.046	<u>0.046</u>	<u>0.046</u>	0.046	0.035~0.069
35	Yamaguchi(Yamaguchi)	0.096	0.096	0.094	0.094	<u>0.093</u>	<u>0.093</u>	<u>0.092</u>	<u>0.091</u>	<u>0.091</u>	<u>0.092</u>	0.084~0.128
36	Tokushima (Tokushima)	0.039	0.039	0.039	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.037~0.067
37	Kagawa (Takamastu)	0.056	0.056	0.064	<u>0.066</u>	0.067	<u>0.054</u>	<u>0.058</u>	0.062	0.054	0.054	0.051~0.077
38	Ehime (Matsuyama)	0.050	0.049	0.049	<u>0.048</u>	0.048	0.047	0.047	<u>0,047</u>	0.046	<u>0.047</u>	0.045~0.074
39	Kochi (Kochi)	0.027	0.027	0.027	0.026	0.025	0.024	0.024	<u>0.024</u>	0.024	0.024	0.023~0.076
40	Fukuoka (Dazaifu)	0.038	0.037	0.037	0.037	0.036	0.036	0.036	0.036	0.036	0.036	0.034~0.079
41	Saga(Saga)	0.041	0.041	0.041	0.041	0.040	0,040	0.040	0.040	0.039	0.040	0.037~0.086
42	Nagasaki(Ohmura)	0.029	0.029	0.030	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.027~0.069
43	Kumamoto(Uto)	0.029	0.029	0.029	0.028	0.028	0.028	0.028	0.026	0.027	0.027	0.021~0.067
44	Oita (Oita)	0.051	0.051	0.052	0.050	<u>0.050</u>	0.051	0.051	0.050	0.050	0.050	0.048~0.085
45	Miyazaki (Miyazaki)	0.027	0.027	0.027	0.027	0.027	0.026	0.026	0.026	0.026	0.026	0.0243~0.0664
46	Kagoshima (Kagoshima)	0.036	0.036	0.035	0.035	0.034	<u>0.034</u>	0.034	0.034	0.034	0.034	0.0306~0.0943
47	Okinawa (Uruma)	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.020	0.021	0.021	0.0133~0.0575

*Figures for Miyagi Prefecture are measured by transportable monitoring post.

*Refer to other title "Readings at Monitoring Post out of 20 Km Zone of Fukushima Dai-ichi NPP" for the datas in Fukushima. It could not be measured by

*Blanks are caused by device maintenance, but the area was measured by Monitoring Posts.

*These figures are estimated as 1μ Gy/h= 1μ Sv/h.

*The table was made by MEXT, based on the reports from prefectures.

2011/4/1 19:00	Monitoring dat	ta at Ibaraki prefe	ecture <u>µSv/h</u>
Date and Time	JAEA nuclear science research institute (Tokai-village in Ibaraki- prefecture)	JAEA Nuclear fuel cycle engineering laboratory (Tokai-village in Ibaraki- prefecture)	Yayoi in Tokyo University (Tokai−village in Ibaraki− prefecture)
2011/4/1			
0:00	1.44	0.84	1.12
1:00	1.43	0.84	1.24
2:00	1.44	0.84	1.19
3:00	1.43	0.84	1.16
4:00	1.43	0.84	1.28
5:00	1.42	0.84	1.19
6:00	1.42	0.84	1.25
7:00	1.42	0.84	1.21
8:00	1.42	0.83	1.21
9:00	1.41	0.83	1.13
<u>10:00</u>	1.40	0.82	<u>1.21</u>
<u>11:00</u>	1.40	0.81	<u>1.15</u>
<u>12:00</u>	1.39	0.81	<u>1.22</u>
<u>13:00</u>	<u>1.39</u>	<u>0.81</u>	<u>1.16</u>
<u>14:00</u>	<u>1.39</u>	<u>0.80</u>	<u>1.17</u>
<u>15:00</u>	<u>1.39</u>	<u>0.80</u>	<u>1,19</u>
<u>16:00</u>	<u>1.39</u>	<u>0.80</u>	<u>1.18</u>
<u>17:00</u>	<u>1.38</u>	<u>0.80</u>	<u>1.22</u>
<u>18:00</u>	<u>1.38</u>	<u>0.80</u>	

Υ.

XThe readings are measured once every hour from March 24th.

The readings of JAEA nuclear science research institute and JAEA Nuclear fuel cycle engineering laboratory JAEA nuclear science research institute

http://erms.jaea.go.jp/Chart.htm

JAEA Nuclear fuel cycle engineering laboratory

http://www.jaea.go.jp/04/ztokai/kankyo/realtime/tbl_10mStPo01.html

2011.4.01 19:00

(MBq/km²)

	Desferation		Fallout	
	Fretecture	I-131	Cs-137	Remarks
1	Hokkaido(Sapporo)	Not Detectable	Not Detectable	
2	Aomori(Aomori)	Not Detectable	Not Detectable	
3	Iwate(Morioka)	25.7	21.9	
4	Miyagi	-	-	Not be measured because of the earthquake disaster damage
5	Akita(Akita)	Not Detectable	Not Detectable	
6	Yamagata(Yamagata)	_		On Setting up the equipment
7	Fukushima (Fukushima)			Measurements arrived, though it had delayed.
8	Ibaraki(Hitachinaka)	74	26	
9	Tochigi(Utsunomiya)	-	_	Measurements arrived, though it had delayed.
10	Gunma(Maebashi)	7.0	4.7	
11	Saitama(Saitama)	18	25	
12	Chiba(Ichihara)	39	76	
13	Tokyo(Shinjuku)	38	26	
14	Kanagawa(Chigasaki)	13	5.9	
15	Niigata(Niigata)	Not Detectable	Not Detectable	
16	Toyama(Imizu)	Not Detectable	Not Detectable	
17	Ishikawa(Kanazawa)	Not Detectable	Not Detectable	
18	Fukui(Fukui)	Not Detectable	Not Detectable	
19	Yamanashi(Kotu)	Not Detectable	2.9	
20	Ngano(Nagano)	Not Detectable	Not Detectable	
21	Gifu(Kakamigahara)	-	-	though it had delayed.
22	Shizuoka(Omaezaki)	Not Detectable	3.4	
23	Aichi(Nagoya)	Not Detectable	Not Detectable	
24	Mie(Yokkaichi)	Not Detectable	Not Detectable	
25	Shiga(Otsu)	Not Detectable	Not Detectable	
26	Kyoto(Kyoto)	Not Detectable	Not Detectable	
27	Osaka(Osaka)	Not Detectable	Not Detectable	
28	Hyogo(Kobe)	Not Detectable	Not Detectable	
29	Nara (Nara)	Not Detectable	Not Detectable	
30	Wakayama(Wakayama)	Not Detectable	Not Detectable	
31	lottori (lohhaku)	Not Detectable	Not Detectable	
32	Shimane(Matsue)	Not Detectable	Not Detectable	
34	Hiroshima(Ukayama)	Not Detectable	Not Detectable	
35	Yamaguchi(Yamaguchi)	Not Detectable	Not Detectable	
36	Tokushima(Tokushima)	Not Detectable	Not Detectable	
37	Kagawa(Takamatsu)	Not Detectable	Not Detectable	
38	Ehime(Yawatahama)	Not Detectable	Not Detectable	
39	Kochi(Kochi)	Not Detectable	Not Detectable	
40	Fukuoka(Dazaifu)	Not Detectable	Not Detectable	
41	Saga(Saga)	Not Detectable	Not Detectable	
42	Nagasaki(Ohmura)	Not Detectable	Not Detectable	
43	Kumamoto(Uto)	Not Detectable	Not Detectable	
44	Oita(Oita)	Not Detectable	Not Detectable	
45	Miyazaki(Miyazaki)	Not Detectable	Not Detectable	
46	Kagoshima(Kagoshima)	Not Detectable	Not Detectable	
47	Okinawa(Nanjo)	Not Detectable	Not Detectable	

*The table was made by MEXT, based on the reports from prefectures

CW 116 of 2789

Readings of the radiation rate with the cooperation of universities

Prefecture	Monitoring Point	City	3/31~4/1
	1	Muroran City	1 μ Sv (0.04 μ Sv/h)
	2	Obihiro City	1 μ Sv (0.04 μ Sv/h)
	3	Asahikawa City	1 μ Sv (0.04 μ Sv/h)
Hokkaido	4	Kitami City	2μSv (0.08μSv/h)
	5	Kushiro City	1 μ Sv (0.04 μ Sv/h)
	6	Hakodate City	1 μ Sv (0.04 μ Sv/h)
A i	7	Hirosaki City	2μSv (0.08μSv/h)
Aomori	8	Hachinohe City	1 μ Sv (0.04 μ Sv/h)
Miyagi	9	Sendai City	3μSv (0.1μSv/h)
V	10	Yonezawa City	3μSv (0.1μSv/h)
ramagata	11	Tsuruoka City	2μSv (0.08μSv/h)
Fukushima	12	Fukushima City	12 μ Sv (0.50 μ Sv/h)
Ibaraki	13	Tsukuba City	5μSv (0.2μSv/h)
Tochigi	14	Oyama City	2μSv (0.08μSv/h)
Gunma	15	Kiryu City	2 μ Sv (0.08 μ Sv/h)
	16	Chiba City	4 μ Sv (0.2 μ Sv/h)
Gniba	17	Kisarazu City	5μSv (0.2μSv/h)
	18	Bunkyo Ward	4 μ Sv (0.2 μ Sv/h)
	19	Fuchu City	3μSv (0.1μSv/h)
Tokyo	20	Meguro Ward	3μSv (0.1μSv/h)
	21	Minato Ward	2μSv (0.08μSv/h)
	22	Hachioji City	3μSv (0.1μSv/h)
Kanagawa	23	Yokohama City	2μSv (0.08μSv/h)
Niigata	24	Nagaoka City	_
	25	Matsumoto City	2 µ Sv (0.08 µ Sv/h)
Nagano	26	Ueda City	2μSv (0.08μSv/h)

Upper column: Reading of the integrated dose(24h) Lower column: the reference value which was calculated as the number per one hour

* We have measured the integrated dose(24h) from around 2PM to the next * Readings of lower column are the reference value because of the lower

* "-" in the column indicates that "now setting up for measuring".

News Release

Readings at Monitoring Post out of 20 Km Zone of Fukushima Dai-ichi NPP

As of 16:00 April 4, 2011 Ministry of Education, Culture, Sports, Science and Technology (MEXT)

OMonitoring Outputs by MEXT *Boldface and underlined readings are new.

*1 measured by Geiger-Müller counter

*2 measured by ionization chamber type survey meter

* 3 measured by NaI scintillator detector

 $\boldsymbol{*}\,\boldsymbol{4}\,$ variation range of the measuring data in measuring time

Monitoring Post (length from NPP)	Monitoring Time	Reading (unit : μ Sv / h)	Weather	Reading by
Reading Point 【1】 (About60KmNorthWest)	2011/4/4 8:40	0.9 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【2】 (About55KmNorthWest)	2011/4/4 9:16	3.5 *²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【3】 (About45KmNorthWest)	2011/4/4 10:00	3.1 * ²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【4】 (About50KmNorthWest)	2011/4/4 9:29	1.5 *²	No Rain	MEXT
Reading Point 【5】(About45KmNorth)	2011/4/4 10:47	0.9 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【6】(About45KmNorth)	2011/4/4 11:13	1.2 * ²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【7】(About45KmNorth)	2011/4/4 11:28	1.2 * ²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【11】 (About40KmNorthWest)	2011/4/4 9:48	1.6 *2	No Rain	MEXT
Reading Point 【15】 (About35KmWest)	2011/4/4 11:08	1.7 *2	No Rain	MEXT
Reading Point 【20】 (About45KmNorthWest)	2011/4/4 10:10	0.6 *2	No Rain	MEXT
Reading Point 【31】 (About30KmWestNorthWest)	2011/4/4 10:16	9.8 ^{*2}	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【32】 (About30KmNorthWest)	2011/4/4 10:44	32.7 ^{*2}	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【33】 (About30KmNorthWest)	2011/4/4 11:06	18.6 * ²	No Rain	JAEA (Japan Atomic Energy Agency)

* 1 measured by Geiger-Müller counter

*2 measured by ionization chamber type survey meter

* 3 measured by NaI scintillator detector

*4 variation range of the measuring data in

measuring time

Monitoring Post (length from NPP)	Monitoring Time	Reading (unit : μ Sv / h)	Weather	Reading by
Reading Point 【34】 (About30KmNorthWest)	<u>2011/4/4 12:48</u>	<u>6.5</u> *2	<u>No Rain</u>	JAEA (Japan Atomic Energy Agency)
Reading Point 【36】 (About40KmNorthWest)	2011/4/4 9:48	5.2 * ²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【37】 (About50KmNorthWest)	2011/4/4 9:51	4.2 * ²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【38】 (About35KmSouth)	<u>2011/4/4 12:11</u>	<u>1.0</u> <u>*2</u>	<u>No Rain</u>	<u>MEXT</u>
Reading Point 【39】(About45KmNorth)	2011/4/4 10:23	1.3 * ²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point [71] (About25KmSouth)	<u>2011/4/4 13:11</u>	<u>1.2 *2</u>	<u>No Rain</u>	<u>MEXT</u>
Reading Point [71] (About25KmSouth)	<u>2011/4/4 8;19</u>	<u>1.3 *2</u>	<u>No Rain</u>	Police (counter NBC operations unit)
Reading Point [72] (About30KmSouth)	2011/4/4 12:48	<u>1.5</u> *2	<u>No Rain</u>	MEXT
Reading Point [72] (About30KmSouth)	<u>2011/4/4 8:54</u>	<u>0,9</u> *2	<u>No Rain</u>	Police (counter NBC operations unit)
Reading Point 【73】 (About35KmSouth)	<u>2011/4/4 12:28</u>	<u>1.1 *2</u>	<u>No Rain</u>	MEXT
Reading Point 【73】 (About35KmSouth)	<u>2011/4/4 9;11</u>	<u>0.5</u> *2	<u>No Rain</u>	Police (counter NBC operations unit)
Reading Point 【74】 (About35KmSouth)	2011/4/4 11:24	0.6 *2	No Rain	MEXT
Reading Point [74] (About35KmSouth)	<u>2011/4/4 7:32</u>	<u>0.3</u> *2	<u>No Rain</u>	Police (counter NBC operations unit)
Reading Point 【75】 (About45KmSouth)	2011/4/4 10:48	0.7 *2	No Rain	MEXT
Reading Point [75] (About45KmSouth)	2011/4/4 7:05	<u>0.2</u> <u>*</u> 2	<u>No Rain</u>	Police (counter NBC operations unit)
Reading Point [76] (About 20Km South South West)	2011/4/4 12:11	<u>0.7</u> <u>*2</u>	<u>No Rain</u>	Police (counter NBC operations unit)
Reading Point [77] (About25KmSouthSouthWest)	2011/4/4 11:55	<u>1.5</u> *2	<u>No Rain</u>	Police (counter NBC operations unit)

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* 1 measured by Geiger-Müller counter

*2 measured by ionization chamber type survey meter

* 3 measured by NaI scintillator detector

*4 variation range of the measuring data in

measuring time

Monitoring Post (length from NPP)	Monitoring Time	Reading (unit : μ Sv / h)	Weather	Reading by
Reading Point 【78】 (About45KmNorthWest)	<u>2011/4/4 7:52</u>	<u>1.2</u> *2	<u>No Rain</u>	Police (counter NBC operations unit)
Reading Point 【79】 (About30KmNorthWest)	2011/4/4 11:44	15.4 *²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【79】 (About30KmNorthWest)	2011/4/4 10:27	<u>13.5</u> *2	<u>No Rain</u>	Police (counter NBC operations unit)
Reading Point. [80] (About25KmNorth)	2011/4/4 13:02	<u>0.7</u> *2	<u>No Rain</u>	Police (counter NBC operations unit)
Reading Point [80] (About25KmNorth)	<u>2011/4/4 11:57</u>	<u>0.6</u> *2	<u>No Rain</u>	JAEA (Japan Atomic Energy Agency)
Reading Point [81] (About30KmNorthWest)	2011/4/4 8:55	<u>27.4</u> *2	<u>No Rain</u>	Police (counter NBC operations unit)
Reading Point [83] (About20KmNorthWest)	2011/4/4 12:29	<u>57.0</u> *2	<u>No Rain</u>	JAEA (Japan Atomic Energy Agency)
Reading Point [83] (About20KmNorthWest)	<u>2011/4/4 10:42</u>	<u>51.5</u> <u>*2</u>	<u>No Rain</u>	Police (counter NBC operations unit)
Reading Point 【84】 (About40KrnSouthSouthWest)	2011/4/4 10:17	0.4 ^{*2}	No Rain	MEXT
Reading Point 【85】 (About60KmNorthWest)	2011/4/4 6:00	0.6 *2	No Rain	Ministry of Defense
Reading Point 【86】 (About55KmWest)	2011/4/4 6:00	1.0 *²	No Rain	Ministry of Defense
Reading Point 【87】 (About30KmWestSouthWest)	2011/4/4 6:00	1.0 *2	No Rain	Ministry of Defense

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Readings at Monitoring Post out of Fukushima Dai-ichi NPP

News Release

Readings at Monitoring Post out of 20 Km Zone of Fukushima Dai-ichi NPP

Ministry of Education, Culture, Sports, Science and Technology (MEXT)

OMonitoring Outputs by MEXT ***Boldface and underlined readings are new.**

- * 1 measured by Geiger-Müller counter
- *2 measured by ionization chamber type survey meter
- * 3 measured by NaI scintillator detector
- *4 variation range of the measuring data in measuring
- time

Monitoring Post (length from NPP)	Monitoring Time	Reading (unit : μ Sv / h)	Weather	Reading by
Reading Point 【1】 (About60KmNorthWest)	2011/4/4 8:40	0.9 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【2】 (About55KmNorthWest)	2011/4/4 9:16	3.5 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【3】 (About45KmNorthWest)	2011/4/4 10:00	3.1 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point [4] (About50KmNorthWest)	2011/4/4 9:29	1.5 *2	No Rain	MEXT
Reading Point 【5】 (About45KmNorth)	2011/4/4 10:47	0.9 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【6】 (About45KmNorth)	2011/4/4 11:13	1.2 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【7】(About45KmNorth)	2011/4/4 11:28	1.2 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【11】 (About40KmNorthWest)	2011/4/4 9:48	1.6 *2	No Rain	MEXT
Reading Point 【15】 (About35KmWest)	2011/4/4 11:08	1.7 *2	No Rain	MEXT
Reading Point [20] (About45KmNorthWest)	2011/4/4 10:10	0.6 *2	No Rain	MEXT
Reading Point 【31】 (About30KmWestNorthWest)	2011/4/4 10:16	9.8 ^{*2}	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【32】 (About30KmNorthWest)	2011/4/4 10:44	32.7 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【33】 (About30KmNorthWest)	2011/4/4 11:06	18.6 * ²	No Rain	JAEA (Japan Atomic Energy Agency)

As of 19:00 April 4, 2011

* 1 measured by Geiger-Müller counter
* 2 measured by ionization chamber type survey meter

* 3 measured by NaI scintillator detector

*4 variation range of the measuring data in measuring

time

Monitoring Post (length from NPP)	Monitoring Time	Reading (unit : μ Sv / h)	Weather	Reading by
Reading Point 【34】 (About30KmNorthWest)	2011/4/4 12:48	6.5 * ²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【36】 (About40KmNorthWest)	2011/4/4 9:48	5.2 * ²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【37】 (About50KmNorthWest)	2011/4/4 9:51	4.2 ^{*2}	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【38】 (About35KmSouth)	2011/4/4 12:11	1.0 *2	No Rain	MEXT
Reading Point 【39】(About45KmNorth)	2011/4/4 10:23	1.3 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point. 【41】 (About20KmWest)	<u>2011/4/4 13:15</u>	<u>0.9</u> *2	<u>No Rain</u>	Electric power company
Reading Point 【41】 (About20KmWest)	2011/4/4 9:45	<u>0.9</u> *2	<u>No Rain</u>	Electric power company
Reading Point [42] (About30KmWest)	<u>2011/4/4 13:10</u>	<u>1.1 *2</u>	<u>No Rain</u>	Electric power company
Reading Point 【42】 (About30KmWest)	2011/4/4 9:50	<u>1.1 *2</u>	<u>No Rain</u>	Electric power company
Reading Point [43] (About 20Km South South West)	<u>2011/4/4 14:45</u>	<u>0.4</u> *2	<u>No Rain</u>	Electric power company
Reading Point 【43】 (About 20Km South South West)	2011/4/4 10:45	<u>0.4</u> *2	<u>No Rain</u>	Electric power company
Reading Point 【44】 (About30KmSouth)	<u>2011/4/4 13:00</u>	<u>1.0 *2</u>	<u>No Rain</u>	Electric power company
Reading Point 【44】 (About30KmSouth)	2011/4/4 10:00	<u>1.2</u> *2	<u>No Rain</u>	Electric power company
Reading Point 【45】 (About20KmSouth)	<u>2011/4/4 13:42</u>	<u>1.7</u> *2	<u>No Rain</u>	Electric power company
Reading Point 【45】 (About20KmSouth)	2011/4/4 10:18	<u>1.7</u> *2	<u>No Rain</u>	Electric power company
Reading Point 【46】 (About 30KmNorthWest)	2011/4/4 14:00	<u>5.7</u> *2	<u>No Rain</u>	Electric power company_
Reading Point [46] (About30KmNorthWest)	2011/4/4 10:30	<u>5.8</u> *2	<u>No Rain</u>	Electric power company
Reading Point [51] (About 40Km South South Went)	2011/4/4 13:31	<u>0.2 *3</u>	<u>No Rain</u>	Fukushima

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* 1 measured by Geiger-Müller counter

*2 measured by ionization chamber type survey meter

* 3 measured by NaI scintillator detector

*4 variation range of the measuring data in measuring

time

Monitoring Post (length from NPP)	Monitoring Time	Reading (unit : μ Sv / h)	Weather	Reading by
Reading Point. [51] (About 40Km South South West)	2011/4/4 10:36	<u>0.3</u> *3	<u>No Rain</u>	<u>Fukushima</u>
Reading Point [52] (About40KmWest)	2011/4/4 14:08	<u>0.3</u> *3	<u>No Rain</u>	<u>Fukushima</u>
Reading Point [52] (About40KmWest)	2011/4/4 11:18	<u>0.3</u> *3	<u>No Rain</u>	<u>Fukushima</u>
Reading Point. [61] (About 40Km North West)	2011/4/4 14:19	<u>6.1 *3</u>	<u>No Rain</u>	<u>Fukushima</u>
Reading Point. [61] (About 40Km North West)	2011/4/4 12:26	<u>6.1 *3</u>	<u>No Rain</u>	<u>Fukushima</u>
Reading Point [62] (About40KmNorthWest)	2011/4/4 14:16	<u>7.1 *3</u>	<u>No Rain</u>	<u>Fukushima</u>
Reading Point. [62] (About 40KmNorthWest)	2011/4/4 11:34	<u>7.2 *3</u>	<u>No Rain</u>	Fukushima
Reading Point. [63] (About45KmNorthWest)	2011/4/4 14:38	<u>2.8 *3</u>	<u>No Rain</u>	<u>Fukushima</u>
Reading Point [63] (About 45KmNorthWest)	2011/4/4 10:36	<u>2.4 *3</u>	<u>No Rain</u>	<u>Fukushima</u>
Reading Point 【71】 (About25KmSouth)	2011/4/4 13:11	1.2 *2	No Rain	MEXT
Reading Point 【71】 (About25KmSouth)	2011/4/4 8:19	1.3 *2	No Rain	Police (counter NBC operations unit)
Reading Point 【72】 (About30KmSouth)	2011/4/4 12:48	1.5 *2	No Rain	MEXT
Reading Point 【72】 (About30KmSouth)	2011/4/4 8:54	0.9 *2	No Rain	Police (counter NBC operations unit)
Reading Point 【73】 (About35KmSouth)	2011/4/4 12:28	1.1 *2	No Rain	MEXT
Reading Point 【73】 (About35KmSouth)	2011/4/4 9:11	0.5 *2	No Rain	Police (counter NBC operations unit)
Reading Point 【74】 (About35KmSouth)	2011/4/4 11:24	0.6 *2	No Rain	MEXT
Reading Point 【74】 (About35KmSouth)	2011/4/4 7:32	0.3 *2	No Rain	Police (counter NBC operations unit)
Reading Point 【75】 (About45KmSouth)	2011/4/4 10:48	0.7 *2	No Rain	MEXT
Reading Point 【75】 (About45KmSouth)	2011/4/4 7:05	0.2 *2	No Rain	Police (counter NBC operations unit)
Reading Point 【76】 (About20KmSouthSouthWest)	2011/4/4 12:11	0.7 *2	No Rain	Police (counter NBC operations unit)

* 1 measured by Geiger-Müller counter

*2 measured by ionization chamber type survey meter

* 3 measured by NaI scintillator detector

*4 variation range of the measuring data in measuring

time

Monitoring Post (length from NPP)	Monitoring Time	Reading (unit : μ Sv / h)	Weather	Reading by
Reading Point [77] (About25KmSouthSouthWest)	2011/4/4 11:55	1.5 * ²	No Rain	Police (counter NBC operations unit)
Reading Point 【78】 (About45KmNorthWest)	2011/4/4 7:52	1.2 * ²	No Rain	Police (counter NBC operations unit)
Reading Point 【79】 (About30KmNorthWest)	2011/4/4 11:44	15.4 * ²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【79】 (About30KmNorthWest)	2011/4/4 10:27	13.5 *2	No Rain	Police (counter NBC operations unit)
Reading Point 【80】 (About25KmNorth)	2011/4/4 13:02	0.7 *2	No Rain	Police (counter NBC operations unit)
Reading Point 【80】 (About25KmNorth)	2011/4/4 11:57	0.6 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【81】 (About30KmNorthWest)	2011/4/4 8:55	27.4 ^{*2}	No Rain	Police (counter NBC operations unit)
Reading Point [83] (About20KmNorthWest)	2011/4/4 12:29	57.0 ^{*2}	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point [83] (About20KmNorthWest)	2011/4/4 10:42	51.5 *²	No Rain	Police (counter NBC operations unit)
Reading Point [84] (About40KmSouthSouthWest)	2011/4/4 10:17	0.4 * ²	No Rain	MEXT
Reading Point [85] (About60KmNorthWest)	<u>2011/4/4 14:00</u>	<u>0.7 *²</u>	<u>No Rain</u>	<u>Ministry of Defense</u>
Reading Point 【85】 (About60KmNorthWest)	2011/4/4 6:00	0.6 *2	No Rain	Ministry of Defense
Reading Point. [86] (About55KmWest)	<u>2011/4/4 14:00</u>	<u>1.0</u> *2	<u>No Rain</u>	Ministry of Defense
Reading Point 【86】 (About55KmWest)	2011/4/4 6:00	1.0 *2	No Rain	Ministry of Defense
Reading Point [87] (About30KmWestSouthWest)	2011/4/4 14:00	<u>1.2 *2</u>	<u>No Rain</u>	<u>Ministry of Defense</u>
Reading Point [87] (About30KmWestSouthWest)	2011/4/4 6:00	1.0 *2	No Rain	Ministry of Defense



Readings at Monitoring Post out of Fukushima Dai-ichi NPP

H23	4.4 19:00															(μSv/h)
	Durfastu (O'L)				4/3							4/4				
	Prefecture(Gity)	17-18	18-19	19-20	20-21	21-22	22-23	23-24	0-1	1-2	2-3	3-4	4-5	5-6	6-7	Usual Value Band
1	Hokkaido(Sappro)	0.032	0.030	0.029	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.02~0.105
2	Aomori (Aomori)	0.027	0.027	0.027	0.027	0.027	0.027	0.029	0.032	0.028	0.028	0.028	0.027	0.027	0.027	0.017~0.102
3	Iwate (Morioka)	0.025	0.024	0.025	0.025	0.025	0.024	0.025	0.025	0.025	0.026	0.025	0.025	0.025	0.026	0.014~0.084
4	Miyagi (Sendai)	0.079	0.078	0.076	0.076	0.075	0.075	0.075	0.074	0.073	0.073	0.073	0.072	0.073	0.072	0.0176~0.0513
5	Akita (Akita)	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.034	0.035	0.034	0.034	0.034	0.022~0.086
6	Yamagata (Yamagata)	0.060	0.061	0.061	0.060	0.061	0.061	0.061	0.061	0.061	0.061	0.060	0.061	0.060	0.060	0.025~0.082
7	Fukushima (Futaba)															0.037~0.071
8	Ibaraki (Mito)	0.174	0.174	0.173	0.173	0.174	0.173	0.173	0.173	0.173	0.172	0.172	0.172	0.172	0.171	0.036~0.056
9	Tochigi (Utsunomiya)	0.083	0.084	0.084	0.084	0.084	0.083	0.084	0.083	0.084	0.083	0.084	0.083	0.084	0.084	0.030~0.067
10	Gunma(Maebashi)	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.047	0.017~0.045
11	Saitama (Saitama)	0.073	0.073	0.073	0.073	0.073	0.073	0.073	0.073	0.073	0.073	0.073	0.073	0.073	0.072	0.031~0.060
12	Chiba(Ishihara)	0.064	0.065	0.064	0.065	0.064	0.065	0.064	0.064	0.065	0.064	0.064	0.065	0.065	0.064	0.022~0.044
13	Tokyo(Shinjyuku)	0.091	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.091	0.090	0.090	0.090	0.028~0.079
14	Kanagawa (Chigasaki)	0.063	0.064	0.064	0.064	0.063	0.063	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.035~0.069
15	Niigata (Niigata)	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.031~0.153
16	Toyama (Imizu)	0.046	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.048	0.048	0.048	0.048	0.048	0.029~0.147
17	Ishikawa (Kanazawa)	0.046	0.046	0.046	0.046	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.0291~0.1275
18	Fukui (Fukui)	0.045	0.045	0.045	0.045	0.045	0.046	0.045	0.045	0.046	0.046	0.046	0.046	0.046	0.046	0.032~0.097
19	Yamanashi (Kohu)	0.043	0.043	0.043	0.043	0.043	0.043	0.043	0.044	0.043	0.044	0.043	0.044	0.044	0.044	0.040~0.064
20	Nagano (Nagano)	0.044	0.044	0.044	0.044	0.044	0.044	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.046	0.0299~0.0974
21	Gifu (Kakamigahara)	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.060	0.061	0.061	0.061	0.061	0.061	0,057~0.110
22	Shizuoka (Shizuoka)	0.039	0.037	0.037	0.037	0.037	0.037	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.0281~0.0765
23	Aichi(Nagoya)	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.040	0.040	0.040	0.040	0.035~0.074
24	Mie (Yokkaichi)	0.045	0.046	0.046	0.045	0.045	0.045	0.045	0.046	0.045	0.046	0.045	0.045	0.045	0.045	0.0416~0.0789
25	Shiga (Otsu)	0.032	0.032	0.032	0.032	0.032	0.033	0.033	0.033	0.033	0.033	0.033	0.033	0.034	0.034	0.031~0.061
26	Kyoto (Kyoto)	0.037	0.037	0.037	0.037	0.037	0.037	0.038	0.038	0.038	0.039	0.039	0.040	0.040	0.040	0.033~0.087
27	Osaka (Osaka)	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042~0.061
28	Hyogo (Kobe)	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.035~0.076
29	Nara (Nara)	0.047	0.047	0.047	0.047	0.047	0.048	0.048	0.048	0.048	0.048	0.049	0.049	0.049	0.049	0.046~0.08
30	Wakayama (Wakayama)	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.032	0.032	0.032	0.032	0.032	0.031~0.056
31	Tottori(Tohhaku)	0.062	0.062	0.062	0.063	0.063	0.062	0.063	0.063	0.063	0.063	0.063	0.063	0.062	0.062	0.036~0.11
32	Shimane (Matsue)	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.033~0.079
33	Okayama (Okayama)	0.048	0.048	0.048	0.048	0.048	0.048	0.048	0.049	0.049	0.050	0.050	0.051	0.050	0.051	0.043~0.104
34	Hiroshima (Hiroshima)	0.046	0.046	0.047	0.046	0.046	0.047	0.046	0.046	0.047	0.047	0.047	0.047	0.047	0.047	0.035~0.069
35	Yamaguchi (Yamaguchi)	0.092	0.092	0.092	0.092	0.092	0.092	0.092	0.093	0.092	0.093	0.093	0.093	0.094	0.094	0.084~0.128
36	Tokushima (Tokushima)	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.038	0.038	0.038	0.038	0.037~0.067
37	Kagawa (Takamastu)	0.059	0.054	0.059	0.062	0.058	0.053	0.062	0.063	0.059	0.055	0.068	0.068	0.057	0.059	0.051~0.077
38	Ehime(Matsuyama)	0.047	0.047	0.047	0.048	0.047	0.047	0.048	0.048	0.047	0.047	0.047	0.048	0.048	0.048	0.045~0.074
39	Kochi (Kochi)	0.025	0.025	0.024	0.024	0.025	0.025	0.025	0.025	0.024	0.024	0.025	0.024	0.024	0.024	0.023~0.076
40	Fukuoka (Dazaifu)	0.036	0.036	0.035	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.037	0.036	0.034~0.079
41	Saga(Saga)	0.040	0.039	0.039	0.039	0.040	0.039	0.039	0.039	0.039	0.040	0.040	0.040	0.040	0.040	0.037~0.086
42	Nagasaki(Ohmura)	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.027~0.069
43	Kumamoto(Uto)	0.027	0.027	0.027	0.027	0.027	0.027	0.028	0.028	0.028	0.028	0.027	0.028	0.027	0.028	0.021~0.067
44	Oita (Oita)	0.049	0.049	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.048~0.085
45	Miyazaki (Miyazaki)	0.027	0.027	0.028	0.028	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.0243~0.0664
46	Kagoshima (Kagoshima)	0.036	0.035	0.035	0.035	0.035	0.035	0.035	0.036	0.035	0.035	0.035	0.035	0.035	0.035	0.0306~0.0943
47	Okinawa (Uruma)	0.021	0.021	0.020	0.021	0.021	0.021	0.021	0.022	0.021	0.022	0.022	0.021	0.021	0.023	0.0133~0.0575

*Figures for Miyagi Prefecture are measured by transportable monitoring post.

*Refer to other title "Readings at Monitoring Post out of 20 Km Zone of Fukushima Dai-ichi NPP" for the datas in Fukushima. It could not be

measured by Monitoring Post since the radiation level around it is so high.

*Blanks are caused by device maintenance, but the area was measured by Monitoring Posts.

*These figures are estimated as 1μ Gy/h= 1μ Sv/h.

*The table was made by MEXT, based on the reports from prefectures.

H23.	123.4.4 19:00 (μ Sv/h)											
						4,	/4					
	Prefecture(City)	7-8	8-9	<u>9-10</u>	<u>10-11</u>	11-12	<u>12-13</u>	<u>13-14</u>	<u>14-15</u>	<u>15-16</u>	<u>16-17</u>	Usual Value Band
1	Hokkaido(Sappro)	0.028	0.028	0.028	0.028	0.028	<u>0.028</u>	<u>0.028</u>	<u>0.028</u>	<u>0.028</u>	<u>0.028</u>	0.02~0.105
2	Aomori (Aomori)	0.027	0.027	<u>0.027</u>	<u>0.026</u>	<u>0.026</u>	<u>0.026</u>	<u>0.026</u>	<u>0.026</u>	<u>0.026</u>	0.026	0.017~0.102
3	lwate (Morioka)	0.025	0.025	0.025	<u>0.025</u>	0.025	0.024	<u>0.024</u>	<u>0.024</u>	0.024	<u>0.025</u>	0.014~0.084
4	Miyagi (Sendai)	0.074	0.077	<u>0.081</u>	0.082	<u>0.081</u>	<u>0.081</u>	<u>0.081</u>	<u>0.081</u>	0.080	0.077	0.0176~0.0513
5	Akita (Akita)	0.035	0.036	<u>0.036</u>	<u>0.035</u>	0.034	<u>0.034</u>	0.034	<u>0.034</u>	<u>0.034</u>	<u>0.034</u>	0.022~0.086
6	Yamagata (Yamagata)	0.060	0.060	0.060	<u>0.060</u>	<u>0.060</u>	<u>0.060</u>	<u>0.060</u>	0.060	0.060	<u>0,060</u>	0.025~0.082
7	Fukushima (Futaba)											0.037~0.071
8	Ibaraki (Mito)	0.171	0.171	<u>0.171</u>	<u>0.171</u>	<u>0.170</u>	<u>0.170</u>	<u>0.170</u>	<u>0.169</u>	<u>0.169</u>	<u>0.169</u>	0.036~0.056
9	Tochigi (Utsunomiya)	0.083	0.083	<u>0.082</u>	0.082	<u>0.082</u>	0.082	<u>0.082</u>	<u>0.081</u>	<u>0.082</u>	<u>0.082</u>	0.030~0.067
10	Gunma (Maebashi)	0.047	0.047	<u>0.046</u>	<u>0,047</u>	<u>0.046</u>	<u>0.046</u>	<u>0,046</u>	<u>0.046</u>	<u>0.046</u>	<u>0.046</u>	0.017~0.045
11	Saitama (Saitama)	0.072	0.072	<u>0.072</u>	<u>0.071</u>	<u>0.072</u>	<u>0.071</u>	<u>0.071</u>		<u>0.071</u>	<u>0.071</u>	0.031~0.060
12	Chiba (Ishihara)	0.064	0.064	<u>0.063</u>	<u>0.063</u>	0.062	<u>0.063</u>	<u>0.063</u>	0.062	<u>0.062</u>	<u>0.063</u>	0.022~0.044
13	Tokyo(Shinjyuku)	0.090	0.090	0.090	0.090	0.090	0.090	0.090	<u>0.090</u>	0.089	0.089	0.028~0.079
14	Kanagawa (Chigasaki)	0.063	0.063	<u>0.062</u>	<u>0.062</u>	<u>0.062</u>	<u>0,062</u>	<u>0.062</u>	0.062	<u>0.062</u>	<u>0.062</u>	0.035~0.069
15	Niigata (Niigata)	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0,046	0.046	0.046	0.031~0.153
16	Toyama (Imizu)	0.048	0.047	<u>0.047</u>	<u>0.047</u>	<u>0.047</u>	<u>0.047</u>	0.047	<u>0.047</u>	<u>0.048</u>	<u>0.048</u>	0.029~0.147
17	Ishikawa (Kanazawa)	0.047	0.047	<u>0.047</u>	<u>0.047</u>	0.046	<u>0.047</u>	<u>0.046</u>	<u>0.047</u>	<u>0.046</u>	<u>0.047</u>	0.0291~0.1275
18	Fukui(Fukui)	0.046	0.045	<u>0,045</u>	<u>0.045</u>	0.045	<u>0.044</u>	<u>0.045</u>	<u>0.045</u>	0.045	<u>0.045</u>	0.032~0.097
19	Yamanashi (Kohu)	0.043	0.043	<u>0.043</u>	<u>0.043</u>	<u>0.043</u>	<u>0.043</u>	<u>0.043</u>	<u>0.043</u>	<u>0.042</u>	<u>0.043</u>	0.040~0.064
20	Nagano (Nagano)	0.045	0.044	0.043	0.043	0.044	0.043	<u>0.043</u>	<u>0.043</u>	<u>0.043</u>	0.043	0.0299~0.0974
21	Gifu(Kakamigahara)	0.060	0.061	0.060	0.060	0.060	0.060	0.060	<u>0.060</u>	0.060	0.060	0.057~0.110
22	Shizuoka (Shizuoka)	0.037	0.037	0.038	<u>0.039</u>	<u>0.041</u>	<u>0.041</u>	<u>0.039</u>	<u>0.039</u>	<u>0.039</u>	<u>0.038</u>	0.0281~0.0765
23	Aichi (Nagoya)	0.040	0.040	<u>0.040</u>	0.039	0.039	<u>0.039</u>	<u>0.039</u>	<u>0.039</u>	0.038	0.039	0.035~0.074
24	Mie (Yokkaichi)	0.045	0.045	<u>0.045</u>	<u>0.045</u>	<u>0.045</u>	<u>0.045</u>	<u>0.046</u>	<u>0.046</u>	<u>0.046</u>	<u>0.045</u>	0.0416~0.0789
25	Shiga(Otsu)	0.033	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	<u>0.032</u>	0.031~0.061
26	Kyoto (Kyoto)	0.040	0.039	0.038	0.037	0.037	<u>0.037</u>	<u>0.037</u>	<u>0.037</u>	0.037	0.037	0.033~0.087
27	Osaka(Osaka)	0.042	0.042	<u>0.042</u>	<u>0.042</u>	<u>0.042</u>	<u>0.042</u>	<u>0.042</u>	<u>0.041</u>	<u>0.041</u>	<u>0.041</u>	0.042~0.061
28	Hyogo(Kobe)	0.036	0.036	<u>0.036</u>	<u>0.035</u>	<u>0.035</u>	<u>0.035</u>	<u>0.035</u>	<u>0.036</u>	0.035	<u>0.035</u>	0.035~0.076
29	Nara(Nara)	0.049	0.048	0.047	<u>0.047</u>	<u>0.047</u>	<u>0.047</u>	<u>0.046</u>	<u>0.047</u>	<u>0.046</u>	<u>0.046</u>	0.046~0.08
30	Wakayama (Wakayama)	0.032	0.031	<u>0.031</u>	0.031	<u>0.031</u>	<u>0.031</u>	0.031	<u>0,031</u>	0.031	<u>0.030</u>	0.031~0.056
31	Tottori(Tohhaku)	0.062	0.062	0.063	<u>0.063</u>	<u>0.062</u>	<u>0.062</u>	<u>0.062</u>	<u>0.063</u>	0.062	<u>0.062</u>	0.036~0.11
32	Shimane(Matsue)	0.036	0.036	<u>0.036</u>	0.036	<u>0.036</u>	<u>0.036</u>	<u>0.036</u>	<u>0.036</u>	0.036	<u>0.036</u>	0.033~0.079
33	Okayama (Okayama)	0.050	0.049	<u>0.049</u>	0.048	0.048	<u>0.048</u>	<u>0.047</u>	<u>0.048</u>	<u>0.048</u>	<u>0.048</u>	0.043~0.104
34	Hiroshima (Hiroshima)	0.047	0.047	<u>0.046</u>	<u>0.046</u>	<u>0.046</u>	<u>0.046</u>	0.046	<u>0.046</u>	<u>0.046</u>	0.046	0.035~0.069
35	Yamaguchi(Yamaguchi)	0.093	0.093	<u>0.092</u>	<u>0.092</u>	<u>0.092</u>	<u>0,092</u>	0.092	<u>0.092</u>	0.092	<u>0.092</u>	0.084~0.128
36	Tokushima (Tokushima)	0.038	0.036	<u>0.037</u>	<u>0.037</u>	<u>0.037</u>	<u>0.037</u>	<u>0.037</u>	<u>0.036</u>	0.036	<u>0.037</u>	0.037~0.067
37	Kagawa (Takamastu)	0.067	0.055	<u>0.054</u>	<u>0.054</u>	<u>0.054</u>	<u>0.054</u>	<u>0.055</u>	0.054	<u>0.054</u>	0.054	0.051~0.077
38	Ehime (Matsuyama)	0.048	0.047	<u>0.047</u>	<u>0.047</u>	<u>0.046</u>	<u>0.046</u>	<u>0.047</u>	<u>0.046</u>	<u>0.047</u>	<u>0.047</u>	0.045~0.074
39	Kochi (Kochi)	0.024	0.024	<u>0.024</u>	0.024	<u>0.024</u>	<u>0.024</u>	<u>0.025</u>	<u>0.024</u>	<u>0.024</u>	<u>0.024</u>	0.023~0.076
40	Fukuoka(Dazaifu)	0.036	0.036	<u>0.036</u>	<u>0.036</u>	<u>0.036</u>	<u>0.036</u>	<u>0.036</u>	<u>0.036</u>	<u>0.035</u>	0.036	0.034~0.079
41	Saga(Saga)	0.040	0.040	<u>0.039</u>	<u>0.039</u>	0.039	<u>0.039</u>	0.039	<u>0.039</u>	<u>0.039</u>	<u>0.039</u>	0.037~0.086
42	Nagasaki(Ohmura)	0.030	0.029	<u>0.029</u>	<u>0.029</u>	<u>0.029</u>	<u>0.028</u>	<u>0.029</u>	<u>0.028</u>	<u>0.029</u>	<u>0.029</u>	0.027~0.069
43	Kumamoto(Uto)	0.027	0.027	0.027	0.027	0.027	0.027	0.026	0.026	0.026	0.026	0.021~0.067
44	Oita(Oita)	0.049	0.050	0,049	0.049	<u>0.049</u>	<u>0.049</u>	0.049	<u>0,049</u>	0.049	<u>0.049</u>	0.048~0.085
45	Miyazaki (Miyazaki)	0.027	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.0243~0.0664
46	Kagoshima (Kagoshima)	0.035	0.035	0.035	0.035	<u>0.035</u>	<u>0.035</u>	0.034	0.035	<u>0.035</u>	<u>0.035</u>	0.0306~0.0943
47	Okinawa (Uruma)	0.023	0.024	0.024	0.022	0.021	0.022	0.023	0.023	0.023	0.022	0.0133~0.0575

*Figures for Miyagi Prefecture are measured by transportable monitoring post.

*Refer to other title "Readings at Monitoring Post out of 20 Km Zone of Fukushima Dai-ichi NPP" for the datas in Fukushima. It could not be measured by 0

*Blanks are caused by device maintenance, but the area was measured by Monitoring Posts.

*These figures are estimated as 1μ Gy/h= 1μ Sv/h.

*The table was made by MEXT, based on the reports from prefectures.

Monitoring data at Ibaraki prefecture

H23.4.4 19:00			μ Sv/h
Date and Time	JAEA nuclear science research institute (Tokai–village in Ibaraki–	JAEA Nuclear fuel cycle engineering laboratory (Tokai-village in Ibaraki- prefecture)	Yayoi in Tokyo University (Tokai-village in Ibaraki- prefecture)
4/4			
0:00	1.30	0.74	1.01
1:00	1.30	0.74	1.12
2:00	1.29	0.74	1.10
3:00	1.30	0.74	1.02
4:00	1.29	0.73	1.10
5:00	1.29	0.73	1.04
6:00	1.28	0.73	1.11
7:00	1.28	0.73	1.01
8:00	1.28	0.73	0.98
9:00	1.27	0.72	1.12
<u>10;00</u>	1.27	0.72	<u>1.14</u>
<u>11:00</u>	1.27	0.72	<u>1.07</u>
<u>12:00</u>	1.27	0.72	<u>1.00</u>
<u>13:00</u>	<u>1.27</u>	<u>0.72</u>	<u>0.99</u>
<u>14:00</u>	<u>1.27</u>	<u>0.72</u>	<u>1.09</u>
<u>15:00</u>	<u>1.26</u>	<u> </u>	<u>1.09</u>
<u>16:00</u>	<u>1.26</u>	<u>0.72</u>	<u>1.11</u>
<u>17:00</u>	<u>1.26</u>	<u>0.71</u>	<u>1.00</u>
<u>18:00</u>	<u>1.26</u>	<u>0.72</u>	

%The readings are measured once every hour from March 24th.

The readings of JAEA nuclear science research institute and JAEA Nuclear fuel cycle engineering laboratory are also put on their websites in below.

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JAEA nuclear science research institute

http://erms.jaea.go.jp/Chart.htm

JAEA Nuclear fuel cycle engineering laboratory

http://www.jaea.go.jp/04/ztokai/kankyo/realtime/tbl_10mStPo01.html

	Drofasture	Fallout							
	Freiecture	I-131	Cs-137	Remarks					
1	Hokkaido(Sapporo)	Not Detectable	Not Detectable						
2	Aomori(Aomori)	Not Detectable	Not Detectable						
3	Iwate(Morioka)	Not Detectable	Not Detectable	· · · · · · · · · · · · · · · · · · ·					
4	Miyagi	_	_	Not be measured because of the earthquake disaster damage					
5	Akita(Akita)	Not Detectable	Not Detectable						
6	Yamagata(Yamagata)	_	_	On Setting up the equipment					
7	Fukushima (Fukushima)	-	-	Measurements arrived, though it had delayed.					
8	Ibaraki(Hitachinaka)	23	Not Detectable						
9	Tochigi(Utsunomiya)	75	46						
10	Gunma(Maebashi)	3.1	7.4						
11	Saitama(Saitama)	16	18	·					
12	Chiba(Ichihara)	22	23						
13	Tokyo(Shinjuku)		18						
14	Kanagawa(Chigasaki)		7.8						
15	Niigata(Niigata)	Not Detectable	Not Detectable	<u>+</u>					
10 	i oyama(Imizu)								
17	Ishikawa(Kanazawa)	Not Detectable	Not Detectable	<u> </u>					
18		Not Detectable	Not Detectable						
19	Yamanashi(Kotu)	Not Detectable	Not Detectable	+					
20	Ngano(Nagano)	Not Detectable	Not Detectable						
21	Gitu(Kakamigahara)	Not Detectable	Not Detectable						
22		Not Detectable	Not Detectable	<u> </u>					
23		Not Detectable	Not Detectable	-					
24 25		Not Detectable	Not Detectable						
20		Not Detectable	Not Detectable						
20		Not Detectable	Not Detectable						
21		Not Detectable	Not Detectable						
20 20		Not Detectable	Not Detectable	+					
29	Wakayoma(Wakayan)	Not Detectable	Not Detectable	+					
3U 21	Tottori (Table Jun)	Not Detectable	Not Detectable	+					
01 20	Shimana(Mataua)	Not Detectable	Not Detectable	· · · · · · · · · · · · · · · · · · ·					
32	Okavama(Okavama)	Not Detectable	Not Detectable						
34	Hiroshima(Hiroshima)	Not Detectable	Not Detectable	1					
35	Yamaguchi(Yamaguchi)	Not Detectable	Not Detectable						
36	Tokushima(Tokushima)	Not Detectable	Not Detectable	1					
37	Kagawa(Takamatsu)	Not Detectable	Not Detectable						
38	Ehime(Yawatahama)	Not Detectable	Not Detectable						
39	Kochi(Kochi)	Not Detectable	Not Detectable						
40	Fukuoka(Dazaifu)	Not Detectable	Not Detectable						
41	Saga(Saga)	Not Detectable	Not Detectable						
42	Nagasaki(Ohmura)	Not Detectable	Not Detectable						
43	Kumamoto(Uto)	Not Detectable	Not Detectable						
44	Oita(Oita)	Not Detectable	Not Detectable						
45	Miyazaki(Miyazaki)	Not Detectable	Not Detectable						
46	Kagoshima(Kagoshima)	Not Detectable	Not Detectable						
47	Okinawa(Nanjo)	Not Detectable	Not Detectable	· · · · · · · · · · · · · · · · · · ·					

*The table was made by MEXT, based on the reports from prefectures

CW 130 of 2789

Readings of Sea Area Monitoring at Post Out of Fukushima Dai-ichi NPP

April 4, 2011 Ministry of Education, Culture, Sports, Science and Technology (MEXT)

Sampling Point※1	Sampling Time and Date	Radioactivit (outer la	ty Concentration ayer)(Bq∕L)	Radioactivity Concentration (lower layer)(Bq∕L) ^{%2}		
		I-131	Cs-137	I-131	Cs-137	
[2]	2011/4/3 8:09	5.96	Not Detected	1.59	Not Detected	
[4]	2011/4/3 9:40	11.6	Not Detected	2.96	1.16	
[6]	2011/4/3 11:04	18.3	10.70	Not Detected	1.68	
.[8]	2011/4/3 12:53	5.55	1.16	1.98	3.40	
【10】	2011/4/3 14:35	37.5	4.75	Not Detected	Not Detected	

1. Radioactivity Concentration Undersea

※1 Seawater is collected at 5 points bellow (p2).

2 Sampling depth in lower layer is written at the figure(p2).

Sampling Point※1	Sampling Time and Date	Reading (μ Sv/h)%2	Weather
[2]	2011/4/3 8:09	0.08	No Rain
[4]	2011/4/3 9:40	0.08	No Rain
[6]	2011/4/3 11:04	0.08	No Rain
[8]	2011/4/3 12:53	0.08	No Rain
【10】	2011/4/3 14:35	0.07	No Rain

2. Reading of Over the Sea

※1 Seawater is collected at 5 points bellow(p2).

%2 Type of detector : CsI(TI) scintillation detector (PDR-101, ALOKA)

Sompling Point X1	Sompling Time and Data	Radioactivity Concentration(Bq/m3)			Radioactivity Concentration (Bq/n	
Sampling Fount X 1	Sampling Time and Date	I-131	Cs-137			
[2]	2011/4/3 8:09	Not Detected	Not Detected			
[4]	2011/4/3 9:40	Not Detected	Not Detected			
[6]	2011/4/3 11:04	8.84	2.82			
[8]	2011/4/3 12:53	5.09	1.73			
【10】	2011/4/3 14:35	0.435	0.03			

3. Reading of Radioactivity Concentration in dust over the Sea

X1 Seawater is collected at 5 points bellow(p2).

Sampling Point	Latitude, Longitude	Sampling depth in lower layer
[2]	37° 35′ N, 141° 24′ E	120 m
[4]	37°23′N, 141°24′E	127 m
[6]	37°12′N, 141°24′E	142 m
[8]	37° 60′ N, 141° 24′ E	172 m
[10]	37°00′N,141°05′E	84 m

Each sampling point is indicated below



CW 132 of 2789



Reading of Radioactivity Concentration in dust over the Sea







Note: "Not Detectable" is illustrated as OBq/L.

Readings of Sea Area Monitoring at Post Out of Fukushima Dai-ichi NPP Result of Radioactivity Concentration in the Sea (outer layer)



CW 135 of 2789

5/5

Readings of the radiation rate with the cooperation of universities

Prefecture	Monitoring Point	City	4/3/~4/4
	_1	Muroran City	$\begin{array}{c c} 1 \ \mu \ Sv \\ (0.04 \ \mu \ Sv/h) \end{array}$
	2	Obihiro City	$\frac{1 \mu \mathrm{Sv}}{(0.04 \mu \mathrm{Sv/h})}$
Ushira:da	3	Asahikawa City	2 μ Sv (0. 08 μ Sv/h)
Поккајдо	4	Kitami City	1 μ Sv (0. 04 μ Sv/h)
	5	Kushiro City	1 μ Sv (0. 04 μ Sv/h)
	6	Hakodate City	2 μ Sv (0.08 μ Sv/h)
	7	Hirosaki City	$\frac{1 \mu\text{Sv}}{(0.04\mu\text{Sv/h})}$
Aomori	8	Hachinohe City	$\frac{1 \mu\text{Sv}}{(0.04\mu\text{Sv/h})}$
Miyagi	9	Sendai City	$2 \mu Sv$ (0, 08 $\mu Sv/h$)
	10	Yonezawa City	$\frac{2 \mu \text{Sv}}{(0, 08 \mu \text{Sv/h})}$
Yamagata	11	Tsuruoka City	$\frac{2 \mu \text{Sv}}{(0.08 \mu \text{Sv/h})}$
Fukushima	12	Fukushima City	$\frac{12 \mu \text{Sv}}{(0.50 \mu \text{Sv}/\text{h})}$
Ibaraki	13	Tsukuba City	$\frac{4 \mu \text{Sv}}{(0.2 \mu \text{Sv/h})}$
Tochigi	14	Oyama City	$\frac{3\boldsymbol{\mu}\mathbf{S}\mathbf{v}}{(0,1\boldsymbol{\mu}\mathbf{S}\mathbf{v}/\mathbf{h})}$
Gunma	15	Kiryu City	$\frac{(0.1 \mu\text{SV/h})}{3\mu\text{SV}}$
	16	Chiba City	$\frac{(0.1 \mu\text{Sv/h})}{4\mu\text{Sv}}$
Chiba	17	Kisarazu City	$\frac{(0.2 \mu \text{SV/h})}{5 \mu \text{SV}}$
	18	Bunkyo Ward	$\frac{3 \mu S v}{(0.1 \mu S v/h)}$
	19	Fuchu City	$\frac{(0.1 \mu Sv/h)}{3 \mu Sv}$
Tokyo	20	Meguro Ward	$(0.1 \mu SV/h)$ 2 μSV $(0.08 \mu SV/h)$
	21	Minato Ward	$(0, 08 \mu SV/h)$ 3 μ SV
	22	Hachioji City	$(0.1 \mu SV/II)$ 2 μSV $(0.08 \mu SV/II)$
Kanagawa	23	Yokohama City	$(0, 08 \mu \text{Sv/h})$ 2 μSv
Niigata	24	Nagaoka City	$(0.08 \mu \text{Sv/h})$ $2 \mu \text{Sv}$ $(0.08 \mu \text{Sv/h})$
	25	Matsumoto City	$\frac{(0.08\mu\text{Sv/h})}{2\mu\text{Sv}}$
Nagano	26	Ueda City	$(0.08 \mu \text{Sv/h}) = \frac{2 \mu \text{Sv}}{(0.08 \mu \text{Sv/h})}$

Upper column: Reading of the integrated dose(24h) Lower column: the reference value which was calculated as the number per one hour

* We have measured the integrated dose(24h) from around 2PM to the next

* Readings of lower column are the reference value because of the lower limit of

the pocket dosimeter (1 μ Sv)

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CW 137 of 2789

News Release

Readings at Monitoring Post out of 20 Km Zone of Fukushima Dai-ichi NPP

As of 10:00 April 10, 2011

Ministry of Education, Culture, Sports, Science and Technology (MEXT)

OMonitoring Outputs by MEXT *Boldface and underlined readings are new.

*1 measured by Geiger-Müller counter

- *2 measured by ionization chamber type survey meter
- *3 measured by NaI scintillator detector
- *4 variation range of the measuring data in measuring time

Monitoring Post (length from NPP)	Monitoring Time	Reading (unit : μ Sv / h)	Weather	Reading by
Reading Point [1] (About60kmNorth/West)	2011/4/9 16:27	1.0 *2	Rain	MEXT
Reading Point 【1】 (About60kmNorth/West)	2011/4/9 8:35	0.8 *2	Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【2】 (About55kmNorth/West)	2011/4/9 9:03	3.8 * ²	Rain	JAEA (Japan Atomic Energy Agency)
Reading Point [3] (About45kmNorth/West)	2011/4/9 9:54	3.0 ^{*2}	Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【4】 (About50kmNorth/West)	2011/4/9 15:10	1.8 *²	Rain	MEXT
Reading Point 【5】(About45kmNorth)	2011/4/9 10:32	1.1 * ²	Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【6】(About35kmNorth)	2011/4/9 10:49	1.2 * ²	Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【7】(About35kmNorth)	2011/4/9 10:56	1.5 *²	Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【10】 (About40kmNorth/West)	2011/4/9 14:54	1.7 *2	No Rain	MEXT
Reading Point 【11】 (About40kmNorth/West)	2011/4/9 14:41	1.6 *2	Rain	MEXT
Reading Point 【12】 (About40kmWest)	2011/4/9 12:15	1.2 * ²	Rain	MEXT
Reading Point 【13】 (About40kmWest)	2011/4/9 12:04	1.0 *2	Rain	MEXT
Reading Point 【14】 (About35kmWest)	2011/4/9 11:54	0.3 *2	Rain	МЕХТ

- *1 measured by Geiger-Müller counter
- *2 measured by ionization chamber type survey meter
- * 3 measured by NaI scintillator detector
- *4 variation range of the measuring data in measuring time

Monitoring Post (length from NPP)	Monitoring Time	Reading (unit : μ Sv / h)	Weather	Reading by
Reading Point 【15】 (About35kmWest)	2011/4/9 11:45	1.1 *²	Rain	MEXT
Reading Point 【20】 (About45kmNorth/West)	2011/4/9 12:39	1.4 * ²	Rain	MEXT
Reading Point 【22】 (About35kmWest/North/West)	2011/4/9 12:55	1.5 * ²	Rain	MEXT
Reading Point 【23】 (About35kmWest/North/West)	2011/4/9 12:48	1.8 * ²	Rain	MEXT
Reading Point 【31】 (About30kmWest/North/West)	2011/4/9 10:23	10.7 *²	Rain	MEXT
Reading Point 【32】 (About30kmNorth/West)	2011/4/9 10:43	26.1 * ²	Rain	MEXT
Reading Point 【33】 (About30kmNorth/West)	2011/4/9 10:51	15.3 *²	Rain	MEXT
Reading Point 【34】 (About30kmNorth/West)	2011/4/9 9:47	5.1 *²	Rain	MEXT
Reading Point 【36】 (About40kmNorth/West)	2011/4/9 11:38	3 .1 *2	Rain	MEXT
Reading Point 【37】 (About50kmNorth/West)	2011/4/9 9:46	4.0 * ²	Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【38】 (About35kmSouth)	2011/4/9 11:26	0.7 *²	Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【39】(About45kmNorth)	2011/4/9 10:16	1.4 * ²	Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【41】 (About20kmWest)	<u>2011/4/9 13:40</u>	<u>0.8</u> *2	<u>Rain</u>	Electric power company
Reading Point 【41】 (About20kmWest)	2011/4/9 9:55	<u>0.8</u> *2	<u>Rain</u>	Electric power company
Reading Point. 【42】 (About30kmWest)	<u>2011/4/9 13:00</u>	<u>0.9</u> *2	Rain	Electric power company
Reading Point 【42】 (About30kmWest)	<u>2011/4/9 9:43</u>	<u>0.9</u> *2	Rain	Electric power company
Reading Point [43] (About20kmSouth/West)	2011/4/9 15:00	<u>0.5</u> *2	Rain	Electric power company
Reading Point [43] (About20kmSouth/West)	2011/4/9 11:00	<u>0.4</u> *2	Rain	Electric power company

- *1 measured by Geiger-Müller counter
- *2 measured by ionization chamber type survey meter
- * 3 measured by NaI scintillator detector
- *4 variation range of the measuring data in measuring time

Monitoring Post (length from NPP)	Monitoring Time	Reading (unit : μ Sv / h)	Weather	Reading by
Reading Point 【44】 (About30kmSouth)	2011/4/9 13:00	<u>0.8</u> *2	<u>Rain</u>	Electric power company
Reading Point [44] (About30kmSouth)	<u>2011/4/9 10:00</u>	<u>0.8</u> *2	<u>Rain</u>	Electric power company
Reading Point [45] (About20kmSouth)	<u>2011/4/9 13:07</u>	<u>1.1 *2</u>	<u>Rain</u>	Electric power company
Reading Point 【45】 (About20kmSouth)	<u>2011/4/9 10:07</u>	<u>12 *2</u>	Rain	Electric power company_
Reading Point 【46】 (About30kmNorth/West)	<u>2011/4/9 13:55</u>	<u>4.7</u> *2	Rain	Electric power company
Reading Point [46] (About30kmNorth/West)	2011/4/9 10:30	<u>4.8</u> *2	<u>Rain</u>	Electric power company
Reading Point [51] (About40kmSouth/West)	<u>2011/4/9 13:56</u>	<u>0.2</u> *3	Rain	Fukushima Prefecture
Reading Point [51] (About40kmSouth/West)	2011/4/9 10:48	<u>0.3</u> *3	<u>Rain</u>	<u>Fukushima Prefecture</u>
Reading Point. [52] (About40kmWest)	<u>2011/4/9 14:30</u>	<u>0.3</u> * ³	<u>Rain</u>	Fukushima Prefecture
Reading Point [52] (About40kmWest)	<u>2011/4/9 11:16</u>	<u>0.3</u> * ³	Rain	Fukushima Prefecture
Reading Point [61] (About40kmNorth/West)	<u>2011/4/9 14:20</u>	<u>3.9</u> *3	Rain	<u>Fukushima Prefecture</u>
Reading Point. [61] (About40kmNorth/West)	2011/4/9_12:16_	1.1 *3	Rain	<u>Fukushima Prefecture</u>
Reading Point [62] (About40kmNorth/West)	<u>2011/4/9 14:31</u>	<u>6.0</u> *3	<u>Rain</u>	<u>Fukushima Prefecture</u>
Reading Point [62] (About40kmNorth/West)	2011/4/9 12:06	<u>6.4</u> *3	Rain	Fukushima Prefecture
Reading Point [63] (About45kmNorth/West)	2011/4/9 14:57	<u>2.1</u> *3	<u>Rain</u>	Fukushima Prefecture
Reading Point [63] (About45kmNorth/West)	2011/4/9 11:03	<u>1.7</u> <u>*3</u>	Rain	Fukushima Prefecture
Reading Point 【71】 (About25kmSouth)	2011/4/9 15:30	<u>1.8 *2</u>	Rain	Police (counter NBC operations unit)
Reading Point 【71】 (About25kmSouth)	2011/4/9 12:43	0.9 *2	Rain	JAEA (Japan Atomic Energy Agency)

- *1 measured by Geiger-Müller counter
- *2 measured by ionization chamber type survey meter
- *3 measured by NaI scintillator detector
- *4 variation range of the measuring data in measuring time

Monitoring Post (length from NPP)	Monitoring Time	Reading (unit : μ Sv / h)	Weather	Reading by
Reading Point 【71】 (About25kmSouth)	2011/4/9 8:03	1.8 * ²	Rain	Police (counter NBC operations unit)
Reading Point 【72】 (About30kmSouth)	2011/4/9 16:05	<u>0.6</u> <u>*</u> 2	<u>Rain</u>	Police (counter NBC operations unit)
Reading Point 【72】 (About30kmSouth)	2011/4/9 12:30	0.7 * ²	Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【72】 (About30kmSouth)	2011/4/9 8:36	1.0 * ²	Rain	Police (counter NBC operations unit)
Reading Point 【73】 (About35kmSouth)	<u>2011/4/9 16:23</u>	<u>0.9</u> <u>*</u> 2	<u>Rain</u>	Police (counter NBC operations unit)
Reading Point 【73】 (About35kmSouth)	2011/4/9 12:11	1.2 * ²	Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【73】 (About35kmSouth)	2011/4/9 9:01	1.2 * ²	Rain	Police (counter NBC operations unit)
Reading Point 【74】 (About35kmSouth)	2011/4/9 12:53	0.3 *²	Rain	Police (counter NBC operations unit)
Reading Point 【74】 (About35kmSouth)	2011/4/9 11:04	0.5 *²	Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【75】 (About45kmSouth)	2011/4/9 17:20	<u>0.2</u> *2	Rain	Police (counter NBC operations unit)
Reading Point 【75】 (About45kmSouth)	2011/4/9 10:39	0.7 ^{*2}	Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【75】 (About45kmSouth)	2011/4/9 7:13	0.0 *2	Rain	Police (counter NBC operations unit)
Reading Point 【76】 (About20kmSouth/West)	2011/4/9 11:41	0.0 * ²	Rain	Police (counter NBC operations unit)
Reading Point 【76】 (About20kmSouth/West)	2011/4/9 10:50	0.5 ^{*2}	Rain	MEXT
Reading Point 【77】 (About25kmSouth/West)	2011/4/9 12:01	1.7 *2	Rain	Police(counter NBC operations unit)
Reading Point. [78] (About45kmNorth/West)	<u>2011/4/9 18:27</u>	<u>1.3 *2</u>	Rain	Police (counter NBC operations unit)
Reading Point 【78】 (About45kmNorth/West)	2011/4/9 8:00	0.2 *2	Rain	Police (counter NBC operations unit)
Reading Point 【79】 (About30kmNorth/West)	2011/4/9 10:16	12.3 * ²	Rain	MEXT

- *1 measured by Geiger-Müller counter
- *2 measured by ionization chamber type survey meter
- * 3 measured by Nal scintillator detector
- *4 variation range of the measuring data in measuring time

Monitoring Post (length from NPP)	Monitoring Time	Reading (unit : μ Sv / h)	Weather	Reading by
Reading Point 【79】 (About30kmNorth/West)	2011/4/9 8:49	10.4 * ²	Rain	Police (counter NBC operations unit)
Reading Point [80] (About25kmNorth)	2011/4/9 14:35	<u>0.5</u> <u>*</u> 2	<u>Rain</u>	Police (counter NBC operations unit)
Reading Point 【80】(About25kmNorth)	2011/4/9 11:24	1.2 * ²	Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【80】 (About25kmNorth)	2011/4/9 11:05	0.5 * ²	Rain	Police (counter NBC operations unit)
Reading Point 【81】 (About30kmNorth/West)	2011/4/9 8:41	24.2 * ²	Rain	Police (counter NBC operations unit)
Reading Point 【83】 (About20kmNorth/West)	2011/4/9 10:02	47.5 * ²	Rain	MEXT
Reading Point 【83】 (About20kmNorth/West)	2011/4/9 9:04	39.6 * ²	Rain	Police (counter NBC operations unit)
Reading Point 【84】 (About40kmSouth/West)	2011/4/9 10:03	0.3 * ²	Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【85】 (About60kmNorth/West)	2011/4/9 14:00	0.1 *2	No Rain	Ministry of Defense
Reading Point 【85】 (About60kmNorth/West)	2011/4/9 6:00	0.2 *2	No Rain	Ministry of Defense
Reading Point【86】(About55kmWest)	2011/4/9 14:00	0.9 *²	Rain	Ministry of Defense
Reading Point 【86】(About55kmWest)	2011/4/9 6:00	1.2 * ²	No Rain	Ministry of Defense
Reading Point 【87】 (About30kmiWest/South/West)	2011/4/9 14:00	0.8 *2	Rain	Ministry of Defense
Reading Point 【87】 (About30kmWest/South/West)	2011/4/9 6:00	1.3 *²	Rain	Ministry of Defense
Reading Point [88] (About55kmWest/North/West)	2011/4/9 12:00	<u>1.1 *2</u>	<u>Rain</u>	Ministry of Defense
Reading Point [89] (About60kmWest)	<u>2011/4/9 12:00</u>	<u>3.5</u> *2	Rain	Ministry of Defense
Reading Point 【101】 (About55kmNorth/West)	2011/4/9 9:25	1.7 *2	Rain	JAEA (Japan Atomic Energy Agency)
Reading Point [102] (About50kmNorth/West)	2011/4/9 13:33	2.1 *2	Rain	JAEA (Japan Atomic Energy Agency)

- * 1 measured by Geiger-Müller counter
- *2 measured by ionization chamber type survey meter
- *3 measured by NaI scintillator detector
- *4 variation range of the measuring data in measuring time

Monitoring Post (length from NPP)	Monitoring Time	Reading (unit : μSv / h)	Weather	Reading by
Reading Point【103】(About20kmNorth)	2011/4/9 11:45	1.2 * ²	Rain	JAEA (Japan Atomic Energy Agency)
Reading Point [104] (About 25km West/North/West)	2011/4/9 7:30	<u>2.3 *2</u>	Rain	MEXT
Reading Point【105】(About20kmWest)	2011/4/9 11:20	0.4 *2	Rain	MEXT
Reading Point 【106】(About30kmSouth/West)	2011/4/9 10:30	0.8 *2	Rain	MEXT
Reading Point [107] (About25kmNorth/North/West)	2011/4/9 12:05	3.4 * ²	Rain	JAEA (Japan Atomic Energy Agency)
Reading Point [108] (About 30kmNorth/North/West)	2011/4/9 12:43	4.2 * ²	Rain	JAEA (Japan Atomic Energy Agency)




Readings at Monitoring Post out of 20 Km Zone of Fukushima Dai-ichi NPP

CW 145 of 2789

Readings of Integrated Dose at Monitoring Post out of Fukushima Dai-ichi NPP

As of 10:00 April 10, 2011

Ministry of Education, Culture, Sports, Science and Technology (MEXT)

* 1 the readings are measured by pocket dosimeter

Monitoring Post (length from NPP)	Installation Date and Time	Date and Time (last monitoring) (x)	Readings (last monitoring) (a) (µ Sv)	Monitoring Date and Time (y)	Reading of Integrated Dose (b)(µ Sv)	Accumulated Time (z = y - x)	Reading of integrated Dose (c = b - a) (μ Sv)	Weather
Monitoring Post 【31】 (About30kmWest/North/West)	2011/3/23 11:43	2011/4/8 11:00	5977 ^{*1}	2011/4/9 10:27	6214	23hour27minutes	237 (10.1 μ Sv/h)	Rain
Monitoring Post 【32】 (About30kmNorth/West)	2011/3/23 12:14	2011/4/8 11:20	13400 *1	2011/4/9 10:45	13950 *1	23hour25minutes	550 (23.5 μ Sv/h)	Rain
Monitoring Post 【33】 (About30kmNorth/West)	2011/3/23 12:32	2011/4/8 11:35	7838 *1	2011/4/9 10:53	8141 ⁺¹	23hour18minutes	303 (13.0 μ Sv/h)	Rain
Monitoring Post 【34】 (About30kmNorth/West)	2011/3/23 13:08	2011/4/8 12:26	2779 *1	2011/4/9 9:49	2887 *1	21hour23minutes	108 (5.1 μ Sv/h)	Rain
Monitoring Post 【38】(About35kmSouth)	2011/3/31 16:23	2011/4/8 11:46	216 *1	2011/4/9 11:26	227 *1	23hour40minutes	11 (0.5 μ Sv/h)	Rain
Monitoring Post 【71】 (About25kmSouth)	2011/3/23 13:00	2011/4/8 13:05	656 * ¹	2011/4/9 12:43	672 * ¹	23hour38minutes	16 (0.7 μ Sv/h)	Rain
Monitoring Post 【79】 (About30kmNorth/West)	2011/3/23 14:09	2011/4/8 11:56	6301 *1	2011/4/9 10:18	6559 * ¹	22hour22minutes	258 (11.5 μ Sv/h)	Rain
Monitoring Post 【7】(About35kmNorth)	2011/3/23 12:06	2011/4/8 11:40	384	2011/4/9 10:57	400 *1	23hour17minutes	16 (0.7 μ Sv/h)	Rain
Monitoring Post [1] (About80kmNorth/West)	2011/3/24 15:20	2011/4/8 15:56	414 * ¹	2011/4/9 14:27	477 * ¹	22hour31minutes	63 (2.8 μ Sv/h)	No Rain
Monitoring Post 【15】 (About35kmWest)	2011/3/24 10:58	2011/4/8 11:00	631 *1	2011/4/9 11:40	660 *1	24hour40minutes	29.0 (1.2 μ Sv/h)	Rain
Monitoring Post [84] (About40kmSouth/West)	2011/3/25 10:40	2011/4/8 10:04	82 *1	2011/4/9 10:03	86 * ¹	23hour59minutes	4 (0.2 μ Sv/h)	Rain
Monitoring Post 【39】(About45kmNorth)	2011/4/1 10:45	2011/4/8 10:47	130 *1	2011/4/9 10:18	145 *1	23hour31minutes	15 (0.6 μ Sv/h)	Rain
Monitoring Post 【76】 (About20kmSouth/West)	2011/4/2 11:35	2011/4/8 11:41	77 *1	2011/4/9 10:55	90 * ¹	23hour14minutes	13 (0.6 μ Sv/h)	Rain
Monitoring Post 【80】(About25kmNorth)	2011/4/3 11:56	2011/4/8 12:19	75 * ¹	2011/4/9 11:25	88 *1	23hour06minutes	13 (0.6 μ Sv/h)	Rain

notes: The parenthetic figures in the column "Integrated Dose" indicates the values of readings of integrated dose devided by accumulated time (c/z). •Reading by MEXT

•The figures of 0.0 in the column "Date and Time (last monitoring)" indicate that there was new instlation in the area.

Monitoring Time [33] [39] •March 23th~April 9th 8141 145 [1] <303> <15> (Monitoring Post: 7, 31~34, 71, 79) 477 尹谭 (13.0)(0.6)[32] <63> March 23th~28th, April 3rd ~9th 13950 (2.8)(Monitoring Post: 71) <550> March 24th~April 9th 市 [31] (23.5)(Monitoring Post: 1, 15) 6214 March 25th~April 1st. April 3rd ~9th [7] <237> 阿武隈川 400 (Monitoring Post: 84) 大良山 南相馬 (10.1)磐梯山 <16> March 31th ~ April 1st, April 3rd ~9th (0.7)(Monitoring Post: 38) [80] April 1st~April 9th [79] 88 口本松市 (Monitoring Post: 39) 6559 <13> April 2nd~April 9th <258> (0.6)猪苗代湖 (Monitoring Post: 76) (11.5)1若松 Fukushima Dai-ichi NPP April 3th~April 9th (Monitoring Post: 80) [34] Monitoring Post 福島県 2887 <108> Fukushima Dai-ni NPP POKIT (5.1)0 須賀川 (explanatory note) [Monitoring Post number] 30km [76] Readings of Integrated Dose 💥 90 [15] 加岳 <increment from the last monitoring> <13> 660 (average dose per hour) (0.6)<29> [71] Ė (1.2)49 672 耶須岳 Readings of Integrated Dose 阿武隈几 <16> indicate that accumulation of [38] (0.7)[84] dose from each starting date till 227 86 <11> April 9th, for 6 days to 17 days. $\langle 4 \rangle$ いわき (0.5)(0.2)Unit: μ Sv per hour o 那須塩原 @2011 Google - 地図デ

Readings of Integrated Dose at Monitoring Post out of Fukushima Dai-ichi NPP

Readings of dust sampling (1 \checkmark 2)

News Release

:the readings in this thick-frame box are new.

As of 10:00 April 10, 2011 Ministry of Education, Culture, Sports, Science and Technology (MEXT)

		Radioactivity Co	ncentration(Bq/m3)	Reading (µ	Monitoring Point
Sampling Point	Sampling Time and Date	¹³¹ I	, ¹³⁷ Cs	Sv/h)	by monitoring car
[1-1](About45kmNorth/West)	3/23 10:45~10:55	4.0	1.2	5.5	[3]
[1-2] (About40kmNorth/West)	3/23 10:50~11:10	5.2	<1.2	9.0	[36]
[1-3] (About30kmWest/North/West)	3/23 13:54~14:17	8.0	<1.4	9.4	【21】
[1-4] (About35kmWest)	3/23 12:40~13:02	2.8	<1.1	2.3	
[1-4](About35kmWest) Survey1st	3/24 10:58~11:09	3.1	<0.99	2	
[1-4] (About35kmWest) Survev2nd	3/24 11:58~12:09	2.4	1.3	2.8	
[1-4] (About35kmWest) Survey3rd	3/24 12:58~13:09	2.5	<1.2	2.5	【15】
[1-4] (About35kmWest) Survey4th	3/24 13:58~14:09	2.2	1.6	2.2	
[1-4] (About35kmWest) Survey5th	3/24 14:58~15:09	2.8	<1.2	2.5	
[1-4] (About35kmWest) Survey6th	3/24 15:58~16:09	2.1	<1.0	2.2	
【1-5】(About25kmSouth) Vehicle-Borne Survey1st	3/23 13:15~13:58	530.0	6.6	5.5~14.0	
[1-5] (About25kmSouth) Vehicle-Borne Survey2nd	3/23 14:30~15:10	180.0	2.3	5.5~14.0	
【1-5】(About25kmSouth) Vehicle-Borne Survey3rd	3/23 15:20~15:59	110.0	2.1	5.5~14.0	
[1-5](About25kmSouth) Vehicle-Borne Survev1st	3/24 10:06~10:44	5.9	<0.66	5.6	
[1-5] (About25kmSouth) Vehicle-Borne Survey2nd	3/24 10:53~11:33	9.2	<0.71	5.6	
[1-5] (About25kmSouth) Vehicle-Borne Survey3rd	3/24 11:44~12:26	12.0	1.1	5.6	
[1-5] (About25kmSouth) Vehicle-Borne	3/25 11:51~12:38	43.0	2.0	4.1~5.5	
[1-5] (About25kmSouth) Survey1st	3/25 13:12~13:42	23.0	1.4	2	
[1-5] (About25kmSouth) Survey2nd	3/25 14:12~14:42	19.0	1.3	2.8	
[1-5] (About25kmSouth) Survey3rd	3/25 15:12~15:42	24.0	2.5	2.5	
[1-5](About25kmSouth) Survey4th	3/25 16:12~16:42	10.0	1.3	2.2	
[1-5] (About25kmSouth) Survey1st	3/26 12:47~13:21	13.0	1.3	3.9	
[1-5] (About25kmSouth) Survey2nd	3/26 14:21~14:57	10.0	1.5	3.9	【71】
[1-5](About25kmSouth) Vehicle-Borne Survey1st	3/27 12:36~13:26	20.0	0.8	2.8~3.8	
[1-5] (About25kmSouth) Survey1st	3/27 13:58~14:33	7.1	<0.98	3.8	
[1-5](About25kmSouth) Survey2nd	3/27 15:33~16:08	6.6	<1.0	3.8	
[1-5] (About25kmSouth) Survey3rd	3/27 16:16~16:53	10.0	<1.1	3.8	
[1-5] (About25kmSouth) Vehicle-Borne Survey2nd	3/27 14:43~15:18	5.5	1.2	2.8~3.8	
[1-5](About25kmSouth) Survey1st	3/28 9:48~13:03	6.6	0.57	3.0	
[1-5] (About25kmSouth) Survey2nd	3/28 13:23~14:07	54.0	8.0	3.0	

CW 148 of 2789

Someling Deint	Semuling Time and Date	Radioactivity Cor	ncentration(Bq/m3)	Reading (μ	Monitoring Point
Sampling Point	Sampling Time and Date	¹³¹ I	¹³⁷ Cs	Sv/h)	by monitoring car
[1-5] (About25kmSouth) Survey3rd	3/28 14:18~15:19	20.0	3.0	3.0	
【1-5】(About25kmSouth) Survey1st	3/31 12:22~13:12	24.0	4.5	2.1	
[1-5] (About25kmSouth) Survey2nd	3/31 13:17~14:01	18.0	1.3	2.0	
【1-5】(About25kmSouth) Survey3rd	3/31 14:06~14:50	13.0	1.0	1.9	
[1-5] (About25kmSouth) Survey4th	3/31 15:00~15:44	13.0	<0.79	2.0	
[1-7](About35kmNorth) Survey1st	3/25 12:58~13:09	3.5	<0.99	3.2	
[1-7] (About35kmNorth) Survey2nd	3/25 13:58~14:09	4.3	1.6	3.2	
[1-7] (About35kmNorth) Survey3rd	3/25 14:57~15:08	15.0	<0.98	3.2	[7]
[1-7] (About35kmNorth) Survey4th	3/25 15:58~16:09	22.0	1.1	3.2	
[1-7] (About35kmNorth) Survey5th	3/26 11:27~11:38	2.9	1.0	1.5	
[1-7] (About35kmNorth) Survey6th	3/26 13:00~13:11	2.2	1.3	1.5	
【1-8】(About45kmNorth) Survey1st	3/28 13:00~16:00	19.0	3.2	0.6~1.2	[5]

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Constitute Defect	Constant Time and Date	Radioactivity Cor	ncentration(Bq/m3)	Reading (μ	Monitoring Point
Sampling Point	Sampling Time and Date	¹³¹ I	¹³⁷ Cs	Sv/h)	by monitoring car
[2-1] (About40kmNorth/West)	0/00/00 00 00/00		0.70		
Survey1st	3/29 12:50~13:45	4.2	0.73	7.0	
[2-1] (About40kmNorth/West)	2/20 12:40 - 14:40	2.4	0.70	7.0	
Survey2nd	3/29 13:49~14:40	3.4	0.79	7.0	
[2-1] (About40kmNorth/West)	2/20 14:47~15:50	20	/0.74	7.0	
Survey3rd	3/29 14.4/** 13.30	2.5	10.74	7.0	
[2-1] (About40kmNorth/West)	3/30 11:15~11:35	4.8	<18	67	
Survey1st	0/00 11:10 11:00	7.0	<1.0	0.7	[61]
[2-1] (About40kmNorth/West)	3/30 12:15~12:35	47	2 00	72	
Survey2nd					
[2-1] (About40kmNorth/West)	3/30 13:15~13:35	3.4	1.80	7.0	
[2-1] (About40kmNorth/West)	3/30 14:15~14:35	28.0	20.00	7.4	
[2-1] (About40kmNorth/West)					
Suprey5th	3/30 15:15~15:35	7.7	1.90	7.5	
[2-4] (About 25kmNorth)					
Survey1st	3/29 11:17~12:15	75.0	46.0	1.7	
[2-4] (About 25kmNorth)					
Survey2nd	3/29 12:15~13:15	29.0	34.0	0.4	
[2-4] (About25kmNorth)	0/00 10 15 14 15	00.0		0.0	
Survey3rd	3/29 13:15~14:15	32.0	23.0	0.6	
[2-4] (About25kmNorth)	2/20 14:15~15:00	20.0	25.0	0.5	
Survey4th	3/29 14.13**13.00	29.0	23.0	0.0	
[2-4] (About25kmNorth)	3/30 11:09~11:29	18	0.5	00	
Survey1st	0/00 11:00 11:20	1.0	0.5	0.0	
[2-4] (About25kmNorth)	3/30 12:10~12:30	1.6	0.5	0.8	
Survey2nd					
[2-4] (About25kmNorth)	3/30 13:10~13:30	1.2	0.4	0.2	[80]
[2-4] (Aboutzokminorth)	3/30 14:10~14:30	1.5	0.5	0.3	
[2-4] (About 25kmNorth)					
Survey5th	3/30 15:10~15:30	1.1	<0.49	0.6	
[2-4] (About 25kmNorth)			· · · · · · · · · · · · · · · · · · ·		
Survey1st	4/1 12:33~12:48	1.5	1.0	1.2	
[2-4] (About25kmNorth)					
Survey2nd	4/1 13:33~13:55	2.2	0.85	1.2	
[2-4] (About25kmNorth)	4/1 14-22 - 14-52	10	/0.7	1.0	
Survey3rd	4/1 14:33~14:53	1.9	(0.7	1.2	
[2-4] (About25kmNorth)	4/1 15:33~15:53	17	10	12	
Survey4th	4/110.00 - 10.00	1.7	1.0	1.2	
[2-7](About35KmNorth/West)	3/29 12:00~13:00	0.95	0.59	8.0	
[2-7](About35KmNorth/West)	3/29 13:00~14:00	0.66	<0.70	8.0	
[2-7](About35KmNorth/West)	3/29 14:00~15:00	0.75	<0.76	8.0	
[2-7](About35KmNorth/West)	3/29 15:00~16:00	0.90	<0.58	8.0	
2-7 (About 35KmNorth/West)	3/29 10:00~17:00	0.69	<0.59	8.0	
L2-/J(About35KmNorth/West)	3/30 12:11~12:31	1.9	1.0	13.9	[AG]
Jurvey Ist [2-7] (About 25Km North /Morth)					[40]
L2-/ (About Sok mixorth/ west)	3/30 13:11~13:33	1.3	1.0	15.2	
[2-7](About35KmNorth/West)					
Survey3rd	3/30 14:11~14:32	89.0	91.0	14.6	
[2-7](About35KmNorth/West)					
Survev4th	3/30 15:11~15:32	180.0	140.0	15.0	
[3-1] (About30kmNorth/West)	0/04 11 00 11 41	40.0		00	
Survey1st	3/24 11:20~11:41	43.0	2.0	30	
[3-1] (About30kmNorth/West)	2/24 12:20 - 10:40	2.2	/0.02	20	
Survey2nd	3/24 12:20~12:40	3.3	10.98	30	
[3-1] (About30kmNorth/West)	3/24 12:20~12:42	30	(19	30	
Survey3rd	0/24 10.20**10.42	0.0	\1. Z		
[3-1] (About30kmNorth/West)	3/24 14.20~14.42	38	1.5	30	
Survey4th	0, 2 . I I.20 IT.TL				
[3-1] (About30kmNorth/West)	3/24 15:20~15.42	3.3	1.7	30	
Survey5th		l	<u> </u>	L	

CW 150 of 2789

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		Radioactivity Co	ncentration(Bq/m3)	Reading (µ	Monitoring Point
Sampling Point	Sampling Time and Date	¹³¹ I	¹³⁷ Cs	Sv/h)	by monitoring car
[3-1] (About30kmNorth/West) Survey1st	3/26 11:38~12:00	5.8	4.8	26	[33]
[3-1] (About30kmNorth/West) Survey2nd	3/26 13:18~13:39	5.2	2.2	26	
[3-1] (About30kmNorth/West) Survey1st	3/28 11:31~11:52	2.6	1.8	26	
[3-1] (About30kmNorth/West) Survey2nd	3/28 12:53~13:15	2.7	<1.2	26	
[3–1] (About30kmNorth/West) Survey1st	3/29 11:18~11:40	2.4	1.1	18.9	
[3–1] (About30kmNorth/West) Survey2nd	3/29 13:23~13:50	1.9	<1.0	-	
[76] (About20kmSouth/West) Survey1st	4/2 11:22~11:47	4.5	1.1	1.0	
[76] (About20kmSouth/West) Survey2nd	4/2 11:54~12:36	2.0	<0.39	1.0	
[76] (About20kmSouth/West) Survey3rd	4/2 12:42~13:47	1.3	0.45	1.0	
【76】(About20kmSouth/West) Survey4th	4/2 13:50~14:56	1.6	<0.33	1.0	
[76] (About20kmSouth/West) Survey5th	4/2 14:59~16:03	1.6	<0.33	1.0	
[76] (About20kmSouth/West) Survey1st	4/3 11:35~12:34	2.1	0.56	0.7	【76】
[76] (About20kmSouth/West) Survey2nd	4/3 12:36~13:35	1.4	<0.31	0.7	
【76】(About20kmSouth/West) Survey3rd	4/3 13:38~14:37	2.4	<0.39	0.7	
[76] (About20kmSouth/West) Survey1st	4/4 12:00~13:00	1.3	1.60	0.8	
[76] (About20kmSouth/West) Survey2nd	4/4 13:08~13:57	2.0	1.10	0.8	
[76] (About20kmSouth/West) Survey3rd	4/4 14:01~14:50	2.3	0.94	0.8	

Readings are already announced in "Readings at Monitoring Post out of 20 Km Zone of Fukushima Dai-ichi NPP" air dose rate: It has announced separately.

CW 151 of 2789

Sampling points out of Fukushima Dai-ichi NPP



News Release

Readings at Monitoring Post out of 20 Km Zone of Fukushima Dai-ichi NPP

As of 13:00 April 10, 2011

Ministry of Education, Culture, Sports, Science and Technology (MEXT)

OMonitoring Outputs by MEXT

* 1 measured by Geiger-Müller counter

- *2 measured by ionization chamber type survey meter
- * 3 measured by Nal scintillator detector
- *4 variation range of the measuring data in measuring time

Monitoring Post (length from NPP)	Monitoring Time	Reading (unit : μ Sy / h)	Weather	Reading by
Reading Point 【1】 (About60kmNorth/West)	2011/4/10 8:30	0.3 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【2】 (About55kmNorth/West)	2011/4/10 8:53	2.6 * ²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【3】 (About45kmNorth/West)	2011/4/10 9:47	2.9 ^{*2}	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【4】 (About50kmNorth/West)	2011/4/10 9:14	1.9 * ²	No Rain	MEXT
Reading Point 【5】(About45kmNorth)	2011/4/10 10:24	0.6 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【6】(About35kmNorth)	2011/4/10 10:49	1.2 * ²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【10】 (About40kmNorth/West)	2011/4/10 9:27	1.6 * ²	No Rain	MEXT
Reading Point 【11】 (About40kmNorth/West)	2011/4/10 9:35	1.9 *²	No Rain	MEXT
Reading Point 【20】 (About45kmNorth/West)	2011/4/10 9:58	1.6 * ²	No Rain	MEXT
Reading Point 【21】 (About30kmWest/North/West)	2011/4/10 10:24	5.9 *²	No Rain	MEXT
Reading Point 【22】 (About35kmWest/North/West)	2011/4/10 10:12	2.0 *2	No Rain	MEXT
Reading Point 【23】 (About35kmWest/North/West)	2011/4/10 10:50	1.4 *2	No Rain	MEXT
Reading Point 【31】 (About30kmWest/North/West)	2011/4/10 10:00	12.8 *2	No Rain	MEXT
Reading Point 【32】 (About30kmNorth/West)	2011/4/10 10:38	25.2 * ²	No Rain	MEXT

*1 measured by Geiger-Müller counter

*2 measured by ionization chamber type survey meter

* 3 measured by NaI scintillator detector

*4 variation range of the measuring data in measuring time

Monitoring Post (length from NPP)	Monitoring Time	Reading (unit : μ Sv / h)	Weather	Reading by
Reading Point 【36】 (About40kmNorth/West)	2011/4/10 9:38	4.6 * ²	No Rain	MEXT
Reading Point 【37】 (About50kmNorth/West)	2011/4/10 9:40	3.0 *²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【39】(About45kmNorth)	2011/4/10 10:10	0.9 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【74】 (About35kmSouth)	2011/4/10 10:55	0.5 *²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【75】 (About45kmSouth)	2011/4/10 10:33	0.5 *²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【84】 (About40kmSouth/West)	2011/4/10 9:55	0.2 * ²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【85】 (About60kmNorth/West)	2011/4/10 6:00	0.4 *2	No Rain	Ministory of Defence
Reading Point 【86】 (About55kmWest)	2011/4/10 6:00	0.9 *2	No Rain	Ministory of Defence
Reading Point 【87】 (About30kmWest/South/West)	2011/4/10 6:00	1.6 * ²	Rain	Ministory of Defence
Reading Point 【101】 (About55kmNorth/West)	2011/4/10 9:19	1.5 *²	No Rain	JAEA (Japan Atomic Energy Agency)

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2011	2011.4.10 13:00 (µSv/h)																
				-					4/9								
	Prefecture(City)	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	<u>17-18</u>	<u>18-19</u>	<u>19-20</u>	<u>20-21</u>	21-22	22-23	<u>23-24</u>	Usual Value Band
1	Hokkaido(Sapporo)	0.029	0.029	0.028	0.029	0.028	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.02~0.105
2	Aomori(Aomori)	0.027	0.027	0.029	0.035	0.034	0.031	0.028	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.017~0.102
3	Iwate (Morioka)	0.031	0.032	0.031	0.030	0.029	0.027	0.025	0.024	0.024	0.024	0.024	0.024	0.025	0.025	0.025	0.014~0.084
4	Miyagi (Sendai)	0.088	0.086	0.084	0.084	0.085	0.085	0.085	0.084	0.083	0.083	0.082	0.082	0.082	0.082	0,081	0.0176~0.0513
5	Akita(Akita)	0.041	0.040	0.041	0.041	0.042	0.039	0.036	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.022~0.086
6	Yamagata (Yamagata)	0.060	0.059	0.059	0.059	0.058	0.057	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.025~0.082
7	Fukushima (Fukushima)	2.200	2.200	2.200	2.200	2.200	2.200	2.200	2.200	2.200	2.200	2.200	2.200	2.200	2.200	2.200	0.037~0.046
8	Ibaraki (Mito)	0.155	0.153	0.154	0.152	0.150	0.149	0.149	0.150	0.151	0.152	0.153	0.151	0.150	0.151	0.149	0.036~0.056
9	Tochigi (Utsunomiya)	0.080	0.080	0.080	0.079	0.077	0.077	0.078	0.077	0.075	0.075	0.075	0.074	0.074	0.074	0.074	0.030~0.067
10	Gunma (Maebashi)	0.044	0.043	0.043	0.043	0.043	0.044	0.043	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.017~0.049
11	Saitama (Saitama)	0.065	0.065	0.065	0.065	0.065	0.066	0.066	0.066	0.066	0.065	0.065	0.066	0.069	0.070	0.068	0.031~0.060
12	Chiba(Ishihara)	0.058	0.058	0.059	0.058	0.058	0.058	0.057	0.059	0.058	0.057	0.057	0.057	0.058	0.059	0.058	0.022~0.044
13	Tokyo(Shinjuku)	0.084	0.085	0.085	0.084	0.084	0.084	0.083	0.083	0.084	0.084	0.084	0.084	0.083	0.083	0.083	0.028~0.079
14	Kanagawa (Chigasaki)	0.060	0.061	0.061	0.061	0.061	0.059	0.058	0.058	0.058	0.058	0.058	0.059	0.059	0.059	0.059	0.035~0.069
15	Niigata (Niigata)	0.052	0.054	0.058	0.060	0.057	0.051	0.048	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.047	0.031~0.153
16	Toyama(Imizy)	0.051	0.053	0.050	0.048	0.047	0.047	0.047	0.047	0.047	0.047	0.048	0.047	0.048	0.048	0.048	0.029~0.147
17	Ishikawa (Kanazawa)	0.053	0.051	0.048	0.049	0.048	0.048	0.047	0.047	0.047	0.047	0.047	0.047	0.048	0.048	0.048	0.0291~0.1275
18	Fukui(Fukui)	0.052	0.050	0.047	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.046	0.046	0.032~0.097
19	Yamanashi (Kohu)	0.045	0.044	0.044	0.043	0.043	0.043	0.043	0.043	0.043	0.043	0.043	0.044	0.044	0.044	0.044	0.040~0.066
20	Nagano(Nagano)	0.045	0.044	0.043	0.045	0.048	0.046	0.043	0.042	0.042	0.042	0.043	0.043	0.043	0.042	0.043	0.0299~0.0974
21	Gifu (Kakamigahara)	0.064	0.062	0.061	0.061	0.060	0.061	0.060	0.060	0.060	0.060	0.060	0.060	0.061	0.060	0.061	0.057~0.110
22	Shizuoka(Shizuoka)	0.049	0.048	0.047	0.044	0.043	0.041	0.041	0.040	0.040	0.040	0.041	0.040	0.040	0.040	0.040	0.0281~0.0765
23	Aichi (Nagoya)	0.041	0.041	0.040	0.039	0.040	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.035~0.074
24	Mie (Yokkaichi)	0.047	0.047	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	<u>0.046</u>	0.046	0.0416~0.0789
25	Shiga(Otsu)	0.035	0.034	0.034	0.034	0.033	0.033	0.032	0.033	0.032	0.032	0.033	0.032	0.032	0.033	0.033	0.031~0.061
26	Kyoto (Kyoto)	0.040	0.038	0.038	0.038	0.038	0.037	0.038	0.037	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.033~0.087
27	Osaka(Osaka)	0.044	0.043	0.042	0.042	0.042	0.042	0.043	0.042	0.043	0.042	0.043	0.042	0.042	0.042	0.042	0.042~0.061
28	Hyogo (Kobe)	0.038	0.040	0.039	0.037	0.037	0.037	0.037	0.037	0.037	0.037	0.037	<u>0.037</u>	0.037	<u>0.037</u>	0.037	0.035~0.076
29	Nara (Nara)	0.054	0.050	0.048	0.048	0.047	0.048	0.048	0.047	0.048	<u>0.048</u>	<u>0.048</u>	0.048	0.048	<u>0.048</u>	<u>0,048</u>	0.046~0.080
30	Wakayama (Wakayama)	0.031	0.032	0.032	0.032	0.032	0.031	0.031	0.032	0.032	0.032	0.032	<u>0.032</u>	0.032	0.032	<u>0.031</u>	0.031~0.056
31	Tottori (Tohhaku)	0.063	0.063	0.063	0.063	0.063	0.063	0.063	0.063	<u>0.063</u>	<u>0.062</u>	0.063	<u>0.063</u>	0.063	<u>0.064</u>	0.064	0.036~0.110
32	Shimane (Matsue)	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	<u>0.045</u>	<u>0.045</u>	0.045	<u>0.045</u>	0.045	<u>0.046</u>	0.046	0.037~0.131
33	Okayama (Okayama)	0.049	0.049	0.048	0.049	0.049	0.049	0.048	0.048	0.048	0.049	<u>0.048</u>	0.048	0.049	<u>0.048</u>	0.048	0.043~0.104
34	Hiroshima (Hiroshima)	0.046	0.046	0.046	0.046	0.047	0.047	0.047	0.047	<u>0.047</u>	<u>0.046</u>	0.047	<u>0.046</u>	<u>0.046</u>	<u>0.047</u>	0.047	0.035~0.069
35	Yamaguchi (Yamaguchi)	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	<u>0.090</u>	<u>0.091</u>	<u>0.091</u>	<u>0.091</u>	<u>0.092</u>	<u>0.092</u>	0.084~0.128
36	Tokushima (Tokushima)	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038	<u>0.038</u>	<u>0.038</u>	0.038	0.038	0.038	<u>0.038</u>	0.038	0.037~0.067
37	Kagawa (Takamastu)	0.062	0.062	0.054	0.056	0.060	0.059	0.053	0.055	0.059	0.059	<u>0.053</u>	<u>0.057</u>	0.062	<u>0.060</u>	0.054	0.051~0.077
38	Ehime (Matsuyama)	0.048	0.048	0.048	0.048	0.048	0.047	0.048	0.047	<u>0.047</u>	<u>0.047</u>	<u>0.047</u>	0.048	0.049	<u>0.049</u>	0.049	0.045~0.074
39	Kochi (Kochi)	0.026	0.025	0.025	0.025	0.025	0.025	0.025	0.025	<u>0.025</u>	<u>0.025</u>	<u>0.025</u>	<u>0.026</u>	0.026	<u>0.026</u>	<u>0.026</u>	0.019~0.054
40	Fukuoka(Dazaifu)	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.036	<u>0.036</u>	0.034~0.079						
41	Saga(Saga)	0.040	0.040	0.040	0.040	0.040	0.039	0.039	0.039	<u>0.039</u>	0.039	0.040	0.040	0.040	<u>0.040</u>	0.040	0.037~0.086
42	Nagasaki(Ohmura)	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.027~0.069
43	Kumamoto (Uto)	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.021~0.067
44	Oita (Oita)	0.049	0.050	0.050	0.049	0.049	0.049	0.050	0.049	0.049	<u>0.049</u>	<u>0.049</u>	<u>0.049</u>	<u>0.049</u>	0.050	0.050	0.048~0.085
45	Miyazaki (Miyazaki)	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	<u>0.027</u>	0.027	<u>0.027</u>	0.027	0.027	<u>0.027</u>	0.0243~0.0664
46	Kagoshima (Kagoshima)	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	<u>0.035</u>	<u>0.035</u>	<u>0.035</u>	<u>0.035</u>	<u>0.035</u>	<u>0.035</u>	0.035	0.0306~0.0943
47	Okinawa (Uruma)	0.021	0.021	0.021	0.020	0.020	0.021	0.021	0.021	0.021	0.021	0.021	0.021	0.021	<u>0.021</u>	0.021	0.0133~0.0575

*Figures for Miyagi Prefecture are measured by transportable monitoring post.

Moreover, the value of the fixed mount type monitoring post set up in Sendai City is described about the range of the value ordinary of the past

*In Fukushima Prefecture, the monitoring post in Futaba-gun is located at an evacuated area, since it is difficult to measure, figures were measured in Momijiyama (Fukushima City) as an alternative.

* In Shimane Prefecture, readings are measured by alternative machine from 5pm on April 4 because of setting up the equipment.

*These figures are estimated as $1 \mu \text{ Gy/h}=1 \mu \text{ Sv/h}$.

*The table was made by MEXT, based on the reports from prefectures.

Usual value band means a range of the maximum and minimum value observed before the earthquake.

*The data. usual value band of Gunma Pref., Yamanashi Pref. and Kouchi Pref., are corrected from the version released on April 9 19:00.

2011	011.4.10 13:00 (μ Sv/h)										
						4/10		•			
	Prefecture(City)	<u>0-1</u>	1-2	<u>2-3</u>	<u>3-4</u>	<u>4-5</u>	<u>5-6</u>	<u>6-7</u>	<u>7-8</u>	<u>89</u>	Usual Value Band
1	Hokkaido(Sapporo)	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.02~0.105
2	Aomori (Aomori)	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.017~0.102
3	Iwate (Morioka)	0.025	0.025	0.024	0.025	0.025	0.026	0.026	0.026	0.025	0.014~0.084
4	Miyagi (Sendai)	0.082	0.081	0.080	0.080	0.079	0.078	0.078	0.081	0.084	0.0176~0.0513
5	Akita (Akita)	0.035	0.035	0.036	0.036	0.036	0.036	0.036	0.036	0.036	0.022~0.086
6	Yamagata (Yamagata)	0.056	0.056	0.056	<u>0.057</u>	0.056	0.057	0.057	0.056	0.056	0.025~0.082
7	Fukushima (Fukushima)	2.200	2.200	2.200	2.100	2.100	2.200	2.200	2.200	2.200	0.037~0.046
8	Ibaraki (Mito)	<u>0.147</u>	0.147	0.149	0.147	0.148	0.150	0.149	0.150	0.149	0.036~0.056
9	Tochigi (Utsunomiya)	<u>0.074</u>	0.074	<u>0.074</u>	0.074	<u>0.074</u>	0.074	0.074	0.075	0.075	0.030~0.067
10	Gunma (Maebashi)	0.042	0.042	0.042	0.042	0.043	0.042	0.042	0.042	0.042	0.017~0.049
11	Saitama (Saitama)	0.066	0.065	0.065	0.065	0.064	0.064	0.064	0.065	0.064	0.031~0.060
12	Chiba (Ishihara)	0.057	0.057	0.057	0.059	0.058	0.058	0.058	0.057	0.057	0.022~0.044
13	Tokyo (Shinjuku)	0.083	0.083	0.083	0.083	0.083	0.083	0.082	0.083	<u>0.083</u>	0.028~0.079
14	Kanagawa (Chigasaki)	0.059	0.059	0.059	<u>0.059</u>	0.059	0.059	0.058	0.058	0.058	0.035~0.069
15	Niigata (Niigata)	0.047	<u>0.048</u>	0.048	0.048	0.048	0.048	0.047	0.048	0.047	0.031~0.153
16	Toyama(Imizu)	0.048	0.048	0.048	0.049	0.049	0.048	0.049	0.049	0.049	0.029~0.147
17	Ishikawa (Kanazawa)	0.048	0.047	<u>0.048</u>	0.047	0.048	0.047	0.048	0.048	0.047	0.0291~0.1275
18	Fukui(Fukui)	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.046	0.032~0.097
19	Yamanashi (Kohu)	0.044	0.044	0.044	<u>0.044</u>	<u>0.045</u>	0.044	0.045	0.044	<u>0.044</u>	0.040~0.066
20	Nagano(Nagano)	0.043	0.043	0.043	0.043	0.043	0.043	0.043	0.043	0.043	0.0299~0.0974
21	Gifu(Kakamigahara)	0.061	0.060	0.061	0.061	0.061	0.062	0.061	0.062	0.062	0.057~0.110
22	Shizuoka(Shizuoka)	0.040	0.039	0.039	0.039	<u>0.039</u>	0.038	0.039	0.039	0.040	0.0281~0.0765
23	Aichi (Nagoya)	0.039	0.039	0.039	<u>0.039</u>	<u>0.040</u>	0.040	0.040	0.040	0.040	0.035~0.074
24	Mie (Yokkaichi)	<u>0.046</u>	<u>0.046</u>	<u>0.046</u>	0.046	0.046	0.046	0.046	0.046	0.046	0.0416~0.0789
25	Shiga(Otsu)	<u>0.034</u>	<u>0.035</u>	<u>0.035</u>	<u>0.035</u>	<u>0.035</u>	0.034	0.034	0.034	<u>0.034</u>	0.031~0.061
26	Kyoto (Kyoto)	0.038	0.038	0.038	<u>0.038</u>	0.038	0.038	<u>0.039</u>	0.039	<u>0.039</u>	0.033~0.087
27	Osaka (Osaka)	0.042	0.042	0.042	0.042	<u>0.042</u>	0.042	0.042	0.043	0.042	0.042~0.061
28	Hyogo (Kobe)	<u>0.036</u>	<u>0.037</u>	<u>0.037</u>	<u>0.037</u>	<u>0.037</u>	0.037	<u>0.037</u>	0.037	0.037	0.035~0.076
29	Nara (Nara)	0.048	<u>0.048</u>	0.048	0.049	<u>0.048</u>	0.049	0.049	0.048	<u>0.048</u>	0.046~0.080
30	Wakayama (Wakayama)	<u>0.031</u>	0.032	<u>0.032</u>	<u>0.032</u>	0.032	<u>0.032</u>	0.032	0.032	0.032	0.031~0.056
31	Tottori(Tohhaku)	<u>0.063</u>	<u>0.063</u>	0.064	<u>0.064</u>	0.063	0.063	0.063	0.063	0.063	0.036~0.110
32	Shimane (Matsue)	<u>0.046</u>	0.046	0.047	<u>0.047</u>	<u>0.047</u>	0.047	0.047	<u>0.047</u>	<u>0.047</u>	0.037~0.131
33	Okayama (Okayama)	<u>0.049</u>	<u>0.049</u>	<u>0.050</u>	<u>0.050</u>	<u>0.051</u>	0.051	<u>0.051</u>	<u>0.051</u>	<u>0.050</u>	0.043~0.104
34	Hiroshima (Hiroshima)	0.047	<u>0.048</u>	<u>0.048</u>	<u>0.048</u>	<u>0.049</u>	<u>0.049</u>	<u>0.049</u>	0.049	<u>0.050</u>	0.035~0.069
35	Yamaguchi (Yamaguchi)	<u>0.092</u>	<u>0.093</u>	<u>0.093</u>	<u>0.094</u>	<u>0.094</u>	<u>0.094</u>	<u>0.094</u>	<u>0.095</u>	<u>0.095</u>	0.084~0.128
36	Tokushima (Tokushima)	<u>0.038</u>	<u>0.038</u>	<u>0.038</u>	<u>0.038</u>	<u>0.039</u>	<u>0.039</u>	<u>0.039</u>	<u>0.039</u>	<u>0.039</u>	0.037~0.067
37	Kagawa (Takamastu)	<u>0.058</u>	0.063	<u>0.062</u>	<u>0.055</u>	0.061	0.068	<u>0.065</u>	0.056	<u>0.059</u>	0.051~0.077
38	Ehime (Matsuyama)	<u>0.049</u>	<u>0.049</u>	<u>0.049</u>	<u>0.050</u>	<u>0.050</u>	<u>0.050</u>	<u>0.049</u>	<u>0.049</u>	<u>0.049</u>	0.045~0.074
39	Kochi (Kochi)	<u>0.026</u>	<u>0.026</u>	<u>0.026</u>	<u>0.026</u>	<u>0.026</u>	0.026	<u>0.026</u>	<u>0.026</u>	<u>0.026</u>	0.019~0.054
40	Fukuoka(Dazaifu)	<u>0.037</u>	<u>0.037</u>	<u>0.037</u>	<u>0.036</u>	<u>0.037</u>	<u>0.037</u>	<u>0.037</u>	<u>0.037</u>	<u>0.037</u>	0.034~0.079
41	Saga(Saga)	<u>0.040</u>	<u>0.040</u>	<u>0.040</u>	<u>0.041</u>	<u>0.041</u>	0.041	<u>0.041</u>	<u>0.041</u>	<u>0.040</u>	0.037~0.086
42	Nagasaki(Ohmura)	<u>0.029</u>	0.029	<u>0.029</u>	<u>0.029</u>	<u>0.029</u>	0.029	0.029	<u>0.029</u>	<u>0.029</u>	0.027~0.069
43	Kumamoto(Uto)	<u>0.027</u>	<u>0.027</u>	0.028	0.028	<u>0.028</u>	<u>0.029</u>	<u>0.029</u>	<u>0.029</u>	<u>0.029</u>	0.021~0.067
44	Oita(Oita)	<u>0.050</u>	<u>0.050</u>	<u>0.050</u>	<u>0.050</u>	<u>0.050</u>	0.050	<u>0.050</u>	0.051	<u>0.051</u>	0.048~0.085
45	Miyazaki (Miyazaki)	<u>0.027</u>	0.027	<u>0.027</u>	<u>0.027</u>	<u>0.027</u>	<u>0.027</u>	<u>0.027</u>	0.027	<u>0.027</u>	0.0243~0.0664
46	Kagoshima (Kagoshima)	<u>0.035</u>	<u>0.035</u>	<u>0.035</u>	<u>0.035</u>	<u>0.035</u>	<u>0.036</u>	<u>0.036</u>	<u>0.036</u>	<u>0.035</u>	0.0306~0.0943
47	Okinawa(Uruma)	0.021	0.021	0.021	0.022	0.021	0.021	0.021	0.021	0.021	0.0133~0.0575

*Figures for Miyagi Prefecture are measured by transportable monitoring post.

Moreover, the value of the fixed mount type monitoring post set up in Sendai City is described about the range of the value ordinary of the past. *In Fukushima Prefecture, the monitoring post in Futaba-gun is located at an evacuated area, since it is difficult to measure, figures were measured in Monijiyama (Fukushima City) as an alternative.

* In Shimane Prefecture, readings are measured by alternative machine from 5pm on April 4 because of setting up the equipment.

*These figures are estimated as 1μ Gy/h= 1μ Sv/h.

*The table was made by MEXT, based on the reports from prefectures.

Usual value band means a range of the maximum and minimum value observed before the earthquake.

*The data. usual value band of Gunma Pref., Yamanashi Pref. and Kouchi Pref., are corrected from the version released on April 9 19:00.

Monitoring data at Ibaraki prefecture $(1 \swarrow 1)$

2011/4/10 13:00			<u>μ</u> Sv/h
Date	JAEA nuclear science research institute (Tokai-village in Ibaraki- prefecture)	JAEA Nuclear fuel cycle engineering laboratory (Tokai- village in Ibaraki-prefecture)	Yayoi in Tokyo University (Tokai-village in Ibaraki- prefecture)
4/9			
0:00	1.14	0.64	1.01
1:00	1.14	0.64	1.06
2:00	1.15	0.64	0.94
3:00	1.14	0.64	1.05
4:00	1.14	0.64	0.86
5:00	1.14	0.64	1.00
6:00	1.14	0.64	0.90
7:00	1.14	0.64	0.99
8:00	1.14	0.64	0.97
9:00	1.13	0.63	0.95
10:00	1.13	0.63	0.91
11:00	1.13	0.63	0.95
12:00	1.13	0.63	0.98
13:00	1.12	0.63	0.96
14:00	1.13	0.63	0.97
15:00	1.13	0.63	0.92
16:00	1.12	0.63	0.93
17:00	1.12	0.62	0.94
<u>18:00</u>	1.12	0.62	<u>0.99</u>
<u>19:00</u>	<u>1.11</u>	0.62	<u>1.03</u>
<u>20:00</u>	<u>1.11</u>	<u>0.62</u>	0.92
<u>21:00</u>	<u>1.11</u>	0.62	<u>0.94</u>
<u>22:00</u>	1.11	0.62	0.92
<u>23:00</u>	1.11	<u>0.61</u>	<u>1.01</u>
4/10			
<u>0:00</u>	<u>1.11</u>	<u>0.61</u>	<u>0.99</u>
<u>1:00</u>	<u>1.11</u>	<u>0.61</u>	<u>0.91</u>
<u>2:00</u>	<u>t.11</u>	<u>0.62</u>	<u>1.04</u>
<u>3:00</u>	<u>1.11</u>	<u>0.62</u>	<u>0.95</u>
<u>4:00</u>	<u>1.11</u>	0.61	0.97
<u>5:00</u>	<u>1.11</u>	<u>0.62</u>	<u>0.92</u>
<u>6:00</u>	<u>1.11</u>	0.62	<u>0.98</u>
<u>7:00</u>	1.12	0.62	<u>0.90</u>
<u>8:00</u>	1.11	0.62	<u>0.93</u>
<u>9:00</u>	1.12	<u>0.62</u>	1.00
<u>10:00</u>	1.11	0.62	
<u>11:00</u>	1.11	0.62	
12.00	1 11	0.61	

%The readings are measured once every hour from March 24th.

The readings of JAEA nuclear science research institute and JAEA Nuclear fuel cycle engineering laboratory are also put on their websites in below.

JAEA nuclear science research institute

http://erms.jaea.go.jp/Chart.htm

JAEA Nuclear fuel cycle engineering laboratory

http://www.jaea.go.jp/04/ztokai/kankyo/realtime/tbl_10mStPo01.html

MEXT

CW 158 of 2789

			Drinking Water					
	Prefecture (City)	I-131	Cs-134.Cs-137	Remarks				
1	Hokkaido (Sapporo City)	Not Detectable	Not Detectable					
2	Aomori (Aomori City)	Not Detectable	Not Detectable					
3	Iwate (Morioka City)	Not Detectable	Not Detectable					
4	Miyagi	-	_	*Refer to the website of Miyagi Pref (http://www.pref.miyagi.jp/gent ai/Press/PressH230315.html) http://www.pref.miyagi.jp/gentai /Press/PressH230315.html)				
5	Akita (Akita City)	Not Detectable	Not Detectable					
6	Yamagata (Yamagata City)	Not Detectable	Not Detectable					
7	Fukushima	-	-	*Refer to the website of Fukushima Pref (http://www.pref.fukushima.jp/j /index.htm)				
8	Ibaraki (Hitachinaka City)	1.3 (Under the reference	alue) Not Detectable					
9	Tochigi(Utsunomiya City)	4.0 (Under the reference	value) 3.7 (Under the reference value)					
10	Gunma (Maebashi City)	0.96 (Under the reference	value) Not Detectable					
11	Saitama (Saitama City)	0.79 (Under the reference	value) 0.49 (Under the reference value)					
12	Chiba(Ichihara City)	Not Detectable	0.18 (Under the reference value)					
13	Tokyo (Shinjuku Ward)	1.0 (Under the reference	value) 0.26 (Under the reference value)					
14	Kanagawa (Chigasaki City)	0.54 (Under the reference	alue) Not Detectable					
15	Niigata (Niigata City)	0.32 (Under the reference	value) Not Detectable					
16	Toyama(Imizu City)	Not Detectable	Not Detectable					
17	Ishikawa (Kanazawa City)	Not Detectable	Not Detectable					
18	Fukui (Fukui City)	Not Detectable	Not Detectable					
19	Yamanashi (Kofu City)	Not Detectable	Not Detectable					
20	Nagano (Nagano City)	Not Detectable	Not Detectable					
21	Gifu (Kakamigahara City)	Not Detectable	Not Detectable					
22	Shizuoka (Shizuoka City)	Not Detectable	Not Detectable					
23	Aichi (Nagoya City)	Not Detectable	Not Detectable					
24	Mie (Yokkaichi City)	Not Detectable	Not Detectable					
25	Shiga (Otsu City)	Not Detectable	Not Detectable					
26	Kyoto (Kyoto City)	Not Detectable	Not Detectable					
27	Osaka (Osaka City)	Not Detectable	Not Detectable					
28	Hyogo (Kobe City)	Not Detectable	Not Detectable					
29	Nara (Nara City)	Not Detectable	Not Detectable					
30	Wakayama (Wakayama City)	Not Detectable	Not Detectable					
31	Tottori (Tohaku District)	Not Detectable	Not Detectable					
32	Shimane (Matsue City)	Not Detectable	Not Detectable					
33	Okayama (Okayama City)		Not Detectable					
34	Hiroshima (Hiroshima City)		Not Detectable					
35	Yamaguchi (Ube City)	Not Detectable	Not Detectable					
30	Tokushima (Tokushima City)	Not Detectable	Not Detectable					
3/	Kagawa (Takamatsu City)	Not Detectable	Not Detectable					
38	Enime (rawatanama Uity)	Not Detectable	Not Detectable					
39	Fukuoka (Dessify City)	Not Detectable	Not Detectable					
40	Sama (Sama City)	Not Detectable	Not Detectable					
42	Naracaki (Omura Citu)	Not Detectable	Not Detectable					
43	Kumamoto(1)to City)	Not Detectable	Not Detectable					
40	Oita (Oita City)	Not Detectable	Not Detectable	·				
45	Miyazaki (Miyazaki City)	Not Detectable	Not Detectable	· · · · · · · · · · · · · · · · · · ·				
46	Kagoshima (Kagoshima City)	Not Detectable	Not Detectable					
47	Okinawa (Naba Citu)	Not Detectable	Not Detectable					

*These figures are estimated as IBq/liter = IBq/kg. *The table was made by MEXT, based on the reports from prefectures. *"Emergency Preparedness for Nuclear Facilities (The Nuclear Safety Commission of Japan)", The index of drinking water based on the indicator about the restriction of food intake, I-131: More than 300Bq/kg, Cs-137: More than 200Bq/kg

News Release

Readings at Monitoring Post out of 20 Km Zone of Fukushima Dai-ichi NPP

As of 16:00 April 10, 2011

Ministry of Education, Culture, Sports, Science and Technology (MEXT)

OMonitoring Outputs by MEXT

*Boldface and underlined readings are new.

*1 measured by Geiger-Müller counter

*2 measured by ionization chamber type survey meter

* 3 measured by NaI scintillator detector

*4 variation range of the measuring data in measuring time

Monitoring Post (I	length from NPP)	Monitoring Time	Reading (unit : μ Sv / h)	Weather	Reading by
Reading Point 【1】 (At	bout60kmNorth/West)	2011/4/10 8:30	0.3 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【2】 (Al	bout55kmNorth/West)	2011/4/10 8:53	2.6 * ²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【3】 (Al	bout45kmNorth/West)	2011/4/10 9:47	2.9 * ²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【4】 (At	bout50kmNorth/West)	2011/4/10 9:14	1.9 *²	No Rain	MEXT
Reading Point 【5】	(About45kmNorth)	2011/4/10 10:24	0.6 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【6】	(About35kmNorth)	2011/4/10 10:49	1.2 * ²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point [7]	(About35kmNorth)	<u>2011/4/10 11:01</u>	<u>0.7</u> <u>*</u> 2	<u>No Rain</u>	JAEA (Japan Atomic Energy Agency)
Reading Point 【10】 (At	pout40kmNorth/West)	2011/4/10 9:27	1.6 * ²	No Rain	МЕХТ
Reading Point 【11】 (Ab	pout40kmNorth/West)	2011/4/10 9:35	1.9 ^{*2}	No Rain	МЕХТ
Reading Point [12]	(About40kmWest)	2011/4/10 11:15	<u>1.2</u> *2	<u>No Rain</u>	MEXT
Reading Point [13]	(About40kmWest)	<u>2011/4/10 11:23</u>	<u>1.6</u> * 2	<u>No Rain</u>	MEXT
Reading Point [14]	(About35kmWest)	<u>2011/4/10 11:29</u>	<u>0.8</u> *2	<u>No Rain</u>	MEXT
Reading Point [15]	(About35kmWest)	2011/4/10 11:42	<u>1.5</u> *2	<u>No Rain</u>	MEXT
Reading Point 【20】 (At	bout45kmNorth/West)	2011/4/10 9:58	1.6 *2	No Rain	MEXT

CW 160 of 2789

* 1 measured by Geiger-Müller counter

*2 measured by ionization chamber type survey meter

* 3 measured by NaI scintillator detector

*4 variation range of the measuring data in measuring time

Monitoring Post (length from NPP)	Monitoring Time	Reading (unit : μ Sv / h)	Weather	Reading by
Reading Point 【21】 (About30kmWest/North/West)	2011/4/10 10:24	5.9 *²	No Rain	MEXT
Reading Point 【22】(About35kmWest/North/West)	2011/4/10 10:12	2.0 *2	No Rain	MEXT
Reading Point 【23】(About35kmWest/North/West)	2011/4/10 10:50	1.4 *2	No Rain	MEXT
Reading Point 【31】(About30kmWest/North/West)	2011/4/10 10:00	12.8 *2	No Rain	MEXT
Reading Point 【32】 (About30kmNorth/West)	2011/4/10 10:38	25.2 *²	No Rain	MEXT
Reading Point [33] (About30kmNorth/West)	<u>2011/4/10 11:08</u>	<u>18.7</u> *2	<u>No Rain</u>	MEXT
Reading Point 【36】 (About40kmNorth/West)	2011/4/10 9:38	4.6 * ²	No Rain	MEXT
Reading Point 【37】 (About50kmNorth/West)	2011/4/10 9:40	3.0 ^{*2}	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point [38] (About35kmSouth)	2011/4/10 11:20	<u>0.4</u> *2	<u>No Rain</u>	JAEA (Japan Atomic Energy Agency)
Reading Point 【39】 (About45kmNorth)	2011/4/10 10:10	0.9 ^{*2}	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point [71] (About25kmSouth)	<u>2011/4/10 12:23</u>	<u>0.6</u> *2	<u>No Rain</u>	JAEA (Japan Atomic Energy Agency)
Reading Point [71] (About25kmSouth)	<u>2011/4/10 7:50</u>	<u>0.8</u> *2	<u>No Rain</u>	Police (counter NBC operations unit)
Reading Point [72] (About30kmSouth)	<u>2011/4/10 12:08</u>	<u>0.5</u> *2	<u>No Rain</u>	JAEA (Japan Atomic Energy Agency)
Reading Point [72] (About30kmSouth)	2011/4/10 8:24	<u>0.3</u> *2	<u>No Rain</u>	Police (counter NBC operations unit)
Reading Point [73] (About35kmSouth)	<u>2011/4/10 8:41</u>	<u>0.3</u> *2	<u>No Rain</u>	Police (counter NBC operations unit)
Reading Point [74] (About35kmSouth)	<u>2011/4/10 12:22</u>	<u>0.2</u> <u>*</u> 2	<u>No Rain</u>	Police (counter NBC operations unit)
Reading Point 【74】 (About35kmSouth)	2011/4/10 10:55	0.5 * ²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【75】 (About45kmSouth)	2011/4/10 10:33	0.5 *2	No Rain	JAEA (Japan Atomic Energy Agency)

*1 measured by Geiger-Müller counter

*2 measured by ionization chamber type survey meter

* 3 measured by NaI scintillator detector

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*4 variation range of the measuring data in measuring time

Monitoring Post (length from NPP)	Monitoring Time	Reading (unit : μ Sv / h)	Weather	Reading by
Reading Point [75] (About45kmSouth)	2011/4/10 7:00	<u>0.2</u> *2	<u>No Rain</u>	Police (counter NBC operations unit)
Reading Point [76] (About20kmSouth/West)	<u>2011/4/10 12:17</u>	<u>0.9</u> *2	<u>No Rain</u>	MEXT
Reading Point [76] (About20kmSouth/West)	<u>2011/4/10 11:38</u>	<u>1.8</u> <u>*</u> 2	<u>No Rain</u>	Police (counter NBC operations unit)
Reading Point [77] (About25kmSouth/West)	<u>2011/4/10 11:18</u>	<u>0.2</u> *2	<u>No Rain</u>	Police (counter NBC operations unit)
Reading Point [78] (About45kmNorth/West)	2011/4/10 7:00	<u>1.0 *2</u>	<u>No Rain</u>	Police (counter NBC operations unit)
Reading Point [80] (About25kmNorth)	<u>2011/4/10 11:29</u>	<u>0.9</u> *2	<u>No Rain</u>	<u>JAEA (Japan Atomic Energy Agency)</u>
Reading Point [80] (About25kmNorth)	<u>2011/4/10 8:13</u>	<u>0.2</u> <u>*</u> 2	<u>No Rain</u>	Police (counter NBC operations unit)
Reading Point 【84】 (About40kmSouth/West)	2011/4/10 9:55	0.2 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【85】 (About60kmNorth/West)	2011/4/10 6:00	0.4 *2	No Rain	Ministry of Defense
Reading Point 【86】 (About55kmWest)	2011/4/10 6:00	0.9 *2	No Rain	Ministry of Defense
Reading Point 【87】(About30kmWest/South/West)	2011/4/10 6:00	1.6 *²	Rain	Ministry of Defense
Reading Point 【101】 (About55kmNorth/West)	2011/4/10 9:19	1.5 ^{*2}	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【102】 (About50kmNorth/West)	<u>2011/4/10 13:49</u>	<u>1.2 *2</u>	<u>No Rain</u>	JAEA (Japan Atomic Energy Agency)
Reading Point [103] (About20kmNorth)	<u>2011/4/10 12:19</u>	<u>0.5</u> *2	<u>No Rain</u>	JAEA (Japan Atomic Energy Agency)
Reading Point [105] (About20kmWest)	<u>2011/4/10 11:59</u>	<u>1.5</u> <u>*</u> 2	<u>No Rain</u>	MEXT
Reading Point [106] (About30kmSouth/West)	<u>2011/4/10 12:45</u>	<u>1.2 *2</u>	<u>No Rain</u>	MEXT
Reading Point. [107] (About25kmNorth/North/West)	2011/4/10 12:35	<u>2.2 *2</u>	<u>No Rain</u>	JAEA (Japan Atomic Energy Agency)
Reading Point. [108] (About30kmNorth/North/West)	2011/4/10 12:56	<u>2.7 *2</u>	<u>No Rain</u>	JAEA (Japan Atomic Energy Agency)

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Readings at Monitoring Post out of 20 Km Zone of Fukushima Dai-ichi NPP

As of 10:00 April 12, 2011

Ministry of Education, Culture, Sports, Science and Technology (MEXT)

OMonitoring Outputs by MEXT *Boldface and underlined readings are new.

* 1 measured by Geiger-Müller counter

*2 measured by ionization chamber type survey meter

* 3 measured by NaI scintillator detector
* 4 variation range of the measuring data in measuring time

Mor	Monitoring Post (P)		Monitoring Time	Reading (unit : μ Sv / h)	Weather	Reading by
Reading Point	[1]	<u>Fukushima city</u> Sugitsuma town	2011/4/11 16:59	<u>1.6</u> <u>*</u> 2	<u>Rain</u>	MEXT
Reading Point	[1]	Fukushima city Sugitsuma town	2011/4/11 7:29	1.8 *2	No Rain	MEXT
Reading Point	[2]	Fukushima city Onami Takinoiri	2011/4/11 8:53	2.7 * ²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point	[3]	Date city Ryozen town Ishida Hikohei	2011/4/11 9:48	3.6 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point	[4]	Date county Kawamata town oaza Tsurusawa aza Kawabata	2011/4/11 16:06	1.7 *2	Rain	MEXT
Reading Point	[5]	Soma city Nakanoteramae	2011/4/11 10:24	1.2 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point	[6]	Minami Soma city Kashima ward Nishimachi	2011/4/11 10:48	1.8 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point	[7]	Minami Soma city Kashima ward Terauchi Motoyashiki	2011/4/11 10:55	1.6 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point	[10]	Nihonmatsu city Harimichi Nakajima	2011/4/11 15:52	1.8 *2	Rain	MEXT
Reading Point	[11]	Nihonmatsu city Ota aza Shimoda	2011/4/11 15:44	2.2 *2	Rain	MEXT
Reading Point	[12]	Tamura city Funehiki town Funehiki aza Ozawakawashiro	2011/4/11 12:13	0.7 *2	No Rain	MEXT
Reading Point	[13]	Tamura city Tokiwa town Nishimuki Yakata	2011/4/11 11:52	1.0 *2	No Rain	MEXT
Reading Point	[14]	Tamura city Tokiwa town Tokiwa Uchimachi	2011/4/11 11:30	1.1 *2	No Rain	MEXT
Reading Point	[15]	Tamura city Tokiwa town Yamane Kashima	2011/4/11 11:18	1.6 *2	No Rain	MEXT
Reading Point	[20]	Tamura city Funehiki town Niitate shimo	2011/4/11 12:28	1.1 *2	No Rain	MEXT
Reading Point	[21]	Futaba county Namie town Tsushima Higashitate	2011/4/11 12:54	4.2 * ²	No Rain	MEXT
Reading Point	[22]	Tamura city Funehiki-town Kamiutsushi Ushirota	2011/4/11 12:43	1.4 *2	No Rain	MEXT
Reading Point	[23]	Tamura city Funehiki town Niitate Magariyama	2011/4/11 12:36	1.3 *2	No Rain	MEXT
Reading Point	[31]	Futaba county Namie town Tsushima Nakaoki	2011/4/11 13:32	12.6 *2	No Rain	MEXT
Reading Point	[32]	Futaba county Namie town Akougi Teshichiro	2011/4/11 13:49	23.9 * ²	No Rain	MEXT
Reading Point	[33]	Soma county litate village Nagadoro	2011/4/11 14:03	17.5 *2	No Rain	MEXT
Reading Point	[34]	Futaba county Namie town Tsushima Taikougi	2011/4/11 15:05	6.7 * ²	No Rain	MEXT
Reading Point	[36]	Date county Kawamata town Yamakiya Nagahashi	2011/4/11 10:34	4.0 *2	No Rain	MEXT
Reading Point	[37]	Date city Ryozen town Ishida Hojizawa	2011/4/11 9:41	3.6 * ²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point	[38]	lwaki City Yotsukura town Shiraiwa Hokita	2011/4/11 11:24	0.6 *2	CW R162	JACT 2478 Domic Energy

* 1 measured by Geiger-Müller counter
* 2 measured by ionization chamber type survey meter
* 3 measured by NaI scintillator detector
* 4 variation range of the measuring data in measuring time

Monitorin	g Post (P)	Monitoring Time	Reading (unit : μ Sv / h)	Weather	Reading by
Reading Point 【39】	Soma city Yamakami Kaminamiki	2011/4/11 10:11	1.6 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【41】	Tamura city Miyakoji town Furumichi Teranomae	2011/4/11 13:40	0.7 *2	No Rain	Electric power company
Reading Point 【41】	Tamura city Miyakoji town Furumichi Teranomae	2011/4/11 10:05	0.7 ^{*2}	No Rain	Electric power company
Reading Point 【42】	Tamura city Tokiwa town Yamane Tomioka	2011/4/11 13:00	0.9 ^{*2}	No Rain	Electric power company
Reading Point 【42】	Tamura city Tokiwa town Yamane Tomioka	2011/4/11 9:20	0.9 ^{*2}	No Rain	Electric power company
Reading Point 【43】	Futaba county Kawauchi village Shimokawauchi Miyawata	2011/4/11 15:00	0.4 ^{*2}	Rain	Electric power company
Reading Point 【43】	Futaba county Kawauchi villag e Shimokawauchi Miyawata	2011/4/11 11:00	0.5 *²	No Rain	Electric power company
Reading Point 【44】	lwaki city Ohisa town Ohisa Yanomezawa	2011/4/11 13:00	0.8 ^{*2}	No Rain	Electric power company
Reading Point 【44】	Iwaki city Ohisa town Ohisa Yanomezawa	2011/4/11 10:00	0.8 ^{*2}	No Rain	Electric power company
Reading Point 【45】	Futaba county Naraha town Yamádaoka Utsukushimori	2011/4/11 13:21	1.1 * ²	No Rain	Electric power company
Reading Point 【45】	Futaba county Naraha town Yamadaoka Utsukushimori	2011/4/11 10:06	1.1 *²	No Rain	Electric power company
Reading Point 【46】	Date county Kawamata town Yamakiya Mukaideyama	2011/4/11 13:05	4.7 ^{*2}	No Rain	Electric power company
Reading Point 【46】	Date county Kawamata town Yamakiya Mukaideyama	2011/4/11 10:25	4.7 * ²	No Rain	Electric power company
Reading Point [51]	<u>Tamura county One town</u> <u>Ononiimachi</u> <u>Tatemawari</u>	<u>2011/4/11 13:52</u>	<u>0.2 *3</u>	<u>Rain</u>	Fukushima Prefecture
Reading Point [51]	<u>Tamura county One town</u> <u>Oneniimachi</u> <u>Tatemawari</u>	<u>2011/4/11 10:37</u>	<u>0.2 *3</u>	<u>No Rain</u>	Fukushima Prefecture
Reading Point [52]	<u>Tamura city Funehiki</u> <u>town</u> funehiki Babakawara	2011/4/11 14:27	<u>0.3 *3</u>	<u>No Rain</u>	Fukushima Prefecture
Reading Point [52]	<u>Tamura city Funehiki</u> <u>town</u> funehiki Babakawara	2011/4/11 11:00	<u>0.4</u> <u>*</u> 3	<u>No Rain</u>	Fukushima Prefecture
Reading Point [61]	<u>Soma county lidata</u>	<u>2011/4/11 15:17</u>	<u>5.2</u> *3	<u>No Rain</u>	Fukushima Prefecture
Reading Point [61]	<u>Soma county lidate</u> <u>village Yagisawa</u>	<u>2011/4/11 13:15</u>	<u>5.0</u> *3	<u>No Rain</u>	Fukushima Prefecture
Reading Point [62]	Soma county Iidate village Kusano Taishido	2011/4/11 15:30	<u>6.2 *3</u>	<u>No Rain</u>	Fukushima Prefecture
Reading Point [62]	Soma county lidate village Kusano Talshido	<u>2011/4/11 13:03</u>	<u>6.3</u> *3	<u>No Rain</u>	Fukushima Prefecture
Reading Point [63]	<u>Soma county lidate village Nimaibashi</u>	<u>2011/4/11 15:57</u>	<u>2.0 *3</u>	<u>Rain</u>	Fukushima Prefecture
Reading Point [63]	<u>Soma county lidate</u>	<u>2011/4/11 11:41</u>	<u>2.1 *3</u>	<u>No Rain</u>	Fukushima Prefecture
Reading Point 【71】	<u>Futaba county Hirono</u> <u>town Shimokitaba</u> <u>Nawashirogae</u>	2011/4/11 16:00	<u>0.6</u> *2	<u>Rain</u>	Police (counter NBC operations unit)
Reading Point 【71】	Futaba county Hirono town Shimokitaba Nawashirogae	2011/4/11 12:06	0.9 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【71】	Futaba county Hirono town Shimokitaba Nawashirogae	2011/4/11 7:53	1.0 *2	No Rain	Police (counter NBC operations unit)
Reading Point [72]	lwaki city Hisanohama town Hisanohama aza Kitaaramaki	<u>2011/4/11 16:31</u>	<u>0.5</u> *2	No Rain	Police (counter NBC

* 1 measured by Geiger-Müller counter
* 2 measured by ionization chamber type survey meter
* 3 measured by NaI scintillator detector
* 4 variation range of the measuring data in measuring time

Monitorin	g Post (P)	Monitoring Time	Reading (unit : µ Sv / h)	Weather	Reading by
Reading Point 【72】	Iwaki city Hisanohama town Hisanohama aza Kitaaramaki	2011/4/11 11:51	0.5 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【72】	lwaki city Hisanohama town Hisanohama aza Kitaaramaki	2011/4/11 8:29	0.4 *2	No Rain	Police (counter NBC operations unit)
Reading Point [73]	<u>Iwaki city</u> Yotsukura town	<u>2011/4/11 16:46</u>	<u>0.3</u> *2	<u>Rain</u>	<u>Police (counter NBC</u> operations unit)
Reading Point [73]	Iwaki city Yotsukura town	2011/4/11 11:40	0.9 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【73】	Iwaki city Yotsukura town	2011/4/11 8:43	0.6 ^{*2}	No Rain	Police (counter NBC operations unit)
Reading Point 【74】	lwaki city Ogawa town Takahagi	2011/4/11 12:28	0.0 *2	No Rain	Police (counter NBC operations unit)
Reading Point 【74】	lwaki city Ogawa town Takahagi	2011/4/11 11:04	0.3 ^{*2}	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point [75]	<u>Iwaki city</u> Uchigoumiyamaya town	<u>2011/4/11 20:20</u>	<u>0.6</u> <u>*2</u>	<u>Rain</u>	Police (counter NBC operations unit)
Reading Point 【75】	Iwaki city Uchigoumiyamaya town	2011/4/11 10:40	0.4 ^{*2}	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【75】	Iwaki city Uchigoumiyamaya town	2011/4/11 7:02	0.5 * ²	No Rain	Police (counter NBC operations unit)
Reading Point 【76】	Futaba county Kawauchi village Kamikawauchi Hayawata	2011/4/11 11:12	0.5 ^{*2}	No Rain	Police(counter NBC operations unit)
Reading Point 【76】	Futaba county Kawauchi village Kamikawauchi Hayawata	2011/4/11 10:37	0.5 *²	No Rain	MEXT
Reading Point 【77】	lwaki city Ogawa town Kamiogawa	2011/4/11 11:29	0.1 ^{*2}	No Rain	Police (counter NBC operations unit)
Reading Point 【78】	Date county kawamata town Tsurusawa	2011/4/11 6:50	1.0 ^{*2}	No Rain	Police (counter NBC operations unit)
Reading Point [79]	<u>Futaba county Namie</u> <u>town shimotsushima</u> <u>kayabuka</u>	2011/4/11 16:55	<u>7.3 *2</u>	<u>Rain</u>	Police (counter NBC operations unit)
Reading Point [79]	Futaba county Namie town shimotsushima kayabuka	2011/4/11 14:57	14.2 ^{*2}	No Rain	MEXT
Reading Point [80]	<u>Minami Soma city</u> <u>Haramachi ward Takami</u> <u>town</u>	<u>2011/4/11 16:04</u>	<u>0.3 *2</u>	<u>Rain</u>	Police (counter NBC operations unit)
Reading Point 【80】	Minami Soma city Haramachi ward Takami town	2011/4/11 11:25	1.4 * ²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【80】	Minami Soma city Haramachi ward Takami town	2011/4/11 8:00	0.5 *²	No Rain	Police (counter NBC operations unit)
Reading Point [81]	<u>Futaba county Namie</u> <u>town</u> <u>Akougi Ishikoya</u>	2011/4/11 17:05	<u>16.0</u> *2	<u>Rain</u>	Police (counter NBC operations unit)
Reading Point [83]	<u>Futaba county Namie</u> <u>town</u> Akougi Kunugidaira	<u>2011/4/11 16:45</u>	<u>5.3</u> *2	<u>Rain</u>	Police (counter NBC operations unit)
Reading Point [83]	Futaba county Namie town Akougi Kunugidaira	2011/4/11 14:44	53.5 * ²	No Rain	MEXT
Reading Point [84]	lwaki city Miawa-town Saiso	2011/4/11 10:12	0.5 *2	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【85】	Fukushimashi Arai Harajiku	2011/4/11 14:00	0.5 ^{*2}	No Rain	Ministry of Defense
Reading Point 【85】	Fukushimashi Arai Harajiku	2011/4/11 6:00	0.3 *2	No Rain	Ministry of Defense
Reading Point 【86】	Koriyamashi Ootsuki town Choemonbayashi	2011/4/11 14:00	1.1 *2	No Rain	Ministry of Defense
Reading Point 【86】	Koriyamashi Ootsuki town Choemonbayashi	2011/4/11 6:00	1.1 *2	No Rain	Ministry of Defense
Reading Point 【87】	Futaba county Kawauchi village Kamikawauchi Hananouchi	2011/4/11 14:00	0.8 *2	Rain	Ministry of Defense
			(CW 166	5 of 2789

*1 measured by Geiger-Müller counter

*2 measured by ionization chamber type survey meter

* 3 measured by NaI scintillator detector

*4 variation range of the measuring data in measuring time

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Monitorin	g Post (P)	Monitoring Time	Reading (unit : μ Sv / h)	Weather	Reading by
Reading Point 【87】	Futaba county Kawauchi village Kamikawauchi Hananouchi	2011/4/11 6:00	1.2 *2	No Rain	Ministry of Defense
Reading Point [88]	<u>Fukushima city</u> <u>Hikarigaoka</u>	<u>2011/4/11 17:00</u>	<u>1.9</u> *2	<u>Rain</u>	Ministry of Defense
Reading Point [89]	<u>Koriyama city</u> <u>Toyota town</u>	2011/4/11 17:00	<u>2.8</u> *2	<u>Rain</u>	Ministry of Defense
Reading Point 【101】	Date city Ryozen town Oishi aza Minowa	2011/4/11 9:17	2.2 ^{*2}	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【102】	Date city Tsukidate town Tsukidate aza Machi	2011/4/11 14:13	1.5 *²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point【103】	Minami Soma city Haramachi ward taka aza Mamegarauchi	2011/4/11 12:23	1.5 *²	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【104】	Futaba county Katsurao village Oaza Ochiai aza Ochiai	2011/4/11 13:09	2.6 ^{*2}	No Rain	MEXT
Reading Point [105]	Tamura city Miyakoji town Furumichi aza Teranomae	2011/4/11 10:57	0.5 ^{*2}	No Rain	MEXT
Reading Point [106]	lwaki city Kawamae town Ojiroi aza Syokangoya	2011/4/11 10:11	0.6 *2	No Rain	MEXT
Reading Point【107】	Minami Soma city Haramachi ward Baba aza Nakouchi	2011/4/11 12:41	3.3 ^{*2}	No Rain	JAEA (Japan Atomic Energy Agency)
Reading Point 【108】	Minami Soma city Haramachi ward Ohara Daihata	2011/4/11 12:57	3.7 ^{*2}	No Rain	JAEA (Japan Atomic Energy Agency)

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3

Readings at Monitoring Post out of 20 Km Zone of Fukushima Dai-ichi NPP

CW 168 of 2789



Readings of integrated Dose at Monitoring Post out of 20 Km Zone of Fukushima Dai-ichi NPP

As of 10:00 April 12, 2011 Ministry of Education, Culture, Sports, Science and Technology (MEXT)

	Monitoring Post (length from NPP)		Installation Date and Time	Date and Time (last monitoring) (x)	Readings (last monitoring) (a) (µ Sv)	Monitoring Date and Time (y)	Reading of Integrated Dose (b)(µ Sv)	Accumulated Time (z=y-x)	Reading of integrated Dose ($c = b - a$) (μ Sv)	Weather
Monitoring Post	[31]Futaba county Namie town Tsushima Nakaoki	(About30kmWast/Narth:Wast)	2011/3/23 11:43	2011/4/10 10:10	6214 *1	2011/4/11 13:30	6433	******	219 (8.0 μSv/h)	No Rain
Monitoring Post	[32]Futaba county Namie town Akougi Teshichiro	(About30kmNorth/West)	2011/3/23 12:14	2011/4/10 10:47	13950 *1	2011/4/11 13:50	14480 *1	#################	530 (19.6 <i>μ</i> Sv/h)	No Rain
Monitoring Post	[33]Soma county litate village Nagadoro	(About30kmNorth/West)	2011/3/23 12:32	2011/4/10 11:10	8141 *1	2011/4/11 14:04	8442 *1	******	301 (11.2 μSv/h)	No Rain
Monitoring Post	[34]Futaba county Namie townTsushima Taikougi	(About30kmNorth/West)	2011/3/23 13:08	2011/4/10 16:14	2887 *1	2011/4/11 15:06	3034 *'	******	147 (6.4 μSv/h)	No Rain
Monitoring Post	[38]Iwaki City Yotsukura town Shiraiwa Hokita	(About35kmSouth)	2011/3/31 16:23	2011/4/10 11:20	227 *1	2011/4/11 11:23	239 *1	*******	12 (0.5 μ Sv/h)	No Rain
Monitoring Post	[71]Futaba county Hirono town Shimokitaba Nawashirogae	(About25kmSouth)	2011/3/23 13:00	2011/4/10 12:23	672 *1	2011/4/11 12:05	688 * ¹	*******	16 (0.7 μSv/h)	No Rain
Monitoring Post	[79]Futaba county Namie town shimotsushima kayabuka	(About30kmNorth/West)	2011/3/23 14:09	2011/4/10 16:20	6559 *1	2011/4/11 14:58	6888 *1	***	329 (14.5 μ Sv/h)	No Rain
Monitoring Post	[7] Miriami Soma city Kashima ward Terauchi Motovashiki	(About35kmNorth)	2011/3/23 12:06	2011/4/10 10:58	400	2011/4/11 10:56	*1 417	******	17 (0.7 μSv/h)	No Rain
Monitoring Post	[1]Fukushima city Sugitsuma town	(About60kmNorth/West)	2011/3/24 15:20	2011/4/10 14:39	477 *1	2011/4/11 14:58	497 *1	****	20 (0.8 μ Sv/h)	No Rain
Monitoring Post	[15]Tamura city Tokiwa town Yamane Kashima	(About35kmWest)	2011/3/24 10:58	2011/4/10 11:42	660 *'	2011/4/11 11:19	687 * ¹	******	27.0 (1.1 μSv/h)	No Rain
Monitoring Post	[84]Iwaki city Miawa~town Saiso	(About40kmSouth/West)	2011/3/25 10:40	2011/4/10 9:55	86 *1	2011/4/11 10:10	90 *1	#######################################	4 (0.2 μSv/h)	No Rain
Monitoring Post	[39]Soma city Yamakami Kaminamiki	(About45kmNorth)	2011/4/1 10:45	2011/4/10 10:07	145 *1	2011/4/11 10:10	161 *1	******	16 (0.7 μ Sv/h)	No Rain
Monitoring Post	Kawauchi village Kamikawauchi	(About20kmSouth/West)	2011/4/2 11:35	2011/4/10 12:19	90 *1	2011/4/11 10:38	103 *1	***	13 (0.6 μ Sv/h)	No Rain
Monitoring Post	Haramachi ward Takami	(About25kmNorth)	2011/4/3 11:56	2011/4/10 11:26	88 *1	2011/4/11 11:27	101 *1	***	13 (0.5 μ Sv/h)	No Rain
Monitoring Post	[21]Futaba county Namie town Tsushima Higashitate	(Abaut30kmWest/Nortn/West)	2011/4/8 13:18	2011/4/10 10:24	0 *1	2011/4/11 12:54	161 *1	#######################################	161 (6.1 μ Sv/h)	No Rain

*1 the readings are measured by pocket dosimeter

notes: The parenthetic figures in the column "Integrated Dose" indicates the values of readings of integrated dose devided by accumulated time (z/c). • Reading by MEXT

•The figures of 0.0 in the column "Date and Time (last monitoring)" indicate that there was new instlation in the area.

Readings of Integrated Dose at Monitoring Post out of Fukushima Dai-ichi NPP



CW 171 of 2789