Comprehensive Risk Review of all the possible risks which might have an impact outside the site boundary of the Fukushima Daiichi Nuclear Power Station

～ Result of Comprehensive Risk Review ～

April 28, 2015

Tokyo Electric Power Company

■Contents

0. Overview

- Comprehensive risk review was implemented, considering all the possible risks that might have an impact outside the Fukushima Daiichi NPS site boundary.

- Focusing on liquids and dust, risk sources, leakage paths, and operations were examined. 190 items that need to be targeted were identified.

- The items which had been already known were included and evaluated from a new perspective this time. Necessity of additional measures was examined for these items.

- As a result of the comprehensive risk review, 124 items were classified under ①countermeasures in practice, ②follow-up observation (after implementing countermeasures) in practice, ③no need for additional measures.

- Classification of remaining 66 items;
  21 items were classified as the items for which ④countermeasures need to be implemented (one of these 21 items was classified as the item for which additional measures need to be implemented immediately) (to be conducted in May 2015)
  45 items were classified as the items which ⑤need further examination

- Details of measures and period of implementing measures will be examined according to its priority etc. Continuous efforts will be made to further reduce the risks which might have an impact outside the site boundary.

1. Background

＜September 2013＞

Subsequent actions taken after following incidents

○Increase of contaminated water
→Installation of bolted-joint tanks and other equipment

○Leakage of contaminated water from tanks or elsewhere
→Reclaiming contaminated water and contaminated soil

etc.

Basic policy for the Contaminated Water Issue at the TEPCO's Fukushima Daiichi Nuclear Power Station
（decision by the Nuclear Emergency Response Headquarters on September 3）

『Beyond the follow up measures like in the past, the preventive and multi-layered measures will be taken through indentification of any potential risks.』

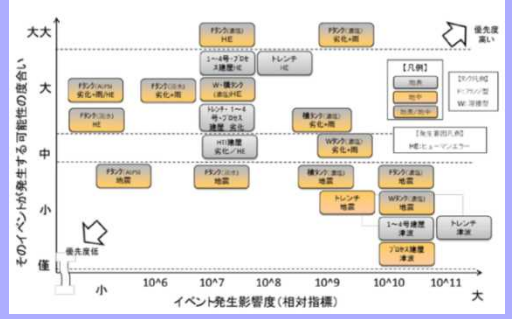
＜December 2013＞

A preventive and multi-layered measures

①Removing the contamination source
◆Treating contaminated water by ALPS (Multi-nuclide removal equipment)
◆Removing contaminated water from trench etc.

②Isolating groundwater from the contamination source
◆Groudwater bypassing system
◆Pumping up water from sub-drain around the reactor building
◆Land-side frozen soil impermeable walls
◆On - site soil pavement for suppressing groundwater ingress etc.

③Preventing leakage of contaminated water
◆Ground solidification by water glass
◆Sea-side impermeable walls
◆Construction of welding type tanks including replacement from flange (bolt) type etc.



（Risk map）

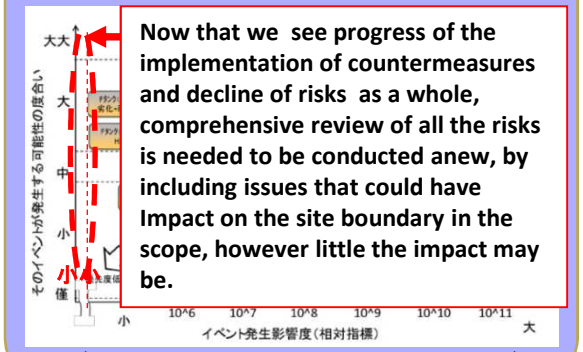
＜February 2015＞

Comprehensive risk review

（Direction from Mr. Takagi, Senior Vice Minister of Economy, Trade and Industry）

✓TEPCO should conduct anew comprehensive risk review covering all the possible risks that could be thought of at Fukushima Daiichi NPS at this moment. It should be done from the perspective of the affected people and the public. In addition, TEPCO should present appropriate countermeasures for
the current situation of the site, and
provide necessary information.

✓ In conducting this comprehensive overall review, any risks that could have an impact on the environment outside the site boundary of Fukushima Daiichi NPS should be included in the scope of the review. This scope should be decided by taking into account the progress of the countermeasures.



Now that we see progress of the implementation of countermeasures and decline of risks as a whole, comprehensive review of all the risks is needed to be conducted anew, by including issues that could have Impact on the site boundary in the scope, however little the impact may be.

（Risk map with broader targets）

2. Implementation of Comprehensive Risk Review

■Risks that might have an impact outside the site boundary of the Fukushima Daiichi Nuclear Power Station were broadly included in the review, and **target items for risk reduction were systematically classified**.

[1] Impact of liquids and dust
- Regardless of the source of contamination, all liquids and dust were reviewed

(Note) Leakage due to fire / human factors and leakage of oil / chemicals (such as sulfuric acid / caustic soda) was identified as a risks and detailed evaluation and classification was continued

[2] Low frequency external events
- Tornado, plane crash, earthquake / tsunami

→ Risks and measures were *examined* after in-depth discussions with the concerned agencies regarding the approach for ensuring safety

[3] Impact other than liquids and dust
- Debris recriticality, shutdown of cooling of debris/ spent fuel

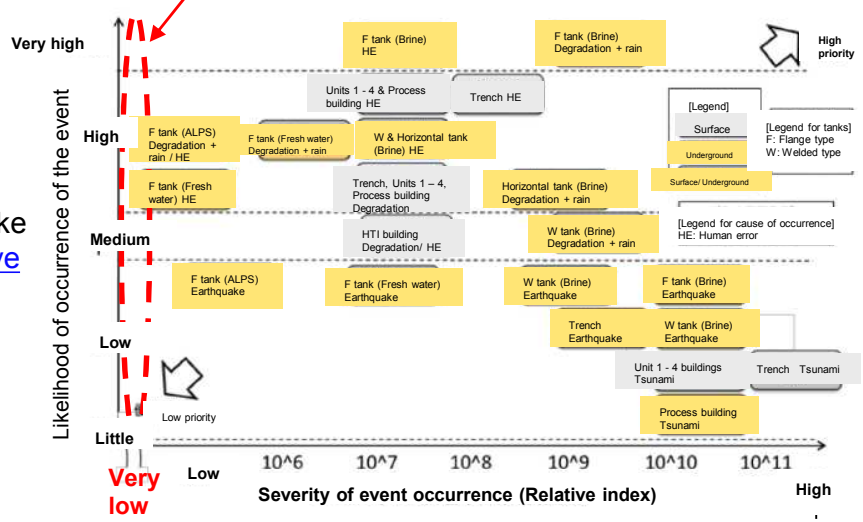
→ The possibility of debris recriticality is extremely low at present.
Before carrying out operations that might generate changes (increased water levels and concentration of debris) that would increase recriticality, the individual key issues were verified and measures were take

→Even if there is cooling shutdown, there is sufficient time to take alternative steps. Within this time, it is possible to take action in a flexible manner so that areas outside the site are not affected.

(Debris) For about 63 hours after cooling shutdown, the surrounding public is safe from significant radiation exposure.[Note]

(Spent fuel) It takes 100 hours or more for the pool water temperature to reach the operational limit (65℃) after cooling shutdown

Target items which have potential impact on outside the site boundary including those having very small impact are evaluated in the situation where risks as a whole have been reduced



(Risk map further broadening the target*)

*: Risk map by Committee on Countermeasures for Contaminated Water Treatment
Added in (Dec 2013)

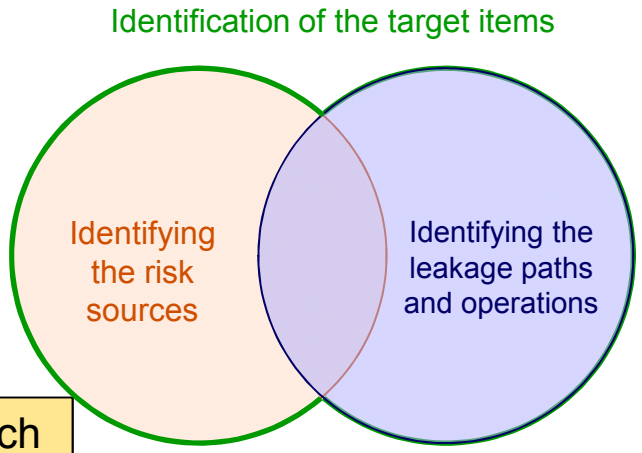
[Note] Annually 5mSv on site boundary.
Evaluated values as of Oct 1, 2014.

3-1. Identification of the target items and evaluation of the necessity for additional measures

■ As a part of the comprehensive risk review, target items that might have an impact outside the site boundary were identified (①), and the necessity for additional measures for each of the identified items was evaluated (②).

① Identification of the target items

- During risk review “risk sources” such as radioactive materials were identified.
- “Leakage paths (liquids)” and “operations (dust)” were identified in parallel.
- Items identified in either of the above were considered as the “target items”.



② Evaluation of the necessity for additional measures for each of identified items

- The state of each of the identified target items (presence of data on the amount or concentration of radioactive materials, and implementation status of measures, etc.) was verified, and the future necessity for additional measures was classified as follows:
  (1) Need further examination
  (2) Countermeasures *need* to be taken
  (3) Countermeasures in practice
  (4) Follow-up observation (after implementing countermeasures) in practice
  (5) No need for additional measures
- For point (2) above, prioritization was made based on the possibility of impact outside the site and the concentration of radioactive materials.

3-2 Identification of the target items

■In addition to the items for which measures have been taken, other items that might have an impact outside the site boundary were included in the identification of the target items .

◎Risks that could cause radioactive materials to flow outside the site (including the sea) in the form of liquid

So far, TEPCO has put priority on taking measures for contaminated water issues whose risk is high. Besides them, TEPCO will check the contamination sources and the route of any leakage in order to identify wide range of risks that could have an impact outside the site boundary.

◎Contaminated water with high risks for which TEPCO has been taking measures with high priority

- ○Accumulated water inside seawater pipe trenches in the Unit 2-4
  【Measures】Removal of contaminated water and filling up of the trenches
- ○Accumulated water inside buildings
  【Measures】Purification treatment of accumulated water, groundwater bypassing , pumping water up from sub-drain, installation of land-side frozen soil impermeable walls, etc.
- ○Water stored in tanks
  【Measures】Purification of concentrated salt water, construction of welding type tanks, replacement from flange (bolt) type tanks, elevating the height of and doubling a dike surround each tank, etc.
- ○Rainwater in tank area dike
  【Measures】Decontaminated water sprinkle
- ○Contaminated soil in the sea side of turbine buildings
  【Measures】Water improvement with water glass

＋

◎ Identifying remaining risks that could have an impact outside the site boundary

- ○Accumulated water inside trenches and other places other than seaside pipe trenches in the Unit 2-4
- ○Discharge channels
- ○Other accumulated water outside buildings
  (pits including sump, buried pipes, wells and tanks placed temporarily, etc.)
- ○Place where rainwater could be contaminated
  (temporal storage for radioactive waste, rubbles, rooftop of buildings, drainage channels and pits including oil barrier dikes)

Etc.

◎Risks that could generate dust

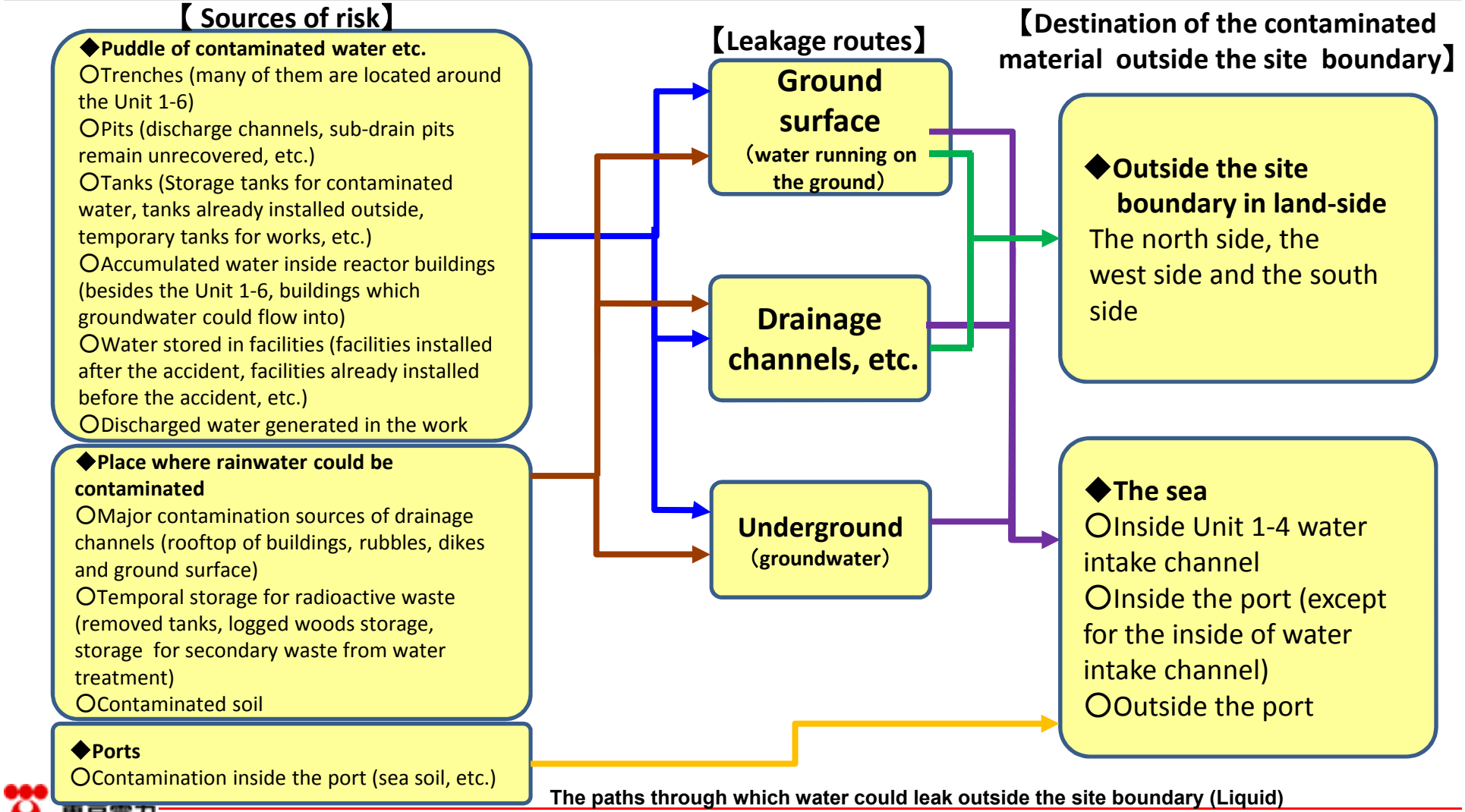
So far, When conducting operations such as removing rubbles in the operating floor of the Unit 3 or dismantling Unit 1 cover, TEPCO has taken measures to prevent scattering of dust. Besides them, TEPCO will check the contamination sources and the process of operations, as dust might scatter in such operations. Wide range of risks that could have an impact outside the site boundary will be identified.

◎Identifying risks that could have an impact outside the site boundary by the scattering of dust

- ○Removal of rubbles and upper section of reactor buildings
- ○Temporal storage of radioactive waste
- ○Operation for dismantling tanks etc.

3-3. Identification of the target items (evaluation of the leakage path)

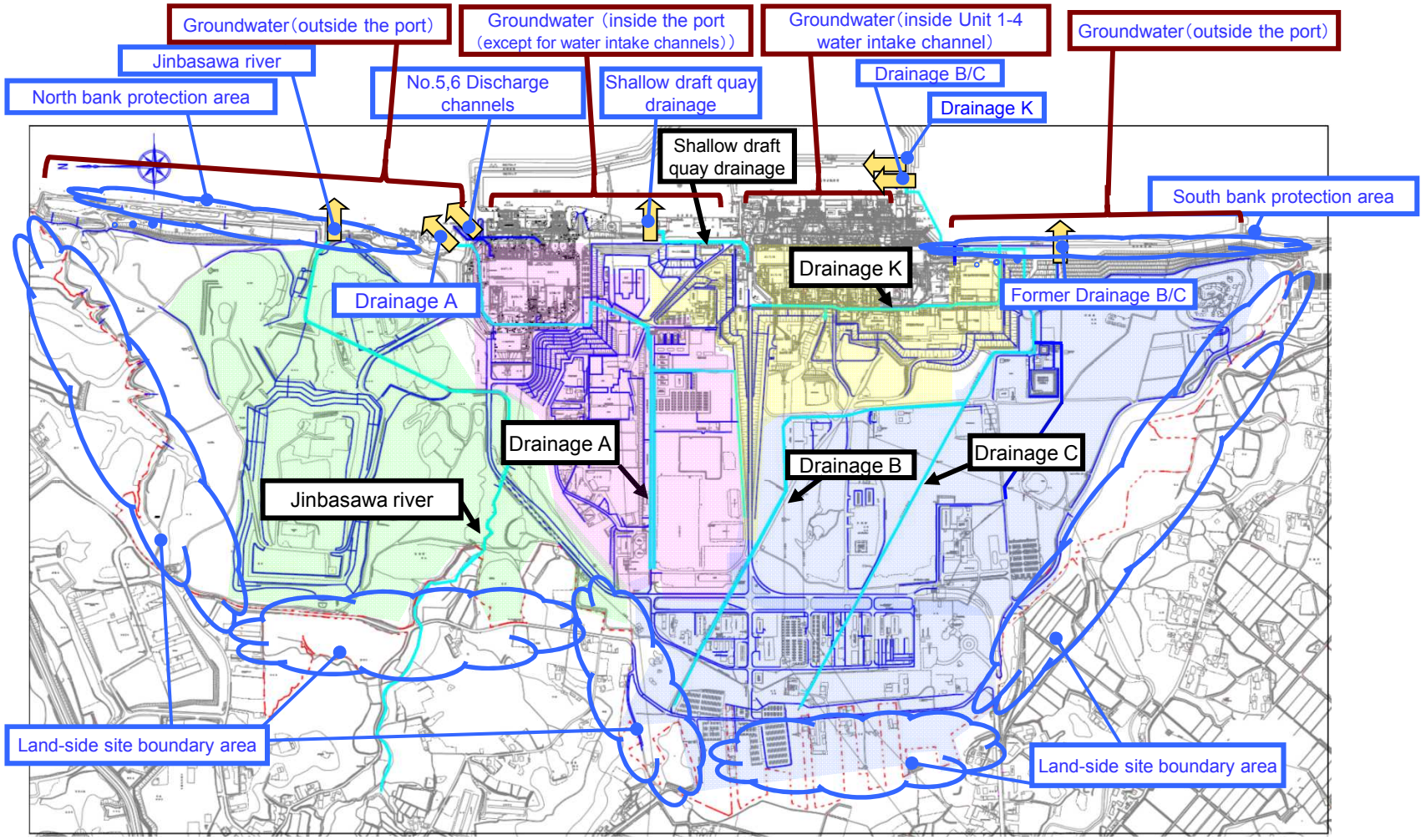
■During the identification of target items, paths leading to leakage outside the site boundary were identified taking into account the location of the risk sources and the assumed leakage of these sources.



The paths through which water could leak outside the site boundary (Liquid)

3-3. Identification of the target items (evaluation of the leakage path)

■For the leakage paths, drains around the site were also examined based on field verification.



＊Besides this, some liquid run on the ground surface as its routes.

4-1. Results of classification of target items

- As a result of comprehensive risk review, 190 items were systematically classified.
  (Liquid leakage: 159 items, generation of dust: 31 items)
- For the items for which countermeasures need to be taken, content and period of measures will be considered according to priority, etc.

[Target items newly identified]

(1) Issues for which facts were verified through investigation on site

- Drainage side ditches around the site

For the drains and clay pipes leading from within the site to outside the site, around the site boundary, the location of the drains and clay pipes was identified through investigation on site, and was incorporated into the classification results as the leakage path of rainwater.

(2) Target items for whose relations with the impact outside the site was considered taking into account connection between leakage paths and risk sources

- Water retained in the exhaust stack drain sump, waste storage area, and sea water system facility

This was identified as a key issue, but was organized as an item for which leakage paths are drainage channels, Jinbazawa river, and sea water system pipes.

(3) Target items identified as key issues based on newly confirmed facts (cases occurring after Feb 26, 2015)

- Adsorption tower temporary storage facility (HIC)

Puddle water was confirmed in HIC stored in the adsorption tower temporary storage facility, so the re-evaluation of the impact of leakage from HIC outside the site is being re-examined. For this reason, the survey results are being reviewed. (Although it was sorted out as“(4) Observing status after countermeasure had been taken”in this time, additional countermeasures will be implemented depending on the future survey results.)

- Water in the spent fuel pool (SFP)

Based on the pool gate survey results for Unit 3 spent fuel pool (SFP), the key issue of impaired pool boundary function was re-identified.

- Fires and human factors

Based on cases of outdoor fires generated by vehicle fittings and electrical cables, the key issues that might affect the site boundary due to fires and human factors were re-identified as items for which common measures must be considered.

4-2. Results of evaluation of the necessity for additional measures

■ The results of evaluation of the necessity for additional measures are as follows:

	Main leakage paths	Necessity of additional measures					Total
		(1) Need further examination	(2) Countermeasures need to be taken	(3) Countermeasures in practice	(4) Follow-up observation (after implementing countermeasures) in practice	(5) No need for additional measures	
Water	Drainage channel K	**6**	**3**	**2**	**7**	**1**	19
	Drainage channel A	**3**	**1**	**1**	**7**	**1**	13
	Drainage channels B and C	**1**	**2**	**14**	**10**	**1**	28
	Other drainage channels	**6**	**1**	**3**	**1**	**3**	14
	Groundwater (Inside open culverts of Units 1 - 4)	**8**	**5**	**20**	**8**	**3**	44
	Groundwater (inside the port)	**5**	**2**	**0**	**3**	**10**	20
	Groundwater (outside the port)	**5**	**2**	**2**	**2**	**2**	13
	Water running on the ground	**1**	**0**	**1**	**1**	**0**	3
	Port	**0**	**0**	**1**	**0**	**1**	2
	Common	**1**	**0**	**2**	**0**	**0**	3
Total		36	16	46	39	22	159

Items for which additional measures need to be implemented immediately: 1
Items for which additional measures need to be implemented at an early stage: 5
Items for which additional measures need to be implemented subsequently: 10

	Main leakage paths	Necessity of additional measures					Total
		(1) Need further examination	(2) Countermeasures need to be taken	(3) Countermeasures in practice	(4) Follow-up observation (after implementing countermeasures) in practice	(5) No need for additional measures	
Dust	Generated with operations	**3**	**2**	**5**	**0**	**0**	10
	Generated with damage	**4**	**2**	**0**	**6**	**0**	12
	Other	**2**	**1**	**2**	**2**	**0**	7
	Common	**0**	**0**	**2**	**0**	**0**	2
Total		9	5	9	8	0	31

Items to which additional measures need to be implemented at an early stage: 5

4-3. Results of evaluation of the necessity for additional measures (Items requiring further examination)

- 45 items were classified as items which need further examination.
- Some of these items, such as contamination source of the drainage channels, are being examined. Meanwhile, there are items which have not been examined due to radiation exposure, difficulty in obtaining samples, and constraints on analytical capability.
- Items that are not apparent currently, but might turn into risks in the future were also identified.
- Further examination will be conducted, while taking into account contamination levels and possible impact outside the site.

[Examples of items that have not been examined]

◆ Examples of items that have not been examined because the radiation exposure associated with investigation was high
Exhaust stack drain sump pit (Units 1 and 2)

◆ Examples of items that have not been examined because samples were difficult to obtain
Inside the sea water system pipes (Circulating water pipes of Units 1 ~ 4)

◆ Examples of items that have not been examined because priority was given to other items with a high contamination level and leakage risk

- Items with risks assumed to have a low contamination level
  Ground surface of the areas away from Units 1～4 / standing trees / building roofs / Unit 5 and 6 pits / drain ditch / Jinbazawa river, scrap yard, yard for fallen trees, and so on.
- Items with risks assumed to have a low possibility of leakage
  Water retained in the facility, water accumulated in the buildings, oil fence, and so on

4-4. Results of evaluation of the necessity for additional measures (Items requiring countermeasures)

- 21 items were classified as countermeasures need to be taken. Measures will be examined and implemented according to its considering the following priority and relations with reactor decommissioning operations.

[Priority for items for which countermeasures need to be taken]

●Items for which additional measures will be implemented immediately, in addition to the existing measures: 1 item (to be conducted in May 2015)
Target: High-concentration contamination sources in places that are not solid
(Sub-drain pit #16 near Unit 2 reactor building)

●Items for which additional measures will be implemented at an early stage: 10 items
Target: Comparatively high-concentration contamination sources in places that are not solid
(Puddle water on roofs, puddle water outdoors, soil verified as contaminated)
Places where dust might be generated due to operations and damage to facilities
(flange tank dismantling operation, sheet curing in temporary debris storage area, and so on)

●Items for which additional measures will be implemented subsequently: 10 items
Target: Contamination sources in solid places
Low-concentration contamination sources in places that are not solid
(Puddle water in buildings, puddle water inside facilities, low-concentration outdoor puddle water, low-concentration tank water)

5. Future Plan

- Measures will be implemented depending on priority for the target items classified in this comprehensive risk review. However, **risks change due to changes in the environment depending on the progress of reactor decommissioning operations**. The measures will **be continuously reviewed taking into account** these changes as appropriate .
- While continuously reviewing the measures, efforts will be made to reduce risks based on **the opinions of experts and people from the local community**.

Additional measures will be implemented in accordance with the priority

- Regarding risks that are classified as “Countermeasures necessary to be taken”, the details of additional measures will be considered and implemented sequentially while taking its priority into account.
- During implementation of the measures, in addition to the current priority, the period and content of examination and measures will be considered and implemented taking into account key issues in examination (exposure, difficulty in collecting samples, analytical capability), and relations with reactor decommissioning operations and risk reduction measures (such as operation area and resource allocation).

The review will be conducted regularly by reflecting changes that might occur

- The change in on-site condition will be monitored and the risk will be discussed in the On-site Coordination Council for Reactor Decommissioning and Measures against Contaminated Water by taking into account the change of the situation being observed. Based on the discussion held in the council, comprehensive risk review will be regularly conducted and announced.
- By identifying wide range of risks which might be transubstantiated along with the progress of the decommissioning work, TEPCO aims to reduce risks in the Fukushima Daiichi NPS as a whole.

【Reference】TEPCO's New Approach to , and Mechanism for, Information Disclosure (March 30,2015)

We sincerely apologize to the society, including everybody from Fukushima Prefecture, for the trouble and inconvenience caused due to the problem of information disclosure related to the drainage channel K at the Fukushima Daiichi Nuclear Power Station site.

1. New Information Disclosure Mechanism <Approach to Information Disclosure>

1.All radiation data of Fukushima Daiichi taken by TEPCO will be disclosed

2.Data will be disclosed via the TEPCO website and explanations of data of particular concern will be given at press conferences.

3.External parties will continually monitor and assess the new information disclosure rules and adherence to these rules in order to maintain transparency and reliability.

2. Communication <Enhancement of RC Monitoring / Function>

3. Enhancing communication with the local stakeholders

1.Create new opportunities to exchange opinions based on the "Fukushima Prefecture Nuclear Power Station Town Hall Meeting"*1

2.Increased frequency of visits and briefings given to local government administrative districts and temporary housing residents" associations.

3.Increased frequency of visits and briefings given to stakeholders*2 in the metropolitan region.

<Reference: Example of councils that exist currently>
-"Fukushima Council on the FDEC and Contaminated Water Countermeasures"(Held by the national government, February 2014~)Members: METI Deputy Minister, Fukushima Prefecture/surrounding local Government leaders, local experts and related organizations, regulatory agencies, FDEC/Contaminated Water Countermeasure Team, TEPCO (Executive Vice President Yoshiyuki Ishizaki, CDO Naohiro Masuda)
*1:Meetings at which information on the management of the power station and work being done at it is explained to residents of the siting community and their opinions are gathered.(Started in January 2003)
*2:Intellectuals, economic associations, consumer groups

Comprehensive Risk Review Results List

April 28, 2015
Tokyo Electric Power Company

(1) Needs to be inspected (2) Countermeasures are necessary (3) Countermeasures are currently being implemented (4) Observing status after countermeasure had been taken (5) At present additional measures are not required

No.	[1] Identification of risk location							[2] Risk analysis								[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
								(1) Water condition				(2) Outflow route							
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
1	K Drainage Channel	Risk of becoming the source of contamination of rainwater	Other structures	(1) Needs to be inspected	Rubbles	Rubble at the 10m ground around Units 1 - 4	・ High dose rubble storage area ・ Low dose rubble storage area ・ High dose large rubble (temporary storage steel frame) ・ Assembly base for removing rubble from Unit 3 ・ Rubble from the very beginning of the earthquake disaster (in the ground)	10m board around the Unit 1 - 4 reactor building	-	-	Not applicable	・ Rainwater	・ Rainfall	K drainage channel	・ Rubble → drainage channel → sea ・ Rubble → in the ground → sea	① Drainage channel outlet ② SD pit	① Irregular Every day (January 19, 2015 onwards) ② 3 times a week	・ The source of contamination of the drainage channel is investigated sequentially	-
2	K Drainage Channel	Risk of becoming the source of contamination of rainwater	Other structures	(1) Needs to be inspected	Building roof	Roofs of the Units 1 - 4 R/B (water quality not inspected)	・ Units 1, 3, 4 R/B ・ Units 1 - 4 Rw/B ・ Units 1, 3, 4 R/B truck bay entrance rooftop ・ Process main building ・ High temperature incinerator building ・ Common pool building etc.	Building at the 10m ground	Variation due to the amount of rainfall	Not inspected	-	・ Rainwater	・ Rainfall	K drainage channel	・ Rooftop → gutter → drainage channel → sea ・ Rooftop → gutter → in the ground → sea	① Drainage channel outlet ② SD pit	① Irregular Every day (January 19, 2015 onwards) ② 3 times a week	・ The source of contamination of the drainage channel is investigated sequentially	-
3	K Drainage Channel	Risk of becoming the source of contamination of rainwater	Other structures	(1) Needs to be inspected	Tank dikes, etc.	K drainage channel basin oil fence, etc.	・ No.4, 5 light oil tank fence ・ Units 1 - 4 transformer oil fence ・ EBSTr oil fence ・ EBTr disaster prevention underground tank	Around Units 1 - 4	Variation due to the amount of rainfall	Not inspected	-	・ Rainwater	・ Rainfall	K drainage channel	・ Within the dike → side ditch → drainage channel → sea	① Drainage channel outlet ② SD pit	① Irregular Every day (January 19, 2015 onwards) ② 3 times a week	・ The method of inspection is examined based on the priority	-
4	K Drainage Channel	Risk of becoming the source of contamination of rainwater	Other structures	(1) Needs to be inspected	Upper part of structures except for building	Upper part of structures except for building	・ Top plate of outdoor tanks	Each location	-	-	Not applicable	・ Rainwater	・ Rainfall	K drainage channel	・ Rooftop → gutter → drainage channel → sea ・ Rooftop → gutter → in the ground → sea	Drainage channel outlet	Irregular Daily (Jan 19, 2015 onwards)	The method of inspection is examined based on the priority	-
5	K Drainage Channel	Risk of becoming the source of contamination of rainwater	Other structures	(3) Countermeasures are currently being implemented	Building roof	Unit 2 truck bay entrance rooftop	・ Unit 2 truck bay entrance rooftop	Building at the 10m ground	Variation due to the amount of rainfall	Cs134：6.4E3 Cs137：2.3E4 Gross β：5.2E4 Sr90：4.5 H3：6.0E2 (Feb 19, 2015)	Disclosed	・ Rainwater	・ Outflow from the gutter during rainfall	K drainage channel	・ Rooftop → gutter → drainage channel → sea ・ Rooftop → gutter → in the ground → sea	Drainage channel outlet	Irregular Daily (Jan 19, 2015 onwards)	(a) Installing zeolite packed bags at the rooftop drain (b) Installing blue sheet on the rooftop (c) Removal of the source of contamination (roof block, spreading sand)	(a)(b) Implemented (c) Being implemented
6	K Drainage Channel	Risk of becoming the source of contamination of rainwater	Other structures	(5) At present additional measures are not required	Building roof	Buildings that have been erected after the earthquake disaster	・ Sub-drain transfer pump building ・ Provisional cesium adsorption vessel, Second provisional storage facility folding tent and crane operation room ・ Upland reactor cooling water injection pump rooftop ・ Freezing plant building (1), (20) / electrical appliances building etc.	Building at the 4m ground Building at the 10m ground Building at the 35m ground	Variation due to the amount of rainfall	Not inspected	-	・ Rainwater	・ Rainfall	K drainage channel	・ Rooftop → earth's surface → in the ground → sea ・ Rooftop → gutter → drainage channel → sea	① Groundwater outlet on the east of the turbine building ② Drainage channel	① Every week ② Irregular Every day (Jan 19, 2015 onwards)	-	-
7	K Drainage Channel	Risk of becoming the source of contamination of rainwater	Drainage channel & river	(3) Countermeasures are currently being implemented	Drainage Channel	K Drainage Channel	・ K drainage channel ・ Branch drainage channel	Around the buildings of Units 1 - 4	Variation due to rainfall	[K drainage channel outlet] Cs134：29 (March 19, 2015) Cs137：100 (March 19, 2015) Gross β：180 (March 19, 2015) H3：640 (March 18, 2015)	Disclosed	・ Rainwater	・ Rainfall	K drainage channel	・ Drainage channel → sea	Drainage channel outlet	Irregular Daily (Jan 19, 2015 onwards)	Cleaning Installation of zeolite packed bags and braid-type adsorbent Shifting the drainage channel in the port	Being implemented

(1) Needs to be inspected (2) Countermeasures are necessary (3) Countermeasures are currently being implemented (4) Observing status after countermeasure had been taken (5) At present additional measures are not required

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8	K Drainage Channel	Risk of becoming the source of contamination of rainwater	Other structures	(2) Countermeasures are necessary	Building roof	Unit 2 R/B	・ Unit 2 R/B	Building at the 10m ground	Variation due to the amount of rainfall	[Shed] Cs134：200 - 340 Cs137：650 - 1100 Gross β：920 - 1900 Sr90：10 - 20 H3：ND (<100) (Water sampling on Jan 16, 2015)	Disclosed	・ Rainwater	・ Rainfall	K drainage channel	・ Rooftop → gutter → drainage channel → sea ・ Rooftop → gutter → in the ground → sea	Drainage channel outlet	Irregular Daily (Jan 19, 2015 onwards)	・ Measures are being implemented sequentially from the roof (Unit 2 truck bay entrance rooftop) where the concentration is the highest	-
9	K Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(2) Countermeasures are necessary	Accumulated water treatment facilities in Units 1 - 4	Accumulated water transfer equipment	・ Piping, pump, etc.	Outdoors and inside the building	Main line extension approx. 3km	Same as Units 1 - 4 buildings accumulated water [Unit 1 T/B underground puddle water] Cs134：2.8E+5 Cs137：1.0E+6(Mar 17, 2015) [Unit 2 T/B underground puddle water] Cs134：5.8E+6 Cs137：2.2E+7(Mar 17, 2015) [Unit 3 T/B underground puddle water] Cs134：6.8E+6 Cs137：2.7E+7(Feb 26, 2015) [Unit 4 T/B underground puddle water] Cs134：1.4E+5、Cs137：48E+5,(Feb 17, 2015)	Disclosed	None	・ Leakage outside the system due to damage	K drainage channel	・ Equipment → earth's surface → drainage channel → sea ・ Equipment → earth's surface → sea	① Patrol ② Drainage channel outlet	① Every day ② Irregular Every day (Jan 19, 2015 onwards)	・ Changing to polyethylene pipes from which leakage is difficult	・ Implemented
10	K Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(4) Observing status after countermeasures have been taken	Accumulated water treatment facilities in Units 1 - 4	Cesium adsorption device (KURION)	・ Adsorption vessel	Outdoors and inside the building	Approx. 130	[Water after being treated by the cesium adsorption device] Cs134：ND Cs137：1.7E+2 (Feb 10, 2015)	Disclosed	・ None	・ Leakage outside the system due to damage	K drainage channel	・ Equipment → earth's surface → drainage channel → sea ・ Equipment → earth's surface → sea	① Patrol ② Drainage channel outlet	① Every day ② Irregular Every day (Jan 19, 2015 onwards)	・ Installation within the building ・ Leakage detector ・ Patrol	Under operation
11	K Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(4) Observing status after countermeasures have been taken	Accumulated water treatment facilities in Units 1 - 4	Second cesium adsorption device (SARRY)	・ Adsorption vessel	Outdoors and inside the building	Approx. 20	[A system water after being treated by second cesium adsorption device] Cs134：ND Cs137：1.9E+2 (Feb 17, 2015) 【B system water after being treated by second cesium adsorption device】 Cs134：6.9E+2 Cs137：2.6E+3 (Feb 17, 2015)	Disclosed	・ None	・ Leakage outside the system due to damage	K drainage channel	・ Equipment → earth's surface → drainage channel → sea ・ Equipment → earth's surface → sea	① Patrol ② Drainage channel outlet	① Every day ② Irregular Every day (Jan 19, 2015 onwards)	・ Installation within the building ・ Leakage detector ・ Patrol	Under operation
12	K Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(4) Observing status after countermeasures have been taken	Other facilities added after the earthquake disaster	SFP alternative cooling equipment	・ Tank, piping, heat exchanger	Outdoors and inside the building	(Unit 1) approx. 30 (Units 2 - 4) approx. 50	(Unit 1) Cs134：3.4E6、Cs137：1.4E7 (Jan 16, 2015) (Unit 2) Cs134：4.6E4, Cs137：2.6E5 (Jan 15, 2015) (Unit 3) Cs134：2.4E5, Cs137：8.1E5 (Jan 14, 2015) (Unit 4) Cs134：1.0E3, Cs137：6.7E3 (Jan 14, 2015)	Disclosed	・ None	・ Leakage outside the system due to damage	K drainage channel	・ Equipment → earth's surface → drainage channel → sea ・ Equipment → earth's surface → sea	① Skimmer surge tank water level ② SFP water quality ③ Drainage channel outlet	① Regular ② Every 3 months ③ Irregular Every day (Jan 19, 2015 onwards)	(a) Inserting corrosion inhibitor (b) Desalination	Implemented
13	K Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(4) Observing status after countermeasures have been	Other facilities added after the earthquake disaster	Reactor cooling water injection equipment	・ Tank, piping	Outdoors and inside the building	Approx. 15000 (Total capacity of the water source tank)	[Water purification device outlet water] H3：4.3E5 (Feb 20, 2015) Sr90：2.7E3 (Feb 10, 2015)	Disclosed	・ None	・ Leakage outside the system due to damage	K drainage channel	・ Equipment → earth's surface → drainage channel → sea ・ Equipment → earth's surface → sea	① Patrol ② Drainage channel outlet	① Every day ② Irregular Every day (Jan 19, 2015 onwards)	・ Prevention of spread of leakage by installing a trough ・ Installation of a leakage detector ・ Floor leakage detector	Implemented
14	K Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(4) Observing status after countermeasures have been	Other facilities added after the earthquake disaster	Mobile processing equipment (For cleaning SFP / trench / drainage canal)	・ Piping, unit	Outdoor	0	-	Not applicable	・ None	・ Leakage outside the system due to damage	K drainage channel	・ Equipment → earth's surface → drainage channel → sea ・ Equipment → earth's surface → sea	① Patrol ② Drainage channel outlet	① Once / week ② Irregular Every day (Jan 19, 2015 onwards)	・ Drainage is being stored	Implemented

(1) Needs to be inspected (2) Countermeasures are necessary (3) Countermeasures are currently being implemented (4) Observing status after countermeasure had been taken (5) At present additional measures are not required

No.	[1] Identification of risk location						[2] Risk analysis (1) Water condition				[2] Risk analysis (2) Outflow route				[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
15	K Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(1) Needs to be inspected	Existing outdoor tanks	Existing outdoor tanks at the 10m ground around Units 1 - 4 (welded tank that is planned to be disassembled)	・ Unit 2 waste surge tank	Outdoor (to the west of R/B)	Not inspected	Not inspected	-	・ None	Outflow during disassembly	K drainage channel	・ In the dike → earth's surface → drainage channel → sea	Drainage channel outlet	Irregular Daily (Jan 19, 2015 onwards)	・ Inspection will be carried out before disassembly	-
16	K Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(4) Observing status after countermeasures have been taken	Existing outdoor tanks	Other existing outdoor tanks (welded tanks)	・ Unit 4CST tank (welded tank) ・ Unit 1 waste surge tank (welded tank) ・ Unit 4 waste surge tank (welded tank)	Outdoor (10m ground)	(Unit 4 CST) approx. 1980	Not inspected	-	・ None	・ Leakage from the tank	K drainage channel	・ In the dike → earth's surface → drainage channel → sea	Drainage channel outlet	Irregular Daily (Jan 19, 2015 onwards)	・ Dike	Implemented
17	K Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(2) Countermeasures are necessary	Spent fuel pool, reactor well, DSP	Units 1 - 4 SFP etc.	・Units 1 - 4 SFP ・Unit 4 RPV, reactor well, DSP	Unit 1 Reactor Building Unit 2 Reactor Building Unit 3 Reactor Building Unit 4 Reactor Building	(Unit 1 SFP) approx. 1000 (Unit 2 SFP) approx.1200 (Unit 3 SFP) approx. 1400 (Unit 4 SFP) approx. 1400 (Unit 4 RPV, reactor well, DSP) approx. 1800	(Unit 1) Cs134 : 3.4E6, Cs137 : 1.4E7 (Jan 16, 2015) (Unit 2) Cs134 : 4.6E, Cs137 : 2.6E5 (Jan 15, 2015) (Unit 3) Cs134 : 2.4E5, Cs137 : 8.1E5 (Jan 14, 2015) (Unit 4) Cs134 : 1.0E3, Cs137 : 6.7E3 (Jan 14, 2015)	Disclosed	・ None	・ Leakage outside the system due to damage	K drainage channel	・ Equipment → building → earth's surface → drainage channel → sea	① Skimmer surge tank water level ② SFP water quality ③ Drainage channel outlet	① Regular ② Every 3 months ③ Irregular Every day (Jan 19, 2015 onwards)	(a) Inserting corrosion inhibitor (b) Desalination	Implemented
18	K Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(4) Observing status after countermeasures have been taken	Storage tanks for contaminated water etc.	SPT receiving water tank (Sr treated water / rectangular tank)	・ SPT receiving water tank (Sr treated water / rectangular tank)	Besides the SPT building	Approx. 85 (Tank capacity)	<Upstream> [Water after being treated by the cesium adsorption device] Cs134 : ND Cs137 : 1.7E+2 (Feb 10, 2015) [A system water after being treated by second cesium adsorption device] Cs134 : ND Cs137 : 1.5E+2 (Feb 7, 2015) [B system water after being treated by second cesium adsorption device] Cs134 : 6.9E+2 Cs137 : 2.6E+3 (Feb 17, 2015) <Downstream> [Water purification device inlet water] Cs134 : ND Cs137 : 1.8E+3 H3 : 4.1E+5 (Feb 10, 2015)	Disclosed	・ Contaminated water from the basement of the building	・ Leakage from the tank	K drainage channel	・ Tank → in the dike → earth's surface → drainage channel → sea ・ Tank → in the dike → earth's surface → in the ground → sea	① Patrol monitoring ② Drainage channel outlet	① Every day ② Irregular Every day (Jan 19, 2015 onwards)	・ Installing a concrete dike	Implemented
19	K Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Pits	(1) Needs to be inspected	Stack drain sump pit	Stack drain sump pit around Units 1 - 4	・Units 1/2 stack drain sump pit ・Units 3/4 stack drain sump pit ・Concentrated RW stack drain sump pit	Around Units 1 - 4	Not inspected	Not inspected	-	・ Inflow of rainwater ・ Groundwater	・ Overflow due to inflow of rainwater ・ Seepage into the ground due to deterioration & damage of the pit	K drainage channel	・ Pit → earth's surface → drainage channel → sea ・ Pit → earth's surface → in the ground → sea ・ Pit → in the ground → sea	① Drainage channel outlet ② SD pit	① Irregular Every day (January 19, 2015 onwards) ② 3 times a week	・ Inspection is difficult due to high atmospheric dose	-
20	A Drainage Channel	Risk of becoming the source of contamination of rainwater	Other structures	(1) Needs to be inspected	Building roof	Solid waste storage	・ Solid waste storage	Central part of the site environ	Variation due to the amount of rainfall	Not inspected	-	・ Rainwater	・ Rainfall	A Drainage Channel	・ Rooftop → gutter → drainage channel → sea ・ Rooftop → gutter → in the ground → sea	Drainage Channel	Irregular Once a day (Jan 19, 2015 onwards)	・ The method of inspection is examined based on the priority	-
21	A Drainage Channel	Risk of becoming the source of contamination of rainwater	Other structures	(1) Needs to be inspected	Tank dikes, etc.	A drainage channel basin oil fence, etc.	・ Units 5, 6 light oil tank fence ・ Units 5, 6 chemicals tank (sulfuric acid & caustic) fence ・ Outdoor marine organisms multi-layered tank fence	Seaside of Units 5/6	Variation due to rainfall	Not inspected	-	・ Rainwater	・ Rainfall	A Drainage Channel	・ Within the dike → side ditch → drainage channel → sea	① Drainage channel outlet ② SD pit	① Irregular Every day (January 19, 2015 onwards) ② 3 times a week	・ The method of inspection is examined based on the priority	-
22	A Drainage Channel	Risk of becoming the source of contamination of rainwater	Drainage channel & river	(3) Countermeasures are currently being implemented	Drainage Channel	A Drainage Channel	・ A drainage channel ・ Branch drainage channel	Central part of site environ at 35m board, around the Units 5 - 6 buildings	Variation due to rainfall	[A drainage channel outlet] Cs134 : 3.6 (March 19, 2015) Cs137 : 15 (March 19, 2015) Gross β : 32 (March 19, 2015) H3 : 10 (March 18, 2015)	Disclosed	・ Rainwater	・ Rainfall	A Drainage Channel	・ Drainage channel → sea	Drainage channel outlet	Irregular Daily (Jan 19, 2015 onwards)	・ Cleaning ・ Installation of zeolite packed bags and braid-type adsorbent	Being implemented

(1) Needs to be inspected　(2) Countermeasures are necessary　(3) Countermeasures are currently being implemented　(4) Observing status after countermeasure had been taken　(5) At present additional measures are not required

No.	[1] Identification of risk location							[2] Risk analysis								[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
								(1) Water condition				(2) Outflow route							
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
23	A Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(4) Observing status after countermeasures have been taken	Accumulated water treatment facilities in Units 1 - 4	RO concentrated water treatment equipment	・ Tank, piping, cleaning equipment	Outdoors and inside the building	At most approx. 1000	Sr90：1.0E+3 - about 1.0E+06 (Jan 2015)	Disclosed	・ None	・ Leakage outside the system due to damage	A Drainage Channel	・ Equipment → earth's surface → drainage channel → sea ・ Equipment → earth's surface → in the ground → sea	① Drainage channel outlet ② Leakage detection	① Irregular Every day (January 19, 2015 onwards) ② Under operation	・ Equipment skid receiving pan ・ System separation dike, dike in the outer periphery of the building ・ Leakage detector, patrol	Under operation
24	A Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(4) Observing status after countermeasures have been taken	Accumulated water treatment facilities in Units 1 - 4	High performance multi-nuclide removal equipment	・ Tank, piping, cleaning equipment	Outdoors and inside the building	At most approx. 3,000	Sr90：ND(<1.6E-1) Cs134：ND(<1.5E-1) Cs137：ND(<1.8E-1) (October 2014)	Disclosed	・ None	・ Leakage outside the system due to damage	A Drainage Channel	・ Equipment → earth's surface → drainage channel → sea ・ Equipment → earth's surface → in the ground → sea	① Drainage channel outlet ② Leakage detection	① Irregular Every day (January 19, 2015 onwards) ② Under operation	・ Equipment skid receiving pan ・ Weir in the outer periphery of the building ・ Leakage detector, patrol	Under operation
25	A Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(4) Observing status after countermeasures have been taken	Accumulated water treatment facilities in Units 1 - 4	Additionally installed multi-nuclide removal equipment	・ Tank, piping, cleaning equipment	Outdoors and inside the building	At most approx. 3,000	Sr90：ND(<1.6E-1) Cs134：ND(<1.5E-1) Cs137：ND(<1.8E-1) (September 2014)	Disclosed	・ None	・ Leakage outside the system due to damage	A Drainage Channel	・ Equipment → earth's surface → drainage channel → sea ・ Equipment → earth's surface → in the ground → sea	① Drainage channel outlet ② Leakage detection	① Irregular Every day (January 19, 2015 onwards) ② Under operation	・ Equipment skid receiving pan ・ System separation dike, dike in the outer periphery of the building ・ Leakage detector, patrol	Under operation
26	A Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(4) Observing status after countermeasures have been taken	Accumulated water treatment facilities in Units 1 - 4	Multi-nuclide removal equipment	・ Tank, piping, cleaning equipment	Outdoors and inside the building	At most approx. 4,000	Sr90：ND(<1.6E-1) Cs134：ND(<1.5E-1) Cs137：ND(<1.8E-1) (April 2013)	Disclosed	・ None	・ Leakage outside the system due to damage	A Drainage Channel	・ Equipment → earth's surface → drainage channel → sea ・ Equipment → earth's surface → in the ground → sea	① Drainage channel outlet ② Leakage detection	① Irregular Every day (January 19, 2015 onwards) ② Under operation	・ Equipment skid receiving pan ・ System separation dike, dike in the outer periphery of the building ・ Leakage detector, patrol	Under operation
27	A Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(4) Observing status after countermeasures have been taken	Accumulated water treatment facilities in Units 5, 6	RO device (for Units 5, 6 accumulated water)	・ Tank, piping, RO	North of Unit 6	Quantity of retained water At most approx. 14	Same as Unit 5, 6 storage tank Cs134(26),Cs137(65), Co60(13) (Feb 6, 2014)	Disclosed	・ Contaminated water from the accumulated storage tank	・ Leakage outside the system due to damage	A Drainage Channel	・ Equipment → earth's surface → drainage channel → sea ・ Equipment → earth's surface → in the ground → sea	Drainage channel outlet	Irregular Daily (Jan 19, 2015 onwards)	・ Installation inside the dike similar to the tank ・ Installation of leakage detector and dike in the RO device container ・ Carrying out patrol (4 times / day)	Under operation
28	A Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(4) Observing status after countermeasures have been taken	Other facilities added after the earthquake disaster	Equipment for cleaning and transferring sub-drain and groundwater drain	・ Tank, piping, cleaning equipment	Outdoors and inside the building	Approx. 4,000	[Water after cleaning] Cs134：ND Cs137：ND Gross β：ND - 0.93 H3：360 - 670 Analysis carried out from Sept 2014 - November 2014	Disclosed	・ None	・ Leakage outside the system due to damage	A Drainage Channel	・ Equipment → earth's surface → drainage channel → sea ・ Equipment → earth's surface → in the ground → sea	Drainage channel outlet	Irregular Daily (Jan 19, 2015 onwards)	・ Equipment skid receiving pan ・ System separation dike, dike in the outer periphery of the building ・ Leakage detector, patrol	Under operation

(1) Needs to be inspected (2) Countermeasures are necessary (3) Countermeasures are currently being implemented (4) Observing status after countermeasure had been taken (5) At present additional measures are not required

No.	[1] Identification of risk location							[2] Risk analysis (1) Water condition				[2] Risk analysis (2) Outflow route				[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
29	A Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(5) At present additional measures are not required	Existing facilities	No.2 filtered water system equipment	・ Tank, piping	Outdoors and inside the building	Filtered Water ; approx. 4800 Raw water ; approx. 1500	Raw water tank Cs134 : 0.67 (Mar 26, 2015) Cs137 : 0.46 (Mar 26, 2015) Gross β : 0.80 (Mar 26, 2015) Filtered Water Tank №2 Cs134 : 0.71 (Mar 26, 2015) Cs137 : 0.69 (Mar 26, 2015) Gross β : 0.80 (Mar 26, 2015)	Will be disclosed this time	・ None	・ Leakage outside the system due to damage ・ Rainfall	A Drainage Channel	・ Equipment → earth's surface → drainage channel → sea ・ Equipment → in the ground → sea	Drainage channel outlet	Irregular Daily (Jan 19, 2015 onwards)	Patrol	Under operation
30	A Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(2) Countermeasures are necessary	Accumulated water storage tanks for Units 5 and 6	Units 5, 6 storage tanks (flange tanks)	・ Units 5, 6 storage tanks (flange tanks)	North of Unit 6	Approx. 10000 (as of April 16, 2015)	Cs134(26), Cs137(65), Co60(13) (Feb 6, 2014)	Disclosed	・ None	・ Leakage from the tank	A Drainage Channel	・ Tank → in the dike → earth's surface → drainage channel → sea ・ Tank → in the ground → sea	① Tank water level ② Drainage channel outlet	① Regular ② Irregular Every day (Jan 19, 2015 onwards)	・ Installation of tank etc. within the dike ・ Patrol is being carried out (4 times / day)	Under operation
31	A Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(4) Observing status after countermeasures have been taken	Accumulated water storage tanks for Units 5 and 6	Units 5, 6 storage tanks (welded tanks)	・ Units 5, 6 storage tanks (welded tanks)	North of Unit 6	Approx. 5000 (as of April 16, 2015)	Cs134(26), Cs137(65), Co60(13) (Feb 6, 2014)	Disclosed	・ None	・ Leakage from the tank	A Drainage Channel	・ Tank → in the dike → earth's surface → drainage channel → sea ・ Tank → in the ground → sea	① Tank water level ② Drainage channel outlet	① Regular ② Irregular Every day (Jan 19, 2015 onwards)	・ Installation of tank etc. within the dike ・ Patrol is being carried out (4 times / day)	Under operation
32	A Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Pits	(1) Needs to be inspected	Stack drain sump pit	Unit 5 / 6 stack drain sump pit	・ Unit 5 / 6 stack drain sump pit	In the vicinity of the Unit 5 / 6 stack	Approx. 6	Not inspected	-	・ Inflow of rainwater ・ Groundwater	・ Overflow due to inflow of rainwater ・ Seepage into the ground due to deterioration & damage of the pit	A Drainage Channel	・ Pit → earth's surface → drainage channel → sea ・ Pit → earth's surface → in the ground → sea ・ Pit → in the ground → sea	① Drainage channel outlet ② SD pit	① Irregular Every day (January 19, 2015 onwards) ② 3 times a week	・ The method of inspection is examined based on the priority	-
33	B & C Drainage Channel	Risk of becoming the source of contamination of rainwater	Other structures	(1) Needs to be inspected	Tank dikes, etc.	B & C drainage channel basin oil fence, etc.	・ Outdoor transformer oil storage tank oil fence ・ Insulation oil storage tank oil fence ・ Provisional transformer oil fence ・ In-plant common transformer oil fence	West of D Tank Area	Variation due to the amount of rainfall	Not inspected	-	・ Rainwater	・ Rainfall	B & C Drainage Channel	・ Equipment → earth's surface → drainage channel → sea ・ In the dike → in the ground → sea	Drainage channel outlet	Irregular Daily (Jan 19, 2015 onwards)	・ The method of inspection is examined based on the priority	-
34	B & C Drainage Channel	Risk of becoming the source of contamination of rainwater	Other structures	(4) Observing status after countermeasures have been taken	Ground surface	Ground surface (areas where facing has been completed)	・35m ground within the premises of 1F ・Area where land has been reclaimed to the south of the Units 1 - 4 4m ground	35m ground within the premises of 1F	-	-	Not applicable	・ Rainwater	・ Rainfall	B & C Drainage Channel	・ Earth's surface → drainage channel → sea	Drainage channel outlet	Irregular Daily (Jan 19, 2015 onwards)	・ Decontamination & facing	Implemented

(1) Needs to be inspected (2) Countermeasures are necessary (3) Countermeasures are currently being implemented (4) Observing status after countermeasure had been taken (5) At present additional measures are not required

No.	[1] Identification of risk location						[2] Risk analysis (1) Water condition				[2] Risk analysis (2) Outflow route				[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
35	B & C Drainage Channel	Risk of becoming the source of contamination of rainwater	Other structures	(4) Observing status after countermeasures have been taken	Tank dikes, etc.	Tank dikes	・ Tank dikes in the tank area at 35m ground	Outdoor (35m ground)	Variation due to the amount of rainfall	Example of rain water within the dikes before undergoing cleaning Gross β：1600 Cs134：ND(<5.4) Cs137：ND(<8.7) (Mar 5, 2015) Example of rain water within the dikes which does not need to undergo cleaning Cs134：ND(<0.7099) Cs137：0.891 Sr90：ND(<0.5) H3：ND(<101.9) (Mar 25, 2015)	Disclosed	・ Leakage from the storage tank & valve ・ Rainwater	・ Dike overflow due to heavy rainfall / leakage from the tank ・ Leakage from the dikes	B & C Drainage Channel	・ In the dike → earth's surface → drainage channel → sea ・ In the dike → in the ground → sea	① Patrol for water level in the dikes ② Drainage channel outlet	① Every day ② Irregular Every day (Jan 19, 2015 onwards)	・ Raising the dikes ・ Installing double dikes	Implemented
36	B & C Drainage Channel	Risk of becoming the source of contamination of rainwater	Waste storage area	(2) Countermeasures are necessary	Water treated secondary waste storage area	Temporary adsorption vessel storage facility (Sarry / Kurion)	・ Temporary adsorption vessel storage facility (Facility 1, Facility 4)	・ Temporary adsorption vessel storage facility (Facility 1, Facility 4)	Variation due to the amount of rainfall	(The water in the adsorption vessel is difficult to collect due to the structure of the vessel)	Not applicable	・ Rainwater	・ Since there is no roof, if there is leakage from the adsorption vessel it flows out with the rainwater	B & C Drainage Channel	・ Equipment → drainage channel → sea ・ Equipment → in the ground → sea	① Floor, drain (dose, smear) ② Drainage channel outlet	① Every month ② Irregular Every day (Jan 19, 2015 onwards)	・Replacing the water in the adsorption vessel with fresh water and storing it after it is drained	Under operation
37	B & C Drainage Channel	Risk of becoming the source of contamination of rainwater	Waste storage area	(4) Observing status after countermeasures have been taken	Water treated secondary waste storage area	Temporary adsorption vessel storage facility (HIC)	・ Temporary adsorption vessel storage facility (Facility 2, Facility 3)	・ Temporary adsorption vessel storage facility (Facility 2, Facility 3)	0 (Small quantity of water is present in some of the box culverts)	Under inspection [No.172 (AJ5) in the periphery of the lid] Cs134:1.9E+3 Cs137:6.8E+3 Gross β：3.0E+6 (April 2, 2015)	Disclosed	・ Overflow from HIC	・ The structure is such that even if there is leakage from HIC there is no leakage outside the box culvert ・ The structure is such that it is difficult for rainwater to flow out	B & C Drainage Channel	・ Equipment → drainage channel → sea ・ Equipment → in the ground → sea	Drainage channel outlet	Irregular Daily (Jan 19, 2015 onwards)	・ The structure is such that even if there is leakage from HIC there is no leakage outside the box culvert	Implemented
38	B & C Drainage Channel	Risk of becoming the source of contamination of rainwater	Drainage channel & river	(3) Countermeasures are currently being implemented	Drainage Channel	B & C drainage channel	・ B & C drainage channel ・ Branch drainage channel	Tank area at 35m ground	Variation due to rainfall	[B & C drainage channel outlet] Cs134：2.4 (March 19, 2015) Cs137：9.2 (March 19, 2015) Gross β：32 (March 19, 2015) H3：ND (<82) (March 18, 2015)	Disclosed	・ Rainwater	・ Rainfall	B & C Drainage Channel	・ Drainage channel → sea	Drainage channel outlet	Irregular Daily (Jan 19, 2015 onwards)	・ Cleaning ・ Building culverts ・ Switching over to within the port	Being implemented
39	B & C Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(3) Countermeasures are currently being implemented	Other facilities added after the earthquake disaster	Equipment for transferring and treating rainwater within the dikes	・ Collection tank, piping, pump ・ Purification treatment RO membrane device (for rainwater) ・ Mobile RO membrane device (for rainwater)	Outdoor (35m ground)	Approx. 5250	[Example of rain water within the dikes before undergoing cleaning] Gross β：1600 Cs134：ND(<5.4) Cs137：ND(<8.7) (Mar 5, 2015) [Treated water tank] Cs134：ND(<5.0E-1) Cs137：ND(<7.6E-1) Gross β：ND(<4.2E+0) (Mar 30, 2015)	Disclosed	・ None	・ Leakage outside the system due to damage	B & C Drainage Channel	・ Equipment → in the dike → earth's surface → drainage channel → sea ・ Equipment → in the ground → sea	① Patrol ② Drainage channel outlet	① Every day ② Irregular Every day (Jan 19, 2015 onwards)	・ Changing to polyethylene pipes from which leakage is difficult	Being implemented

(1) Needs to be inspected (2) Countermeasures are necessary (3) Countermeasures are currently being implemented (4) Observing status after countermeasure had been taken (5) At present additional measures are not required

No.	[1] Identification of risk location							[2] Risk analysis								[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
								(1) Water condition				(2) Outflow route							
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
40	B & C Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(4) Observing status after countermeasures have been taken	Accumulated water treatment facilities in Units 1 - 4	Evaporation enrichment system	・ Tank, piping, device	Outdoors and inside the building	Approx. 300	[Evaporation enrichment system inlet water] Cs134：6.3E+3 (Jan 26, 2012) Cs137：1.1E+4 (Jan 26, 2012) [Evaporation enrichment system outlet water] H3：3.5E+6 (Dec 20, 2011) Gross β：8.9+E3 (Dec 20, 2011) [Evaporation enrichment system enrichment waste water] Cs134：1.7E+4 (Dec 20, 201) Cs137：2.5E+4 (Dec 20, 2011) Gross β：4.7E+8 (Dec 20, 2011)	Disclosed	・ Contaminated water from the basement of the building	・ Leakage outside the system due to damage	B & C Drainage Channel	・ Equipment → in the dike → earth's surface → drainage channel → sea ・ Equipment → in the ground → sea	① Patrol monitoring ② In-house leakage detector ③ Drainage channel outlet	① Every day ② Regular ③ Irregular Every day (Jan 19, 2015 onwards)	・ Installation of house dikes	Implemented
41	B & C Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(4) Observing status after countermeasures have been taken	Accumulated water treatment facilities in Units 1 - 4	Second mobile strontium removal device	・ Piping, unit	Outdoors and inside the building	Approx. 5 (x 4 Units)	Sr90：3.5E+7 (Mar 16, 2015)	Disclosed	・ None	・ Leakage outside the system due to damage	B & C Drainage Channel	・ Equipment → in the dike → earth's surface → drainage channel → sea ・ Equipment → in the ground → sea	Drainage Channel	Irregular Daily (Jan 19, 2015 onwards)	・ Device： installation within the container, installation of leakage detector, patrol	Under operation
42	B & C Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(4) Observing status after countermeasures have been taken	Accumulated water treatment facilities in Units 1 - 4	Water purification device (RO)	・ Tank, RO	Outdoors and inside the building	Approx. 200 (device capacity)	[Water purification device inlet water] Cs134：ND (Feb 10, 2015) Cs137：1.8E+3 (Feb 10, 2015) H3：4.1E+5 (Feb 10, 2015) [Water purification device outlet water] H3：4.3E+5 (Feb 10, 2015) Sr90：2.7E+3 (Feb 10, 2015) [Water purification device enriched water] Cs134：7.3E+2 (Feb 10, 2015) Cs137：3.1E+3 (Feb 10, 2015) H3：4.5E+5 (Feb 10, 2015) Sr90：1.7E+5 (Feb 10, 2015)	Disclosed	・ Contaminated water from the basement of the building	・ Leakage outside the system due to damage	B & C Drainage Channel	・ Equipment → in the dike → earth's surface → drainage channel → sea ・ Equipment → in the ground → sea	① Patrol monitoring ② In-house leakage detector ③ Drainage channel outlet	① Every day ② Regular ③ Irregular Every day (Jan 19, 2015 onwards)	・ Installation of house dikes	Implemented
43	B & C Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(4) Observing status after countermeasures have been taken	Accumulated water treatment facilities in Units 1 - 4	Mobile strontium removal device	・ Piping, unit	Outdoors and inside the building	Approx. 10 (x 2 Units)	Sr90：1.1E+7 (Feb 12, 2015)	Disclosed	・ None	・ Leakage outside the system due to damage	B & C Drainage Channel	・ Equipment → in the dike → earth's surface → drainage channel → sea ・ Equipment → in the ground → sea	Drainage channel outlet	Irregular Daily (Jan 19, 2015 onwards)	・ Device： installation within the container, installation of leakage detector, patrol	Under operation
44	B & C Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(4) Observing status after countermeasures have been taken	Other facilities added after the earthquake disaster	Groundwater BP equipment	・ Tank, piping, pump	Outdoors and inside the building	At most approx. 9,000	[Pumping well] (Sampled on Mar 26, 2015 and Mar 30, 2015) Gross β：ND H3：4.9 - 970 [Temporary storage tank] (Sampled on Mar 19, 2015, drained on Mar 30, 2015) Cs134：ND(<0.44) Cs137：ND(<0.73) Gross β：ND(<0.90) H3：96	Disclosed	・ None	・ Leakage outside the system due to damage	B & C Drainage Channel	・ Equipment → in the dike → earth's surface → drainage channel → sea ・ Equipment → in the ground → sea	① Water within the system ② Drainage channel outlet	① Once / week ② Irregular Every day (Jan 19, 2015 onwards)	・ Patrol	Under operation

(1) Needs to be inspected　(2) Countermeasures are necessary　(3) Countermeasures are currently being implemented　(4) Observing status after countermeasure had been taken　(5) At present additional measures are not required

No.	[1] Identification of risk location						[2] Risk analysis								[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
							(1) Water condition				(2) Outflow route							
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
45	B & C Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(2) Countermeasures are necessary	Storage tanks for contaminated water etc.	Liquid waste supply tank (Rectangular tank)	・ Liquid waste supply tank	Tank area at 35m ground	Approx. 1200 (Tank capacity)	[Water purification device inlet water] Cs134：ND (Feb 10, 2015) Cs137：1.8E+3 (Feb 10, 2015) H3：4.1E+5 (Feb 10, 2015)	Disclosed	・ None	・ Leakage from the tank	B & C Drainage Channel	・ Tank → in the dike → earth's surface → drainage channel → sea ・ Tank → in the ground → sea	① Patrol monitoring ② Drainage channel outlet	① Regular ② Irregular Every day (Jan 19, 2015 onwards)	・ Installing a concrete dike	Implemented
46	B & C Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(3) Countermeasures are currently being implemented	Existing outdoor tanks	No.1 filtered water tank (RO enriched saline water / welded tank)	・ No.1 filtered water tank (RO enriched saline water / welded tank)	Outdoor (35m ground)	Approx. 100 (under residual water treatment)	[No.1 filtered water tank] Cs-134：2.3E+03 Cs-137：4.3E+03 Gross β：6.6E+07 (Nov 19, 2013)	Disclosed	・ None	・ Leakage outside the system due to equipment damage	B & C Drainage Channel	・ Tank → in the dike → earth's surface → drainage channel → sea ・ Tank → in the ground → sea	① Tank water level outlet ② Patrol monitoring ③ Drainage channel	① Regular ② Every day ③ Irregular Every day (Jan 19, 2015 onwards)	(a) Installation of dikes (b) Residual water treatment	(a) Implemented (b) Being implemented
47	B & C Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(3) Countermeasures are currently being implemented	Storage tanks for contaminated water etc.	RO enriched saline water storage tanks (flange tanks)	・ RO enriched saline water storage tanks (flange tanks)	Tank area at 35m ground	Approx. 35000 (as of April 16, 2015)	[Water purification device enriched water] Cs134：1.3E3 (Dec 9, 2014) Cs137：4.9E3 (Dec 9, 2014) H3：5.0E5 (Dec 9, 2014) Gross β：2.1E7 (Dec 9, 2014)	Disclosed	・ None	・ Leakage from the tank	B & C Drainage Channel	・ Tank → in the dike → earth's surface → drainage channel → sea ・ Tank → in the ground → sea	① Tank water level ② Patrol monitoring ③ Drainage channel outlet	① Regular ② Every day ③ Irregular Every day (Jan 19, 2015 onwards)	(a) Raising the dikes and doubling them (b) Replacing with welded tanks (c) Cleaning of contaminated water etc.	(a) Implemented (b) (c) Being implemented
48	B & C Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(3) Countermeasures are currently being implemented	Treated water storage tank	ALPS treated water storage tanks (flange tanks)	・ ALPS treated water storage tanks (flange tanks)	Tank area at 35m ground	Approx. 26000 (as of April 16, 2015)	Sr90：ND(<1.5E-1) Cs134：ND(<2.8E-1) Cs137：ND(<2.8E-1)	Disclosed	・ None	・ Leakage from the tank	B & C Drainage Channel	・ Tank → in the dike → earth's surface → drainage channel → sea ・ Tank → in the ground → sea	① Tank water level ② Patrol monitoring ③ Drainage channel outlet	① Regular ② Every day ③ Irregular Every day (Jan 19, 2015 onwards)	(a) Raising the dikes and doubling them (b) Replacing with welded tanks etc.	(a) Implemented (b) Being implemented
49	B & C Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(3) Countermeasures are currently being implemented	Treated water storage tank	Sr treated water storage tanks (flange tanks)	・ Sr treated water storage tanks (flange tanks)	Tank area at 35m ground	Approx. 72000 (as of April 16, 2015)	Sr90：1.1E+7 (Feb 12, 2015)	Disclosed	・ None	・ Leakage from the tank	B & C Drainage Channel	・ Tank → in the dike → earth's surface → drainage channel → sea ・ Tank → in the ground → sea	① Tank water level ② Patrol monitoring ③ Drainage channel outlet	① Regular ② Every day ③ Irregular Every day (Jan 19, 2015 onwards)	(a) Raising the dikes and doubling them (b) Replacing with welded tanks (c) Cleaning of contaminated water etc.	(a) Implemented (b) (c) Being implemented
50	B & C Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(3) Countermeasures are currently being implemented	Other tanks added after the earthquake disaster	4000t notch tank (Rectangular tank)	・ 4,000t notch tank	Tank area at 35m ground	Approx. 370 (as of April 20, 2015)	[3000t notch tank] Drained [1000t notch tank] Cs134：ND(<13) Cs137：ND(<18) Gross β：72000 (June 2, 2014)	Disclosed	・ None	・ Leakage from the tank	B & C Drainage Channel	・ Tank → in the dike → earth's surface → drainage channel → sea ・ Tank → in the ground → sea	① Tank water level ② Patrol monitoring ③ Drainage channel outlet	① Regular ② Every day ③ Irregular Every day (Jan 19, 2015 onwards)	・ Draining and tank replacement	Being implemented

(1) Needs to be inspected (2) Countermeasures are necessary (3) Countermeasures are currently being implemented (4) Observing status after countermeasure had been taken (5) At present additional measures are not required

No.	[1] Identification of risk location						[2] Risk analysis								[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
							(1) Water condition				(2) Outflow route							
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
51	B & C Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(3) Countermeasures are currently being implemented	Fresh water storage tank	Fresh water storage tank (Rectangular tank)	・ Fresh water storage tank (Rectangular tank)	Tank area at 35m ground	Approx. 1600 (as of April 16, 2015)	[Water purification device outlet water] H3：4.3E5 (Feb 20, 2015) Sr90：2.7E3 (Feb 10, 2015)	Disclosed	・ None	・ Leakage from the tank	B & C Drainage Channel	・ Tank → in the dike → earth's surface → drainage channel → sea ・ Tank → in the ground → sea	① Tank water level ② Patrol monitoring ③ Drainage channel outlet	① Regular ② Every day ③ Irregular Every day (Jan 19, 2015 onwards)	(a) Installing concrete dikes (b) Replacing with welded tanks	Being implemented
52	B & C Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(3) Countermeasures are currently being implemented	Fresh water storage tank	Fresh water storage tanks (flange tanks)	・ Fresh water storage tanks (flange tanks)	Tank area at 35m ground	Approx. 11000 (as of April 16, 2015)	[Water purification device outlet water] H3：4.3E5 (Feb 20, 2015) Sr90：2.7E3 (Feb 10, 2015)	Disclosed	・ None	・ Leakage from the tank	B & C Drainage Channel	・ Tank → in the dike → earth's surface → drainage channel → sea ・ Tank → in the ground → sea	① Tank water level ② Patrol monitoring ③ Drainage channel outlet	① Regular ② Every day ③ Irregular Every day (Jan 19, 2015 onwards)	(a) Raising the dikes and doubling them (b) Replacing with welded tanks etc.	(a) Implemented (b) Being implemented
53	B & C Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(3) Countermeasures are currently being implemented	Waste storage tank	Tank for waste (concentrated liquid waste / horizontal storage tank)	・ Tank for waste (concentrated liquid waste / horizontal storage tank)	Tank area at 35m ground	Approx. 700 (as of April 16, 2015)	[Evaporation enrichment system enriched waste water] Cs134：1.7E+4 (Dec 20, 2011) Cs137：2.5E+4 (Dec 20, 2011) Gross β：4.7E+5 (Dec 20, 2011)	Disclosed	・ None	・ Leakage from the tank	B & C Drainage Channel	・ Tank → in the dike → earth's surface → drainage channel → sea ・ Tank → in the ground → sea	① Tank water level ② Patrol monitoring ③ Drainage channel outlet	① Regular ② Every day ③ Irregular Every day (Jan 19, 2015 onwards)	・ Replacing with welded tanks etc.	Being implemented
54	B & C Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(3) Countermeasures are currently being implemented	Fresh water storage tank	Fresh water storage tank (Horizontal storage tank)	・ Fresh water storage tank (Horizontal storage tank)	Tank area at 35m ground	Approx. 6000 (as of April 16, 2015)	[Water purification device outlet water] H3：4.3E5 (Feb 20, 2015) Sr90：2.7E3 (Feb 10, 2015)	Disclosed	・ None	・ Leakage from the tank	B & C Drainage Channel	・ Tank → in the dike → earth's surface → drainage channel → sea ・ Tank → in the ground → sea	① Tank water level ② Patrol monitoring ③ Drainage channel outlet	① Regular ② Every day ③ Irregular Every day (Jan 19, 2015 onwards)	・ Replacing with welded tanks etc.	Being implemented
55	B & C Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(3) Countermeasures are currently being implemented	Storage tanks for contaminated water etc.	RO enriched saline water storage tanks (welded tanks)	・ RO enriched saline water storage tanks (welded tanks)	Tank area at 35m ground	Approx. 29000 (as of April 16, 2015)	[Water purification device enriched water] Cs134：1.3E3 (Dec 9, 2014) Cs137：4.9E3 (Dec 9, 2014) H3：5.0E5 (Dec 9, 2014) Gross β：2.1E7 (Dec 9, 2014)	Disclosed	・ None	・ Leakage from the tank	B & C Drainage Channel	・ Tank → in the dike → earth's surface → drainage channel → sea ・ Tank → in the ground → sea	① Tank water level ② Patrol monitoring ③ Drainage channel outlet	① Regular ② Every day ③ Irregular Every day (Jan 19, 2015 onwards)	(a) Raising the dikes and doubling them (b) Cleaning of contaminated water etc.	(a) Implemented (b) Being implemented
56	B & C Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(3) Countermeasures are currently being implemented	Treated water storage tank	Sr treated water storage tanks (welded tanks)	・ Sr treated water storage tanks (welded tanks)	Tank area at 35m ground	Approx. 84000 (as of April 16, 2015)	Sr90：1.1E+7 (Feb 12, 2015)	Disclosed	・ None	・ Leakage from the tank	B & C Drainage Channel	・ Tank → in the dike → earth's surface → drainage channel → sea ・ Tank → in the ground → sea	① Tank water level ② Patrol monitoring ③ Drainage channel outlet	① Regular ② Every day ③ Irregular Every day (Jan 19, 2015 onwards)	(a) Raising the dikes and doubling them (b) Cleaning of contaminated water etc.	(a) Implemented (b) Being implemented

(1) Needs to be inspected (2) Countermeasures are necessary (3) Countermeasures are currently being implemented (4) Observing status after countermeasure had been taken (5) At present additional measures are not required

No.	[1] Identification of risk location						[2] Risk analysis (1) Water condition				[2] Risk analysis (2) Outflow route				[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
57	B & C Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(3) Countermeasures are currently being implemented	Temporary storage tank	Temporary storage tank for construction	・ Plastic tank	Entire area within the premises	Variation due to the construction work	Not inspected	-	・ None	・ Damage, deterioration and tumbling of the tank	B & C Drainage Channel	・ Tank → in the dike → earth's surface → drainage channel → sea ・ Tank → in the ground → sea	Drainage channel outlet	Irregular Daily (Jan 19, 2015 onwards)	・ Managing by setting management rules	Being implemented
58	B & C Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(4) Observing status after countermeasures have been taken	Treated water storage tank	ALPS treated water storage tanks (welded tanks)	・ ALPS treated water storage tanks (welded tanks)	Tank area at 35m ground	Approx. 363000 (as of April 16, 2015)	Sr90 : ND(<1.5E-1) Cs134 : ND(<2.8E-1) Cs137 : ND(<2.8E-1)	Disclosed	・ None	・ Leakage from the tank	B & C Drainage Channel	・ Tank → in the dike → earth's surface → drainage channel → sea ・ Tank → in the ground → sea	① Tank water level ② Patrol monitoring ③ Drainage channel outlet	① Regular ② Every day ③ Irregular Every day (Jan 19, 2015 onwards)	・ Raising the dikes and doubling them etc.	Implemented
59	B & C Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(4) Observing status after countermeasures have been taken	Waste storage tanks	Tanks for waste (concentrated liquid waste / welded tanks)	・ Tanks for waste (concentrated liquid waste / welded tanks)	Tank area at 35m ground	Approx. 8500 (as of April 16, 2015)	[Evaporation enrichment system enriched waste water] Cs134 : 1.7E+4 (Dec 20, 2011) Cs137 : 2.5E+4 (Dec 20, 2011) Gross β : 4.7E+5 (Dec 20, 2011)	Disclosed	・ None	・ Leakage from the tank	B & C Drainage Channel	・ Tank → in the dike → earth's surface → drainage channel → sea ・ Tank → in the ground → sea	① Tank water level ② Patrol monitoring ③ Drainage channel outlet	① Regular ② Every day ③ Irregular Every day (Jan 19, 2015 onwards)	Raising the dikes and doubling them etc.	Implemented
60	B & C Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Pits	(5) At present additional measures are not required	Other wells, etc.	Power cable pit (inspected, no water)	・ Hand-hole ・ South side 66kV switch-yard cable pit ・ Provisional transformer cable pit ・ Open trench	Tank area at 35m ground etc.	0	-	Not applicable	・ Rainwater	・ Rainfall	B & C Drainage Channel	・ Pit → earth's surface → drainage channel → sea ・ Pit → in the ground → sea	Drainage channel outlet	Irregular Daily (Jan 19, 2015 onwards)	-	-
61	Other Drainage Channels	Risk of becoming the source of contamination of rainwater	Other structures	(1) Needs to be inspected	Building roof	Buildings around the shallow draft quarry	・ Old water treatment building ・ Health & Safety Center Annex ・ Cask storage building	Building at the 10m ground	Variation due to the amount of rainfall	Not inspected	-	・ Rainwater	・ Rainfall	Shallow draft quarry drainage channel	・ Rooftop → rain gutter → drainage channel → sea	Drainage channel outlet	Irregular Daily (Jan 19, 2015 onwards)	・ The source of contamination of the drainage channel is investigated sequentially	-
62	Other Drainage Channels	Risk of becoming the source of contamination of rainwater	Other structures	(3) Countermeasures are currently being implemented	Tank dikes, etc.	Puddle water in the treated water buffer tank dikes	・ Treated water buffer tank dikes	35m ground	Approx. 56.7 (Volume of stagnant water in the dikes)	Cs134 : 6.1 Cs137 : 2.3 Gross β : 18 (Data collected on Jan 27, 2015)	Will be disclosed this time	・ Rainwater ・ Leakage from the treated water buffer tank	・ Dike overflow due to heavy rainfall / leakage from the tanks	Shallow draft quarry drainage channel	・ Tank → in the dike → earth's surface → drainage channel → sea ・ Tank → in the dike → earth's surface → in the ground → sea	Drainage channel outlet	Irregular Daily (Jan 19, 2015 onwards)	・ Changing the tank water from RO treated water to treated rain water (Implemented) ・ Installing the equipment for collecting the puddle water in the dikes into the buffer tanks (Implemented) ・ Coating inside the dikes (Implemented) ・ Installing roofs on the dikes (work in progress)	Work in progress partially

(1) Needs to be inspected　(2) Countermeasures are necessary　(3) Countermeasures are currently being implemented　(4) Observing status after countermeasure had been taken　(5) At present additional measures are not required

No.	[1] Identification of risk location						[2] Risk analysis								[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
							(1) Water condition				(2) Outflow route							
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
63	Other Drainage Channels	Risk of becoming the source of contamination of rainwater	Waste storage area	(1) Needs to be inspected	Various waste storage areas	Temporary storage area for rubble & felled tress (Storage depending on the surface dose of the rubble and felled tress)	・ Provisional storage facility ・ Temporary storage area for rubble (covered with sheets) ・ Temporary storage area for rubble (piled outdoors)) ・ Temporary storage area for rubble (packed in containers) ・ Temporary storage area for felled trees (piled outdoors) ・ Temporary storage cistern for felled trees	To the north of the site environ	Variation due to the amount of rainfall	Not applicable	Not applicable	・ Rainwater	・ Rainfall	Northern seawall area	・ Equipment → earth's surface → gutter → sea ・ Equipment → earth's surface → river → sea ・ Equipment → in the ground → sea	River Jinbazawa	Irregular	・ The method of inspection is examined based on the priority	-
64	Other Drainage Channels	Risk of becoming the source of contamination of rainwater	Waste storage area	(4) Observing status after countermeasures have been taken	Various waste storage areas	Soil cover type temporary storage facility	・ Soil cover type temporary storage facility	To the north of the site environ	Variation due to the amount of rainfall	Not applicable	Not applicable	・ Rainwater	・ Rainfall	Northern seawall area	・ Equipment → earth's surface → gutter → sea ・ Equipment → in the ground → sea	Groundwater on the downstream side of the facility	1 time / month	・ Installing impermeable sheet above / below rubble	Implemented

(1) Needs to be inspected (2) Countermeasures are necessary (3) Countermeasures are currently being implemented (4) Observing status after countermeasure had been taken (5) At present additional measures are not required

No.	[1] Identification of risk location						[2] Risk analysis								[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
							(1) Water condition				(2) Outflow route							
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
65	Other Drainage Channels	Risk of becoming the source of contamination of rainwater	Drainage channel & river	(1) Needs to be inspected	Drain etc.	Drain etc. around the site boundary	[Northern shore protection area] ・The location of outflow from the 2 hume pipe locations towards the seaside along the coast was confirmed ・One outflow during fencing (the seaside outlet could not be confirmed) was confirmed ・Outflow to the seaside from 2 locations on the top of the slope was confirmed (the seaside outlet could not be confirmed) <In the vicinity of the mouth of River Jinbazawa> ・Outflow towards the seaside from 1 hume pipe location (buried under gravel) was confirmed ・1 location of outflow from the road side gutter to the seaside was confirmed [Site boundary land-side area] ・Southern side of the site：Outflow is likely from 3 out of 11 locations within the premises, road drainage was confirmed at 8 locations ・Western side of the site：The flow direction from 1 pool needs to be confirmed ・Northern side of the site：Outflow from 8 hume pipe locations was confirmed [Southern shore protection area] ・Outflow from the gutter on the north-eastern side of the process building was confirmed ・Banquette drainage gutter along the slope and hume pipe ・Outflow from the old BC drainage channel was confirmed	Shore protection on the northern side of the site Land-side of the site boundary of the power station Shore protection on the southern side of the site	Variation due to the amount of rainfall	Not inspected	-	・Rainwater	・Rainfall	Northern shore protection area Land-side site boundary area Southern shore protection area	・Drain → sea ・Drain → land-side off-site	-	-	・The method of inspection is examined based on the priority	-
66	Other Drainage Channels	Risk of becoming the source of contamination of rainwater	Drainage channel & river	(3) Countermeasures are currently being implemented	Drainage Channel	Shallow draft quarry drainage channel	・Shallow draft quarry drainage channel ・Branch drainage channel	Shallow draft quarry	Variation due to the amount of rainfall	Cs134：8.7 (Mar 19, 2015) Cs137：34 (Mar 19, 2015) Gross β：55 (Mar 19, 2015) H3：16 (Mar 18, 2015)	Disclosed	・Rainwater	・Rainfall	Shallow draft quarry drainage channel	・Drainage channel → sea	Drainage channel outlet	Irregular Daily (Jan 19, 2015 onwards)	(a) Cleaning (b) Installation of zeolite packed bags and braid-type adsorbent -	Under construction
67	Other Drainage Channels	Risk of becoming the source of contamination of rainwater	Drainage channel & river	(5) At present additional measures are not required	River	River Jinbazawa	・River Jinbazawa	In and around the spoil banks	Variation due to the amount of rainfall	[In the vicinity of the river mouth] Cs134：<0.80 Cs137：<0.85 Gross β：2.9 H3：<7.7 (Feb 19, 2015)	Disclosed	・Rainwater	・Rainfall	River Jinbazawa	・River Jinbazawa → sea	-	-	-	-
68	Other Drainage Channels	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(1) Needs to be inspected	Existing facilities	Units 5, 6 condenser & existing sea-water system facility	・Units 5, 6 condenser ・Units 5, 6 Circulation Sea Water System ・Units 5, 6 RHRS system ・Units 5, 6 ASW system ・Units 5, 6 DGSW system ・Unit 6 MG-SET SW system	Unit 5 Turbine building Unit 6 Turbine building	Not inspected	Not inspected	-	・None	Intrusion of contamination into the sea-water system due to corrosion	Units 5, 6 drainage canal	・Equipment → drainage canal → sea	Inside and outside the port (in front of the intake and in front of the outlet)	Once a week	・The method of inspection is examined based on the priority	-
69	Other Drainage Channels	Risk of presence of accumulated water that becomes a source of contamination	Other	(1) Needs to be inspected	Other wells, etc.	Pond	・Pond	In the mountain forest in the north-west of the switch-yard of Units 5 & 6	Unknown	Not inspected	-	・Rainwater	・Rainfall	River Jinbazawa	・Pond → River Jinbazawa → sea	River Jinbazawa	Irregular	・The method of inspection is examined based on the priority	-

(1) Needs to be inspected　(2) Countermeasures are necessary　(3) Countermeasures are currently being implemented　(4) Observing status after countermeasure had been taken　(5) At present additional measures are not required

No.	[1] Identification of risk location						[2] Risk analysis								[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
							(1) Water condition				(2) Outflow route							
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
70	**Other Drainage Channels**	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(3) Countermeasures are currently being implemented	Reactor cooling water injection tank	Upland reactor cooling water injection buffer tank	・ Upland reactor cooling water injection buffer tank (flange tank)	35m ground on the office building side	Approx. 1000 (Tank capacity)	[Water purification device outlet water] H3：4.3E5 (Feb 20, 2015) Sr90：2.7E3 (Feb 10, 2015)	Disclosed	・ None	・ Leakage outside the system due to equipment damage ・ Leakage due to deterioration of the flange part	Shallow draft quarry drainage channel	・ Tank → in the dike → earth's surface → drainage channel → sea ・ Tank → in the dike → earth's surface → in the ground → sea	Drainage channel outlet	Irregular Daily (Jan 19, 2015 onwards)	(a) Dikes (b) Replacing with welded tanks	(a) Implemented (b) Being implemented
71	**Other Drainage Channels**	Risk of presence of accumulated water that becomes a source of contamination	Pits	(1) Needs to be inspected	Backwash valve pit and delivery valve pits	Units 5, 6 backwash valve pit and delivery valve pits (water quality not inspected)	・ Unit 5 backwash valve pit ・ Unit 6 backwash valve pit	Sea-side of Units 5, 6 turbine buildings	Not inspected	Not inspected	-	・ Inflow of rainwater ・ Inflow of groundwater	・ Overflow due to inflow of rainwater ・ Seepage into the ground due to deterioration & damage of the pit	Units 5, 6 drainage canal	・ Pit → drainage canal → sea ・ Pit → in the ground → sea	Inside and outside the port (in front of the intake and in front of the outlet)	Once a week	・ The method of inspection is examined based on the priority	-
72	**Other Drainage Channels**	Risk of presence of accumulated water that becomes a source of contamination	Pits	(2) Countermeasures are necessary	Backwash valve pit and delivery valve pits	Units 5, 6 backwash valve pit and delivery valve pits (water quality inspected)	・ Unit 5 pump room circulating water pump delivery valve pit ・ Unit 6 pump room circulating water pump delivery valve pit	Near the Units 5, 6 screens Attachment (3-1, 3-23)	(Unit 5 delivery valve pit) approx. 550 (Unit 6 delivery valve pit) approx. 850	[Unit 5 delivery valve pit] Cs134：100 Cs137：160 (Feb 6,2012) [Unit 6 delivery valve pit] Cs134：110 Cs137：140 (Feb 6, 2012)	Disclosed	・ Inflow of rainwater ・ Inflow of groundwater	・ Overflow due to inflow of rainwater ・ Seepage into the ground due to deterioration & damage of the pit	Units 5, 6 drainage canal	・ Pit → earth's surface →sea ・ Pit → in the ground → sea	Inside and outside the port (in front of the intake and in front of the outlet)	Once a week	・ Measures are being implemented sequentially from the delivery valve pit (Unit 2 / Unit 3) where the concentration is the highest	-
73	**Other Drainage Channels**	Risk of presence of accumulated water that becomes a source of contamination	Pits	(5) At present additional measures are not required	Drainage canal	Unit 5 drainage canal (Being used as the sea-water route for cooling)	・ Unit 5 drainage canal (Being used as the sea-water route for cooling)	Eastern side of Units 5 / 6 Turbine buildings	Sea-water is flowing	[Northern side of Units 5, 6 outlets] Cs134：ND(0.67) (Mar 16, 2015) Cs137：ND(0.45) (Mar 16, 2015) Gross β：12 (Mar 16, 2015) H3：ND(1.6) (Mar 12, 2015)	Disclosed	・ Rainwater ・ Inflow from the Units 5 / 6 sea-water system facility	・ Infiltration of rain water or sea water from within the sea-water system facility	Units 5, 6 drainage canal	・ Drainage canal → sea	Inside and outside the port (in front of the intake and in front of the outlet)	Once a week	・ Confirming the soundness of the equipment	Under operation
74	**Other Drainage Channels**	Risk of presence of accumulated water that becomes a source of contamination	Pits	(5) At present additional measures are not required	Drainage canal	Unit 6 drainage canal (Being used as the sea-water route for cooling)	・ Unit 6 drainage canal (Being used as the sea-water route for cooling)	Eastern side of Unit 6 Turbine building	Sea-water is flowing	[Northern side of Units 5, 6 outlets] Cs134：ND(0.67) (Mar 16, 2015) Cs137：ND(0.45) (Mar 16, 2015) Gross β：12 (Mar 16, 2015) H3：ND(1.6) (Mar 12, 2015)	Disclosed	・ Rainwater ・ Inflow from the Units 5 / 6 sea-water system facility	・ Infiltration of rain water or sea water from within the sea-water system facility	Units 5, 6 drainage canal	・ Drainage canal → sea	Inside and outside the port (in front of the intake and in front of the outlet)	Once a week	・ Confirming the soundness of the equipment	Under operation
75	**Groundwater (in the open culvert)**	Risk of becoming the source of contamination of rainwater	Contaminated soil	(2) Countermeasures are necessary	Contaminated soil	Contaminated soil (in areas other than around the H4 area)	・ Soil near the eastern side of Units 1 - 4 turbine buildings ・ Soil that could not be collected when there was leakage in the past (in areas other than around the H4 area)	Eastern side of Units 1 - 4 Turbine buildings	-	-	Not applicable	・ Rainwater	・ Rainfall	Groundwater (in the open culverts 1 - 4)	・ In the ground → sea	Groundwater to the east of the turbine building	Once a week	(a) Installing sea-side impermeable wall (b) Ground improvement by means of water glass ・ Closing of the sea-side impermeable wall (so that there is no leakage)	(a) Implemented (b) Work in progress

(1) Needs to be inspected　(2) Countermeasures are necessary　(3) Countermeasures are currently being implemented　(4) Observing status after countermeasure had been taken　(5) At present additional measures are not required

No.	[1] Identification of risk location							[2] Risk analysis								[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
								(1) Water condition				(2) Outflow route							
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
76	**Groundwater (in the open culvert)**	Risk of becoming the source of contamination of rainwater	Contaminated soil	(3) Countermeasures are currently being implemented	Contaminated soil	Contaminated soil (soil that could not be collected when there was tank leakage in the past) (around the H4 area)	・ Contaminated soil (soil that could not be collected when there was tank leakage in the past) (around the H4 area)	Tank area	-	-	Not applicable	・ Rainwater	・ Rainfall	Groundwater (in the open culverts 1 - 4)	・ In the ground → sea	Groundwater to the east of the turbine building	Once a week	(a) Preventing outflow by installing apatite (b) Collecting soil during tank replacement	(a) Implemented (b) Work in progress
77	**Groundwater (in the open culvert)**	Risk of becoming the source of contamination of rainwater	Other structures	(1) Needs to be inspected	Building roof	Roofs of the Units 1 - 4 T/B (water quality not inspected)	・ Units 3, 4 T/B ・ Units 1, 2 New S/B ・ Units 3, 4 New S/B ・ Units 1 - 4 access control station ・ Storm drain building (side of Units 1, 2) ・ Storm drain building (side of Units 3, 4)　etc.	Building at the 10m ground	Variation due to the amount of rainfall	Not inspected	-	・ Rainwater	・ Rainfall	Groundwater (in the open culverts 1 - 4)	・ Rooftop → gutter → drainage canal → in the ground → sea ・ Rooftop → gutter → in the ground → sea	Groundwater to the east of the turbine building	Once a week	・ The source of contamination of the drainage canal is being investigated sequentially	-
78	**Groundwater (in the open culvert)**	Risk of becoming the source of contamination of rainwater	Other structures	(1) Needs to be inspected	Tank dikes, etc.	Oil fence on the sea-side around Units 1 - 4 etc.	・ Units 1 - 4 chemicals tank (sulfuric acid & caustic) fence ・ Units 1, 2 light oil tank fence	Seaside of Units 1 - 4	Variation due to the amount of rainfall	Not inspected	-	・ Rainwater	・ Rainfall	Groundwater (in the open culverts 1 - 4)	・ In the dike → gutter → drainage canal → in the ground → sea ・ In the dike → in the ground → sea	Groundwater to the east of the turbine building	Once a week	・ The method of inspection is examined based on the priority	-
79	**Groundwater (in the open culvert)**	Risk of becoming the source of contamination of rainwater	Other structures	(2) Countermeasures are necessary	Building roof	Roof of the Units 1 - 4 turbine buildings (water quality inspected)	・Unit 1 T/B ・Unit 2 T/B	Building at the 10m ground	Variation due to the amount of rainfall	[Unit 1 T/B shed] Cs134：250 - 740 Cs137：980 - 2700 Gross β：1400 - 6900 (Water sampling Nov 26, 2014)	Disclosed	・ Rainwater	・ Rainfall	Groundwater (in the open culverts 1 - 4)	・ Rooftop → gutter → drainage canal → in the ground → sea ・ Rooftop → gutter → in the ground → sea	Groundwater to the east of the turbine building	Once a week	・ Measures are being implemented sequentially from the roof (Unit 2 truck bay entrance rooftop) where the concentration is the highest	-
80	**Groundwater (in the open culvert)**	Risk of becoming the source of contamination of rainwater	Other structures	(3) Countermeasures are currently being implemented	Ground surface	Ground surface (areas where facing is planned)	・ Ground surface (areas where facing is planned)	10m ground within the premises of 1F	-	-	Not applicable	・ Rainwater	・ Rainfall	Groundwater (in the open culverts 1 - 4)	・ Earth's surface → drainage channel → sea ・ Earth's surface → underground → sea	Groundwater to the east of the turbine building	Once a week	・ Decontamination & facing	Being implemented
81	**Groundwater (in the open culvert)**	Risk of becoming the source of contamination of rainwater	Other structures	(3) Countermeasures are currently being implemented	Rubble	Rubble from the very beginning of the earthquake disaster (earth's surface)	・ Rubble from the very beginning of the earthquake disaster (earth's surface)	10m ground	-	-	Not applicable	・ Rainwater	・ Rainfall	Groundwater (in the open culverts 1 - 4)	・ Earth's surface → in the ground → sea	Groundwater to the east of the turbine building	Once a week	・ Rubble removal & facing	Being implemented

(1) Needs to be inspected　(2) Countermeasures are necessary　(3) Countermeasures are currently being implemented　(4) Observing status after countermeasure had been taken　(5) At present additional measures are not required

No.	[1] Identification of risk location							[2] Risk analysis								[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
								(1) Water condition				(2) Outflow route							
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
82	**Groundwater (in the open culvert)**	Water generated during work	Work	(3) Countermeasures are currently being implemented	Work	Discharge of water during the work carried out in the area around Units 1 - 4	・ Sprinkling of water in order to control scattering of dust while knocking down the building during improvement and maintenance of the yard around the Unit 2 reactor building ・ Sprinkling of water as anti-scattering measures while removing the rubble from the Unit 1 reactor building ・ Drainage from the cooling tower of the sea-water piping trench freezing plant	Yard on the western side of the Unit 2 reactor building	Approx. $3m^3/h$	・ Use of water drawn from off-site (filtered water)	Not applicable	・ None	・ Sprinkling of water	Groundwater (in the open culverts 1 - 4)	・ In the ground → sea	Groundwater to the east of the turbine building	Once a week	・ Applying anti-scattering agent before sprinkling water to control outflow (While knocking down Unit 2 building, removing rubble from Unit 1)	Being implemented
83	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(1) Needs to be inspected	Existing facilities	Existing facilities within the buildings of Units 1 - 4	・ Each system and facility in Units 1 - 4 (piping, tanks, pumps etc.)	Within the building	Not inspected	Not inspected	-	・ None	・ Leakage outside the system due to damage	Groundwater (in the open culverts 1 - 4)	・ Equipment → basement of the building → groundwater → sea	Groundwater to the east of the turbine building	Once a week	・ The method of inspection is examined based on the priority	-
84	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(1) Needs to be inspected	Existing facilities	Existing outdoor facilities around Units 1 - 4	・ Units 1 - 4 HVAC system facility ・ Units 1 - 4 OG system facility ・ Units 1 - 4 AC system facility ・ Units 1 - 4 SGTS system facility ・ Units 1 - 4 FP system facility etc.	Outdoor	Not inspected (not possible to inspect underground portion)	Not inspected	-	・ None	-	Groundwater (in the open culverts 1 - 4)	・ Equipment → earth's surface → drainage channel → sea ・ Equipment → in the ground → sea	Groundwater to the east of the turbine building	Once a week	・ The method of inspection is examined based on the priority	-
85	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(1) Needs to be inspected	Existing facilities	Units 1 - 4 condenser & existing sea-water system facility	・ Units 1 - 4 condenser ・ Units 1 - 4 Circulation Sea Water System ・ Units 1 - 4 RHRS system ・ Units 1 - 4 ASW system ・ Units 1 - 4 DGSW system	Units 1 - 4 Turbine buildings	Not inspected	Not inspected (inside the sea-water system piping)	-	・ Contamination within the equipment that comes in contact with the sea-water system	Intrusion of contamination into the sea-water system due to corrosion	Groundwater (in the open culverts 1 - 4)	・ Equipment → Sea-water system piping → in the ground → sea	Groundwater to the east of the turbine building	Once a week	・ The method of inspection is examined based on the priority	-
86	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Building	(1) Needs to be inspected	Accumulated water in the building	Units 1 - 3 hold-up building	・ Units 1 - 3 hold-up building	10m ground	Not inspected	Not inspected	-	・ Groundwater level	・ Reversal of the building water level and the groundwater level	Groundwater (in the open culverts 1 - 4)	・ Building → in the ground → sea	Groundwater to the east of the turbine building	Once a week	・ The method of inspection is examined based on the priority	-
87	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Building	(3) Countermeasures are currently being implemented	Accumulated water in the building	Accumulated water in the buildings of Units 1 -4 (including the sites that are not connected)	・ Accumulated water in the buildings of Units 1 -4 (including the sites that are not connected)	In the buildings of Units 1 - 4	Approx. 62500 (as of Feb 19, 2015)	[Unit 1 T/B basement puddle water] Cs134：2.8E+5,Cs137：1.0E+6 (Mar 17, 2015) [Unit 2 T/B basement puddle water] Cs134：5.8E+6, Cs137：2.2E+7 (Mar 17, 2015) [Unit 3 T/B basement puddle water] Cs134：6.8E+6, Cs137：2.7E+7, Co60：1.2E+4 (Feb 26, 2015) [Unit 4 T/B basement puddle water] Cs134：1.4E+5, Cs137：48E+5, (Feb 17, 2015)	Disclosed	・ Core coolant, rainwater, groundwater etc.	・ Reversal of the building water level and the groundwater level	Groundwater (in the open culverts 1 - 4)	・ Building → in the ground → sea	① Building water level ② Groundwater to the east of the turbine building ③ SD pit	① Regular ② Once a week ③ Thrice a week	(a) Controlling the building water level (b) Measures for controlling the inflow of groundwater and removal of accumulated water along with the reduction in groundwater level due to the measures taken	(a) Under operation (b) Being implemented

(1) Needs to be inspected　(2) Countermeasures are necessary　(3) Countermeasures are currently being implemented　(4) Observing status after countermeasure had been taken　(5) At present additional measures are not required

No.	[1] Identification of risk location						[2] Risk analysis (1) Water condition				[2] Risk analysis (2) Outflow route				[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
88	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(1) Needs to be inspected	Existing outdoor tanks	Fire prevention water tank / water purification tank / relay tank / water storage tank	・ Fire prevention water tank ・ Water purification tank / relay tank ・ Water storage tank	Locations within the premises	Not inspected	Not inspected	-	・ Rainwater (Underground type includes rainwater + groundwater)	・ Rainwater ・ Leakage outside the system due to equipment damage	Groundwater (in the open culverts 1 - 4)	・ Equipment → in the ground → sea	Groundwater to the east of the turbine building	Once a week	・ The method of inspection is examined based on the priority	
89	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(4) Observing status after countermeasures have been taken	Existing outdoor tanks	Unit 1 CST tanks (welded tanks)	・ Unit 1 CST tanks (welded tanks)	Outdoor (10m ground)	Approx. 1720	Cs134：6.4E+5 Cs137：2.5E+6 Gross β：3.3E+6 (Water sampling Mar 23, 2015)	Will be disclosed this time	・ None	・ Leakage outside the system due to equipment damage	Groundwater (in the open culverts 1 - 4)	・ Equipment → earth's surface → in the ground → sea	Groundwater to the east of the turbine building	Once a week	・ Dike	Implemented
90	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(4) Observing status after countermeasures have been taken	Existing outdoor tanks	Unit 2 CST tanks (welded tanks)	・ Unit 2 CST tanks (welded tanks)	Outdoor (10m ground)	Approx. 2220	Cs134：1.7E+4 Cs137：5.7E+4 Gross β：3.3E+6 (Water sampling Mar 23, 2015)	Will be disclosed this time	・ None	・ Leakage outside the system due to equipment damage	Groundwater (in the open culverts 1 - 4)	・ Equipment → earth's surface → in the ground → sea	Groundwater to the east of the turbine building	Once a week	・ Dike	Implemented
91	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(4) Observing status after countermeasures have been taken	Existing outdoor tanks	Unit 3 CST tanks (welded tanks)	・ Unit 3 CST tanks (welded tanks)	Outdoor (10m ground)	Approx. 2448 (Tank capacity)	[Water purification device outlet water] H3：4.3E5 (Feb 20, 2015) Sr90：2.7E3 (Feb 10, 2015)	Disclosed	・ None	・ Leakage outside the system due to equipment damage	Groundwater (in the open culverts 1 - 4)	・ Equipment → earth's surface → in the ground → sea	Groundwater to the east of the turbine building	Once a week	・ Dike	Implemented
92	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(4) Observing status after countermeasures have been taken	Other tanks added after the earthquake disaster	Underground water storage tanks	・ Underground water storage tanks	Tank area at 35m ground	Implementation of draining	-	Not applicable	・ Rainwater	・ Leakage from the underground water storage tank	Groundwater (in the open culverts 1 - 4)	・ Equipment → in the ground → sea	① Underground water storage tank (drain hole & detection hole) ② Surrounding boring holes & sea-side observation holes	Once / day - once / week (Revising the frequency is being considered)	・ Draining since leakage was confirmed	Implemented
93	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Trenches	(3) Countermeasures are currently being implemented	Trenches connecting buildings of Units 1 - 4	Trenches connecting buildings of Units 1 - 4, which have not been inspected	・ Unit 2 light oil piping trench ・ Heavy oil piping trench (Eastern side of Units 3,4) ・ Unit 1 hot shower drain tank connecting duct ・ Unit 2 - 3 emergency power cable connecting duct ・ Unit 3 off-gas piping duct (northern side) ・ Unit 4 off-gas piping duct	Around Units 1 - 4 Attachments (1-19, 1-27, 1-10, 1-16, 1-25, 1-35)	Not inspected (Internal condition cannot be inspected due to high dose or obstacles)	Not inspected	-	・ Inflow of rainwater ・ Inflow of groundwater	・ Overflow due to inflow of rainwater ・ Seepage into the ground due to deterioration & damage of the pit	Groundwater (in the open culverts 1 - 4)	・ Trench → earth's surface → sea ・ Trench → in the ground → sea	Groundwater to the east of the turbine building	Once a week	(a) Installation of the sea-side impermeable wall (b) Ground improvement by means of water glass	(a) Under construction (b) Implemented

(1) Needs to be inspected (2) Countermeasures are necessary (3) Countermeasures are currently being implemented (4) Observing status after countermeasure had been taken (5) At present additional measures are not required

No.	[1] Identification of risk location							[2] Risk analysis								[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
								(1) Water condition				(2) Outflow route							
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
94	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Trenches	(3) Countermeasures are currently being implemented	Trenches connecting buildings of Units 1 - 4	Trenches connecting buildings of Units 1 - 4, which have not been inspected (that have water)	・ Unit 1 sea-water piping trench ・ Unit 1 control cable duct ・ Centralized environmental facility waste system common piping duct (Unit 2 waste system common piping duct) ・ Unit 1chemical tank connecting duct ・ Unit 4 chemical tank connecting duct etc.	Around Units 1 - 4 Attachments (1-3, 1-4, 1-6, 1-8, 1-29, 1-30, 1-36, 1-1, 1-2, 1-5, 1-9, 1-26, 1-33, 1-37, 1-40)	Approx. 2 to 2400	Cs134：2.4E1 - 1.5E3 Cs137：8.3E1 - 5.1E3 Gross β：1.2E2 - 1.1E4 H3：ND - 7.9E3 (Collection period： Dec 2014)	Disclosed	・ Inflow of rainwater ・ Inflow of groundwater	・ Overflow due to inflow of rainwater ・ Seepage into the ground due to deterioration & damage of the pit	Groundwater (in the open culverts 1 - 4)	・ Trench → earth's surface → sea ・ Trench → in the ground → sea	① Puddle water in the trench ② Groundwater to the east of the turbine building	① Once a year ② Once a week	(a) Installation of the sea-side impermeable wall (b) Ground improvement by means of water glass	(a) Under construction (b) Implemented
95	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Trenches	(3) Countermeasures are currently being implemented	Trenches connecting buildings of Units 1 - 4	Units 2 - 4 DG connecting duct	・ Units 2 - 4 DG connecting duct	Mountain-side of Units 2 - 4 Attachment (1-12)	Approx. 1600	Cs134：6.1E2 Cs137：1.9E3 Gross β：2.2E3 H3：2.2E2 (Dec 2014)	Disclosed	・ Inflow of rainwater ・ Inflow of groundwater	・ Overflow due to inflow of rainwater ・ Seepage into the ground due to deterioration & damage of the pit	Groundwater (in the open culverts 1 - 4)	・ Trench → earth's surface → sea ・ Trench → in the ground → sea	① Puddle water in the trench ② Groundwater to the east of the turbine building	① Once a year ② Once a week	(a) Removing contaminated water (b) Filling concrete (c) Installing impermeable wall on the sea-side (d) Ground improvement by means of water glass	(a)(b) Partially implemented (c) Under construction (d) Implemented
96	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Trenches	(3) Countermeasures are currently being implemented	Trenches connecting buildings of Units 1 - 4	Unit 2 sea-water piping trench	・ Unit 2 sea-water piping trench	Sea-side of the Unit 2 turbine building (Attachment 1-41)	Approx. 1860 (as of April 21)	[Shaft C] Cs134：1.0E8 (Feb 5, 2015) Cs137：3.5E8 (Feb 5, 2015) Gross β：2.2E8 (Feb 5, 2015) H 3 ：1.9E6 (Feb 5, 2015)	Disclosed	・ Connected to the accumulated water in the buildings	・ Overflow due to increase in accumulated water in the buildings due to tsunami ・ Seepage into the ground due to deterioration of the trench wall etc.	Groundwater (in the open culverts 1 - 4)	・ Trench → earth's surface → sea ・ Trench → in the ground → sea	① Puddle water in the trench ② Groundwater to the east of the turbine building	① Irregular (as appropriate) ② Once a week	(a) Removing contaminated water (b) Filling concrete (c) Installing impermeable wall on the sea-side (d) Ground improvement by means of water glass	(a) - (c) Under construction (d) Implemented
97	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Trenches	(3) Countermeasures are currently being implemented	Trenches connecting buildings of Units 1 - 4	Unit 3 sea-water piping trench	・ Unit 3 sea-water piping trench	Sea-side of the Unit 3 turbine building (Attachment 1-42)	Approx. 2660 (as of April 21)	[Shaft D] Cs134：5.6E5 (Feb 27, 2015) Cs137：1.9E6 (") Gross β ：4.2E6 (") H 3 ：1.5E5 (")	Disclosed	・ Intrusion of rainwater ・ Connected to the accumulated water in the buildings	・ Overflow due to increase in accumulated water in the buildings due to tsunami ・ Seepage into the ground due to deterioration of the trench wall etc.	Groundwater (in the open culverts 1 - 4)	・ Trench → earth's surface → sea ・ Trench → in the ground → sea	① Puddle water in the trench ② Groundwater to the east of the turbine building	① Irregular (as appropriate) ② Once a week	(a) Removing contaminated water (b) Filling concrete (c) Installing impermeable wall on the sea-side (d) Ground improvement by means of water glass	(a) - (c) Under construction (d) Implemented
98	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Trenches	(3) Countermeasures are currently being implemented	Trenches connecting buildings of Units 1 - 4	Unit 3 start-up transformer cable duct	・ Unit 3 start-up transformer cable duct	Mountain-side of Units 3 Attachment (1-21)	Approx. 750	Cs134：1.6E2 Cs137：5.3E2 Gross β：8.1E2 H3：1.3E2 (Dec 2014)	Disclosed	・ Inflow of rainwater ・ Inflow of groundwater	・ Overflow due to inflow of rainwater ・ Seepage into the ground due to deterioration & damage of the pit	Groundwater (in the open culverts 1 - 4)	・ Trench → earth's surface → sea ・ Trench → in the ground → sea	① Puddle water in the trench ② Groundwater to the east of the turbine building	① Once a year ② Once a week	(a) Stopping of water by filling the locations from where there is inflow into the buildings (b) Installing impermeable wall on the sea-side (c) Ground improvement by means of water glass	(a) Partially implemented (b) Work in progress (c)Implemented
99	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Trenches	(3) Countermeasures are currently being implemented	Trenches connecting buildings of Units 1 - 4	Units 2, 3 power cable trenches	・ Unit 2 power cable trench ・ Unit 3 power cable trench	Near Unit 2 screen Attachment (1-17) Near Unit 3 screen Attachment (1-28)	Not inspected (Cannot be accessed due to high dose)	Not inspected	-	・ Inflow of rainwater ・ Inflow of groundwater	・ Overflow due to inflow of rainwater ・ Seepage into the ground due to deterioration & damage of the pit	Groundwater (in the open culverts 1 - 4)	・ Trench → earth's surface → sea ・ Trench → in the ground → sea	Groundwater to the east of the turbine building	Once a week	(a) Removing contaminated water (b) Filling concrete (c) Installing impermeable wall on the sea-side (d) Ground improvement by means of water glass	(a)(b) Partially implemented (c) Work in progress (d) Implemented

(1) Needs to be inspected　(2) Countermeasures are necessary　(3) Countermeasures are currently being implemented　(4) Observing status after countermeasure had been taken　(5) At present additional measures are not required

No.	[1] Identification of risk location							[2] Risk analysis								[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
								(1) Water condition				(2) Outflow route							
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
100	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Trenches	(3) Countermeasures are currently being implemented	Trenches connecting buildings of Units 1 - 4	Units 4 power cable trenches	・ Units 4 power cable trenches	Near the Unit 4 screen Attached document (1-38)	Not inspected (Cannot be accessed due to high dose)	Not inspected	-	・ Inflow of rainwater ・ Inflow of groundwater	・ Overflow due to inflow of rainwater ・ Seepage into the ground due to deterioration & damage of the pit	Groundwater (in the open culverts 1 - 4)	・ Trench → earth's surface → sea ・ Trench → in the ground → sea	Groundwater to the east of the turbine building	Once a week	(a) Removing contaminated water (b) Filling concrete (c) Installing impermeable wall on the sea-side (d) Ground improvement by means of water glass	(a)(b) Partially implemented (c) Under construction (d) Implemented
101	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Trenches	(3) Countermeasures are currently being implemented	Trenches connecting buildings of Units 1 - 4	Unit 4 sea-water piping trench	・ Unit 4 sea-water piping trench	Sea-side of the Unit 4 turbine building Attachment (1-39)	Approx. 370 (as of April 21)	Cs134：6.4E4 Cs137：2.1E5 Gross β：2.9E5 H3：3.3E3 (Dec 2014)	Disclosed	・ Intrusion of rainwater ・ Connected to the accumulated water in the buildings	・ Overflow due to increase in accumulated water in the buildings due to tsunami ・ Seepage into the ground due to deterioration of the trench wall etc.	Groundwater (in the open culverts 1 - 4)	・ Trench → earth's surface → sea ・ Trench → in the ground → sea	① Puddle water in the trench ② Groundwater to the east of the turbine building	① Irregular (as appropriate) ② Once a week	(a) Removing contaminated water (b) Filling concrete (c) Installing impermeable wall on the sea-side (d) Ground improvement by means of water glass	(a) - (c)Under construction (d) Implemented
102	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Trenches	(3) Countermeasures are currently being implemented	Trenches connecting buildings of Units 1 - 4	Connecting duct between the radioactive waste treatment buildings	・ Connecting duct between the radioactive waste treatment buildings	Western side of the Unit 3 radioactive waste treatment building Attachment (1-33)	Approx. 420	Cs134：2.7E1 Cs137：9.4E1 Gross β：1.2E2 H3：3.1E2 (Dec 2014)	Disclosed	・ Inflow of rainwater ・ Inflow of groundwater	・ Overflow due to inflow of rainwater ・ Seepage into the ground due to deterioration & damage of the pit	Groundwater (in the open culverts 1 - 4)	・ Trench → earth's surface → sea ・ Trench → in the ground → sea	① Puddle water in the trench ② Groundwater to the east of the turbine building	① Once a year ② Once a week	(a) Stopping of water by filling the locations from where there is inflow into the buildings (b) Installing impermeable wall on the sea-side (c) Ground improvement by means of water glass	(a) Partially implemented (b) Under construction (c)Implemented
103	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Trenches	(3) Countermeasures are currently being implemented	Trenches that do not connect buildings of Units 1 - 4 etc.	Trenches that do not connect buildings of Units 1 - 4 Trenches that have been inspected (that have water)	・ Unit 2 transformer disaster prevention trench ・ Fire protection piping trench (eastern side of Unit 3) ・ Unit 1 main transformer cable duct ・ Unit 1 waste surge tank connecting duct ・ Unit 1 off-gas piping duct etc.	Around Units 1 - 4 Attachments (2-7, 2-8, 2-10, 2-11, 2-12, 2-14, 2-15, 2-23, 2-29, 2-36, 2-43, 2-53)	Approx. 1 - 800	Cs134：1.9E1 - 6.1E2 Cs137：5.0E1 - 1.8E3 Gross β：6.8E1 - 2.6E3 H3：ND - 1.7E2 (Collection period： Jan 2012 - Feb 2015)	Disclosed	・ Inflow of rainwater ・ Inflow of groundwater	・ Overflow due to inflow of rainwater ・ Seepage into the ground due to deterioration & damage of the pit	Groundwater (in the open culverts 1 - 4)	・ Trench → earth's surface → sea ・ Trench → in the ground → sea	① Puddle water in the trench ② Groundwater to the east of the turbine building	① Once a year ② Once a week	(a) Installation of the sea-side impermeable wall (b) Ground improvement by means of water glass	(a) Under construction (b) Implemented
104	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Trenches	(3) Countermeasures are currently being implemented	Trenches that do not connect buildings of Units 1 - 4 etc.	Trenches that do not connect buildings of Units 1 - 4 Trenches that have not been inspected	・ Unit 2 off-gas piping duct ・ Fire protection piping trench (between Units 2 - 3 T/B) ・ Unit 3 transformer disaster prevention trench ・ Unit 4 transformer disaster prevention trench ・ Unit 4, 5 light oil piping trench etc.	Around Units 1 - 4 Attachments (2-9, 2-16, 2-20, 2-21, 2-22, 2-24, 2-30, 2-31, 2-32, 2-34, 2-35, 2-42, 2-44, 2-45, 2-47, 2-48, 2-49, 2-50)	Not inspected (Internal condition cannot be inspected due to high dose or obstacles)	Not inspected	-	・ Inflow of rainwater ・ Inflow of groundwater	・ Overflow due to inflow of rainwater ・ Seepage into the ground due to deterioration & damage of the pit	Groundwater (in the open culverts 1 - 4)	・ Trench → earth's surface → sea ・ Trench → in the ground → sea	Groundwater to the east of the turbine building	Once a week	(a) Installation of the sea-side impermeable wall (b) Ground improvement by means of water glass	(a)Under construction (b) Implemented
105	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Trenches	(4) Observing status after countermeasures have been taken	Trenches connecting buildings of Units 1 - 4	Common pool connecting duct (highly concentrated contaminated water confirmation range)	・ Common pool connecting duct (highly concentrated contaminated water confirmation range)	Sea-side of the process main building Attachment (1-34)	0 (filled)	Measures (filling) have been implemented	Not applicable	・ Inflow of rainwater ・ Inflow of groundwater	・ Overflow due to inflow of rainwater ・ Seepage into the ground due to deterioration & damage of the pit	Groundwater (in the open culverts 1 - 4)	・ Trench → earth's surface → sea ・ Trench → in the ground → sea	① Groundwater to the east of the turbine building ② SD pit	① Once a week ② 3 times a week	・ Removing contaminated water ・ Filling concrete	Implemented

(1) Needs to be inspected　(2) Countermeasures are necessary　(3) Countermeasures are currently being implemented　(4) Observing status after countermeasure had been taken　(5) At present additional measures are not required

No.	[1] Identification of risk location						[2] Risk analysis (1) Water condition				[2] Risk analysis (2) Outflow route				[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
106	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Trenches	(4) Observing status after countermeasures have been taken	Trenches connecting buildings of Units 1 - 4	HTI connecting duct	・ HTI connecting duct	Sea-side of the process main building Attachment (1-43)	0 (filled)	Measures (filling) have been implemented	Not applicable	・ Inflow of rainwater ・ Inflow of groundwater	・ Overflow due to inflow of rainwater ・ Seepage into the ground due to deterioration & damage of the pit	Groundwater (in the open culverts 1 - 4)	・ Trench → earth's surface → sea ・ Trench → in the ground → sea	① Groundwater to the east of the turbine building ② SD pit	① Once a week ② 3 times a week	・ Removing contaminated water ・ Filling concrete	Implemented
107	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Trenches	(5) At present additional measures are not required	Trenches connecting buildings of Units 1 - 4	Trenches connecting buildings of Units 1 - 4, which have been inspected (that do not have water)	・ Unit 2 radiating fluid piping duct ・ Unit 3 radiating fluid piping duct ・ Unit 1 common piping duct (northern side) ・ Unit 2 common piping duct etc.	Sea-side of the Units 1-4 turbine building Attachment (1-7, 1-13, 1-,14, 1-18, 1-20, 1-22, 1-23, 1-31, 1-38)	0	-	Not applicable	・ Inflow of rainwater ・ Inflow of groundwater	・ Overflow due to inflow of rainwater ・ Seepage into the ground due to deterioration & damage of the pit	Groundwater (in the open culverts 1 - 4)	・ Trench → earth's surface → sea ・ Trench → in the ground → sea	Groundwater to the east of the turbine building	Once a week	-	-
108	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Trenches	(5) At present additional measures are not required	Trenches that do not connect buildings of Units 1 - 4 etc.	Trenches that do not connect buildings of Units 1 - 4 Trenches that have been inspected (that do not have water)	・ Unit 1 light oil piping trench ・ Units 1 - 2 cable duct ・ Unit 1 boiler room electrical appliances room connecting rack trench ・ Trench connected to the nitrogen gas cylinder room for injection into the generators in Units 1 - 4 ・ Unit 1 - 4 common house boiler trench etc.	Around Units 1 - 4 Attachment (2-1, 2-2, 2-3, 2-4, 2-5, 2-6, 2-13, 2-17, 2-18, 2-19, 2-25, 2-26, 2-27, 2-28, 2-33, 2-37, 2-38, 2-39, 2-40, 2-41, 2-46, 2-51, 2-52)	0	-	Not applicable	・ Inflow of rainwater ・ Inflow of groundwater	・ Overflow due to inflow of rainwater ・ Seepage into the ground due to deterioration & damage of the pit	Groundwater (in the open culverts 1 - 4)	・ Trench → earth's surface → sea ・ Trench → in the ground → sea	Groundwater to the east of the turbine building	Once a week	-	-
109	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Pits	(1) Needs to be inspected	SD pit (except the pits that are scheduled to be made operational in Units 1 - 4)	Other sub-drains of Units 1 - 4 (including deep wells) (unrestored pits)(not inspected)	・ Unit 1 - Unit 4 sub-drain ・ Unit 1 - Unit 4 deep well ・ Transformer disaster prevention piping pit ・ Cable pit for EB	In and around Units 1 - 4 Attached document (SD) # "Unrestored pits"	Approx. 15/pit	Not inspected	-	・ Groundwater ・ Rainwater	・ Inflow into the surrounding groundwater from the pit ・ Overflow due to increase in groundwater level during heavy rainfall	Groundwater (in the open culverts 1 - 4)	・ Pit → in the ground →sea ・ Pit → earth's surface → drainage channel → sea	Groundwater to the east of the turbine building	Once a week	(a) Installation of the sea-side impermeable wall (b) Ground improvement by means of water glass	(a) Under construction (b) Implemented
110	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Pits	(2) Countermeasures are necessary	SD pit (except the pits that are scheduled to be made operational in Units 1 - 4)	Units 1 - 4 sub-drain pit No. 16 (Unrestored pits)(water quality has been inspected)	・ Sub-drain pit No. 16	Around Units 1 - 4 Attachment (SD) # "Unrestored pits"	Approx. 15/pit	No.16 Cs134：8.5E5 Cs137：2.9E6 Gross β：3.2E6 H-3：8.4E4 (Oct 29, 2014)	Disclosed	・ Groundwater ・ Rainwater	・ Inflow into the surrounding groundwater from the pit ・ Overflow due to increase in groundwater level during heavy rainfall	Groundwater (in the open culverts 1 - 4)	・ Pit → in the ground →sea ・ Pit → earth's surface → drainage channel → sea	Groundwater to the east of the turbine building	Once a week	(a) Installing impermeable wall on the sea-side (b) Ground improvement by means of water glass (c) Preventing outflow to the nearby sub-drain pits (filling concrete into pit #1)	(a) Under construction (b) (c) Implemented
111	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Pits	(2) Countermeasures are necessary	SD pit (except the pits that are scheduled to be made operational in Units 1 - 4)	Other sub-drains of Units 1 - 4 (including deep wells) (unrestored pits)(water quality inspected)	・ Unit 1 - Unit 4 sub-drains	Around Units 1 - 4 Attachment (SD) # "Unrestored pits"	Approx. 15/pit	No.47,48 Cs134：ND - 3.9E1 Cs137：4.8E1 - 9.6E1 Gross β：7.9E1 - 2.8E2 H-3：ND (Nov 10, 2014)	Disclosed	・ Groundwater ・ Rainwater	・ Inflow into the surrounding groundwater from the pit ・ Overflow due to increase in groundwater level during heavy rainfall	Groundwater (in the open culverts 1 - 4)	・ Pit → in the ground →sea ・ Pit → earth's surface → drainage channel → sea	Groundwater to the east of the turbine building	Once a week	(a) Installation of the sea-side impermeable wall (b) Ground improvement by means of water glass	(a) Under construction (b) Implemented

(1) Needs to be inspected　(2) Countermeasures are necessary　(3) Countermeasures are currently being implemented　(4) Observing status after countermeasure had been taken　(5) At present additional measures are not required

No.	[1] Identification of risk location						[2] Risk analysis								[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
							(1) Water condition				(2) Outflow route							
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
112	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Pits	(2) Countermeasures are necessary	Backwash valve pit and delivery valve pits	Units 1 - 4 backwash valve pit and delivery valve pits (water quality inspected)	・ Unit 1 backwash valve pit ・ Unit 2 backwash valve pit ・ Unit 3 backwash valve pit ・ Unit 4 backwash valve pit ・ Unit 1 pump room circulating water pump delivery valve pit ・ Unit 4 pump room circulating water pump delivery valve pit	Sea-side of the turbine buildings of Units 1 - 4 Attachments (Addition 5, Addition 6, Addition 7, Addition 8, 1-11, 1-32)	(Unit 1 backwash valve pit) approx. 500	(Unit 1 backwash valve pit) [Pit ①] (Jan 15, 2015) Cs134：1.1E4，Cs137：4.2E4 Gross β：5.3E4，H3：6.9E2 [Pit ②] (Jan 15, 2015) Cs134：1.1E4，Cs137：4.3E4 Gross β：5.2E4，H3：5.8E2 [Pit ③] (Jan 15, 2015) Cs134：1.2E4，Cs137：4.4E4 Gross β：5.3E4，H3：7.0E2 [Pit ④] (Jan 15, 2015) Cs134：1.2E4，Cs137：4.4E4 Gross β：5.4E4，H3：6.0E2	Disclosed	・ Inflow of rainwater ・ Inflow of groundwater	・ Overflow due to inflow of rainwater ・ Seepage into the ground due to deterioration & damage of the pit	Groundwater (in the open culverts 1 - 4)	・ Pit → drainage canal → in the ground → sea ・ Pit → in the ground → sea	Groundwater to the east of the turbine building	Once a week	(a) Installation of the sea-side impermeable wall (b) Ground improvement by means of water glass	(a) Under construction (b) Implemented
113	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Pits	(3) Countermeasures are currently being implemented	Drainage canal	Unit 1 drainage canal (outlet has been blocked)	・ Unit 1 drainage canal (outlet has been blocked)	Sea-side of the turbine buildings of Units 1 - 4 Attached document (Addition 1)	Approx. 3800	[On the shaft water upstream side] Cs134：1.7E4 (Mar 30, 2015) Cs137：5.9E4 (Mar 30, 2015) Gross β：7.8E4 (Mar 30, 2015) H 3：4.8E2 (Mar 30, 2015)	Disclosed	・ Inflow of rainwater ・ Inflow of groundwater	・ Leakage into the ground due to deterioration and damage of the drainage canal	Groundwater (in the open culverts 1 - 4)	・ Drainage canal → in the ground → sea	① Puddle water in the drainage canal ② Groundwater to the east of the turbine building	① Twice a week (Until it reduces to 10^4Bq/L) ② Once a week	(a) Cleaning up the accumulated water：Installation of adsorbent (interim measure) (b) Placing zeolite packed bags at the outlet (c) Clean-up using the clean-up device	(a) Installed (b) Under construction (c) In the process of being planned
114	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Pits	(3) Countermeasures are currently being implemented	Drainage canal	Unit 2 drainage canal (outlet has been blocked)	・ Unit 2 drainage canal (outlet has been blocked)	Sea-side of the turbine buildings of Units 2 - 4 Attachment (Addition 2)	Approx. 3000	Cs134：2.0E2(Feb 12, 2014) Cs137：7.4E2(") Gross β：1.1E3(") H 3：2.8E2(")	Disclosed	・ Inflow of rainwater ・ Inflow of groundwater	・ Overflow due to inflow of rainwater ・ Seepage into the ground due to deterioration & damage of the pit	Groundwater (in the open culverts 1 - 4)	・ Drainage canal → in the ground → sea	① Puddle water in the drainage canal ② Groundwater to the east of the turbine building	① Once a month ② Once a week	(a) Cleaning up the accumulated water：Installation of adsorbent (interim measure) (b) Placing zeolite packed bags at the outlet (c) Clean-up using the clean-up device	(a) Installed (b) Under construction (c) In the process of being planned
115	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Pits	(3) Countermeasures are currently being implemented	Drainage canal	Unit 3 drainage canal (outlet has been blocked)	・ Unit 3 drainage canal (outlet has been blocked)	Sea-side of the turbine buildings of Units 3 - 4 Attachment (Addition 3)	Approx. 600	Cs134：6.9E2 (Feb 12, 2014) Cs137：2.4E3(") Gross β：3.1E3(") H 3：2.2E3(")	Disclosed	・ Inflow of rainwater ・ Inflow of groundwater	・ Overflow due to inflow of rainwater ・ Seepage into the ground due to deterioration & damage of the pit	Groundwater (in the open culverts 1 - 4)	・ Drainage canal → in the ground → sea	① Puddle water in the drainage canal ② Groundwater to the east of the turbine building	① Once a month ② Once a week	(a) Cleaning up the accumulated water：Installation of adsorbent (interim measure) (b) Placing zeolite packed bags at the outlet (c) Clean-up using the clean-up device	(a) Installed (b) Under construction (c) In the process of being planned
116	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Pits	(4) Observing status after countermeasures have been taken	Delivery valve pit	Unit 2 pump room circulating water pump delivery valve pit	・ Unit 2 pump room circulating water pump delivery valve pit	Near the Unit 2 screen Attached document (1-15)	Measures (filling) have been implemented	Measures (filling) have been implemented	Not applicable	・ Inflow of rainwater ・ Inflow of groundwater	・ Overflow due to inflow of rainwater ・ Seepage into the ground due to deterioration & damage of the pit	Groundwater (in the open culverts 1 - 4)	・ Pit → earth's surface → sea ・ Pit → in the ground → sea	Groundwater to the east of the turbine building	Once a week	・ Removing contaminated water ・ Filling concrete	Implemented

(1) Needs to be inspected　(2) Countermeasures are necessary　(3) Countermeasures are currently being implemented　(4) Observing status after countermeasure had been taken　(5) At present additional measures are not required

No.	[1] Identification of risk location							[2] Risk analysis								[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
								(1) Water condition				(2) Outflow route							
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
117	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Pits	(4) Observing status after countermeasures have been taken	Delivery valve pit	Unit 3 pump room circulating water pump delivery valve pit	・ Unit 3 pump room circulating water pump delivery valve pit	Near the Unit 3 screen Attached document (1-24)	Measures (filling) have been implemented	Measures (filling) have been implemented	Not applicable	・ Inflow of rainwater ・ Inflow of groundwater	・ Overflow due to inflow of rainwater ・ Seepage into the ground due to deterioration & damage of the pit	Groundwater (in the open culverts 1 - 4)	・ Pit → earth's surface → sea ・ Pit → in the ground → sea	Groundwater to the east of the turbine building	Once a week	・ Removing contaminated water ・ Filling concrete	Implemented
118	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Pits	(5) At present additional measures are not required	Drainage canal	Unit 4 drainage canal (outlet has been blocked)	・ Unit 4 drainage canal (outlet has been blocked)	Sea-side of the Unit 4 turbine building Attachment (Addition 4)	0	-	Not applicable	・ Inflow of rainwater ・ Inflow of groundwater	・Overflow due to inflow of rainwater ・Seepage into the ground due to deterioration & damage of the pit	Groundwater (in the open culverts 1 - 4)	・ Drainage canal → in the ground → sea	Groundwater to the east of the turbine building	Once a week	-	-
119	**Groundwater (in the port)**	Risk of becoming the source of contamination of rainwater	Other structures	(1) Needs to be inspected	Building roof	Other buildings (other than the K drainage channel basin)	・ Unit 5 R/B ・ Unit 5 T/B ・ Unit 6 R/B ・ Unit 6 T/B ・ Anti-seismic building　etc.	Other buildings	Variation due to the amount of rainfall	Not inspected	-	・ Rainwater	・ Rainfall	Groundwater (in the port)	・ Rooftop → gutter → earth's surface → in the ground → sea ・ Rooftop → gutter → earth's surface → drainage channel → sea	Inside and outside the port (in front of the intake and in front of the outlet)	Once a week	・ The method of inspection is examined based on the priority	-
120	**Groundwater (in the port)**	Water generated during work	Work	(5) At present additional measures are not required	Work	Discharge of water during the work carried out in the area around Units 5 - 6	・ Sprinkling of water during the fire-fighting training	In the Units 5, 6 areas	Approx. 5m3/h (once)	・ Use of water drawn from off-site (raw water)	Not applicable	・ None	・ Drainage of water	Groundwater (in the port)	・ In the ground → sea	-	-	・ Training is not carried out in high dose and high contamination areas	Completed
121	**Groundwater (in the port)**	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(1) Needs to be inspected	Existing facilities	Existing outdoor facilities around Units 5, 6	・Units 5, 6 HVAC system facility ・Units 5, 6 OG system facility ・Units 5, 6 AC system facility ・Units 5, 6 SGTS system facility ・Units 5, 6 FP system facility etc.	Outdoor	Not inspected (not possible to inspect underground portion)	Not inspected	-	・ None	・ Leakage outside the system due to damage	Groundwater (in the port)	・ Equipment → earth's surface → drainage channel → sea ・ Equipment → in the ground → sea	Inside and outside the port (in front of the intake and in front of the outlet)	Once a week	・ The method of inspection is examined based on the priority	-
122	**Groundwater (in the port)**	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(5) At present additional measures are not required	Existing facilities	Existing facilities within the buildings of Units 5, 6	・ Each system and facility in Units 5, 6 (piping, tanks, pumps etc.)	In the buildings of Units 5 / 6	Retained water in the tanks of the main systems and facilities (as of April 7, 2015) Unit 5 RCW & TCW both : each approx. 85 Unit 6 RCW & TCW both : each approx. 200 Unit 5 RW tank : approx. 1,100m3 Unit 6 RW tank : approx. 1,200m3	Depends on the equipment	Not applicable	・ System water etc.	・ There is a possibility of outflow into the buildings, but the buildings are sound and there is no outflow into the sea.	Groundwater (in the port)	・ Equipment → building → in the ground → sea	① Water level inside the building ② SD pit	① Every day ② Once a week	-	-

(1) Needs to be inspected　(2) Countermeasures are necessary　(3) Countermeasures are currently being implemented　(4) Observing status after countermeasure had been taken　(5) At present additional measures are not required

No.	[1] Identification of risk location						[2] Risk analysis								[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
							(1) Water condition				(2) Outflow route							
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
123	**Groundwater (in the port)**	Risk of presence of accumulated water that becomes a source of contamination	Building	(1) Needs to be inspected	Accumulated water in the building	Health & Safety Center Annex	・ Health & Safety Center Annex	Building on the southern side of the 10m board below Shiomizaka	Approx. 400	Not inspected	-	・ Sea	・ Tsunami	Groundwater (in the port)	・ Building → in the ground → sea	Inside and outside the port (in front of the intake and in front of the outlet)	Once a week	・ The method of inspection is examined based on the priority	-
124	**Groundwater (in the port)**	Risk of presence of accumulated water that becomes a source of contamination	Building	(2) Countermeasures are necessary	Accumulated water in the building	Accumulated water in the building (other than the buildings around Units 1 - 4) (water quality has been inspected)	・ Accumulated water in the buildings of Units 5/6 ・ Solid waste storage facility (buildings in Units 6 - 8) & Administrative building	Units 5 - 6	Approx. 6500 (Feb 2015)	Unit 5： Cs134(ND), Cs137(3), H3(292), Co60(ND), Gross β(148) (Mar 12, 2015) Unit 6： Cs134(8), Cs137(27), H3(852), Co60(2) Gross β(188) Bq/L (Mar 13, 2015)	Disclosed	・ Groundwater level	・ Reversal of the building water level and the groundwater level	Groundwater (in the port)	・ Building → in the ground → sea	① Water level inside the building ② SD pit	① Every day ② Once a week	・ Transferring accumulated water to outdoor tanks ・ Water-proofing the locations where there is inflow of groundwater	As needed
125	**Groundwater (in the port)**	Risk of presence of accumulated water that becomes a source of contamination	Building	(5) At present additional measures are not required	Accumulated water in the building	Unit 6 DG6B building	・Unit 6 DG6B building	North of Unit 6	0	-	Not applicat	・ None	-	Groundwater (in the port)	・ Building → in the ground → sea	-	-	-	-
126	**Groundwater (in the port)**	Risk of presence of accumulated water that becomes a source of contamination	Building	(5) At present additional measures are not required	Accumulated water in the building	Cask storage building	・ Cask storage building	Shallow draft quarry Western side	Approx. 4500	Cs134：7.2 Cs137：23 I-131：<4.3 Co-60：<4.2 Gross γ radioactivity：3.1E+1 (As of May 23, 2014)	Will be disclosed this time	・ Rainwater ・ Groundwater	・ Overflow due to increase in accumulated water in the buildings ・ Seepage into the ground due to deterioration and damage within the buildings	Groundwater (in the port)	・ Building → in the ground → sea	Puddle water within the building on the 1st floor	Irregular	・ Installing a simple dike	Implemented
127	**Groundwater (in the port)**	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(4) Observing status after countermeasures have been taken	Existing outdoor tanks	Unit 5 CST tanks (welded tanks)	・ Unit 5 CST tanks (welded tanks)	Outdoor (10m ground)	Approx. 1083	Cs134：ND Cs137：ND Co60：1.612E+01 (Mar 12, 2015)	Will be disclosed this time	・ None	・ Leakage outside the system due to equipment damage	Groundwater (in the port)	・ Tank → earth's surface → in the ground → sea	① Sampling ② Measuring the water level	Once / month	・ Installing a dike	Implemented
128	**Groundwater (in the port)**	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(4) Observing status after countermeasures have been taken	Existing outdoor tanks	Unit 6 CST tanks (welded tanks)	・ Unit 6 CST tanks (welded tanks)	Outdoor (10m ground)	Approx. 1236	Cs134：ND Cs137：ND Co60：6.688E+02 (Mar 5, 2015)	Will be disclosed this time	・ None	・ Leakage outside the system due to equipment damage	Groundwater (in the port)	・ Tank → earth's surface → in the ground → sea	① Sampling ② Measuring the water level	Once / month	・ Installing a dike	Implemented

(1) Needs to be inspected (2) Countermeasures are necessary (3) Countermeasures are currently being implemented (4) Observing status after countermeasure had been taken (5) At present additional measures are not required

No.	[1] Identification of risk location							[2] Risk analysis								[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
								(1) Water condition				(2) Outflow route							
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
129	**Groundwater (in the port)**	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(5) At present additional measures are not required	Reactor, well, DSP	Unit 5, 6 RPV, well, DSP	・Unit 5, 6 RPV, well, DSP	Units 5 - 6 reactor buildings	Unit 5: approx. 2110 Unit 6: approx. 610	[Unit 5 well] Cs134：ND(<35) Cs137：ND(<45) Co60：3200 (April 9, 2015) [Unit 6 well] Cs134：ND(<140) Cs137：ND(<160) Co60：48000 (April 2, 2015)	Will be disclosed this time	・None	・Leakage outside the system due to damage	Groundwater (in the port)	・Equipment → building → in the ground → sea	Water level inside the buildings	Everyday	-	-
130	**Groundwater (in the port)**	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(5) At present additional measures are not required	Spent Fuel Pool	Units 5, 6 SFP	・Units 5, 6 SFP	Units 5 - 6 reactor buildings	・Unit 5: approx. 1390 ・Unit 6: approx. 1452	[Unit 5] Cs134：ND(<38) Cs137：ND(<51) Co60：2700 (April 9, 2015) [Unit 6] Cs134：ND(<60) Cs137：ND(<70) Co60：8000 (April 16, 2015)	Will be disclosed this time	・None	・Leakage outside the system due to damage	Groundwater (in the port)	・Equipment → building → in the ground → sea	① Pool water level ② Water level in the building	① Once/month ② Every day	-	-
131	**Groundwater (in the port)**	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(5) At present additional measures are not required	Existing outdoor tanks	Unit 5 Waste Surge Tank (welded tank)	・Unit 5 Waste Surge Tank (welded tank)	Outdoor (RW/B western side)	At most approx. 208	Cs-134：ND(<14) Cs-137：ND(<22) Co60：ND(<14) (Feb 24, 2015)	Will be disclosed this time	・None	・Leakage outside the system due to damage	Groundwater (in the port)	・Tank → in the dike → earth's surface → underground → sea	Inside and outside the port (in front of the intake and in front of the outlet)	Once a week	Carrying out inspection regularly (overhauling)	Under operation
132	**Groundwater (in the port)**	Risk of presence of accumulated water that becomes a source of contamination	Trenches	(2) Countermeasures are necessary	Trenches in Units 5, 6 etc.	Trenches in Units 5, 6 etc. that have been inspected (that have water)	・Unit 5 sea-water piping trench ・Units 5, 6 storm drain piping trench ・Unit 5 heavy oil piping trench (eastern side) ・Unit 5 radiating fluid piping duct ・Unit 5 main transformer cable duct etc.	Attachment (3-16, 3-2, 3-4, 3-5, 3-8, 3-12, 3-13, 3-14, 3-15, 3-24, 3-25, 3-26, 3-27, 3-30, 3-31, 3-33, 3-34, 3-36, 3-37, 3-41, 3-47, 3-53)	Approx. 1 - 1200 / trench	Cs134：ND - 2.2E3 Cs137：7.2E1 - 3.3E3 (Collection period: Jan 2012)	Disclosed	・Inflow of rainwater ・Inflow of groundwater	・Overflow due to inflow of rainwater ・Seepage into the ground due to deterioration & damage of the pit	Groundwater (in the port)	・Trench → earth's surface → sea ・Trench → in the ground → sea	Inside and outside the port (in front of the intake and in front of the outlet)	Once a week	-	-
133	**Groundwater (in the port)**	Risk of presence of accumulated water that becomes a source of contamination	Trenches	(5) At present additional measures are not required	Trenches in Units 5, 6 etc.	Trenches in Units 5, 6 etc. that have been inspected (that don't have water)	・Unit 5 common piping duct ・No, 3 light oil piping trench ・Unit 5 heavy oil piping trench ・Unit 5 chemical tank connecting duct ・Suppression pool water piping trench etc.	Attachment (3-3, 3-6, 3-7, 3-9, 3-10, 3-11, 3-17, 3-18, 3-19, 3-20, 3-21, 3-22, 3-28, 3-29, 3-32, 3-35, 3-38, 3-39, 3-40, 3-42, 3-43, 3-44, 3-45, 3-46, 3-48, 3-49, 3-50, 3-51, 3-52, 3-54)	0	-	Not applicable	・Inflow of rainwater ・Inflow of groundwater	・Overflow due to inflow of rainwater ・Seepage into the ground due to deterioration & damage of the pit	Groundwater (in the port)	・Trench → earth's surface → sea ・Trench → in the ground → sea	Inside and outside the port (in front of the intake and in front of the outlet)	Once a week	-	-
134	**Groundwater (in the port)**	Risk of presence of accumulated water that becomes a source of contamination	Pits	(1) Needs to be inspected	Transformer oil fence	Transformer oil fence around Units 5, 6	・Unit 5 transformer oil fence ・Units 5, 6 start-up transformer oil fence ・Unit 6 transformer oil fence	Western side of Units 5, 6	Approx. 220 (Oct 2011)	Not inspected	-	・Rainwater	・Rainfall	Groundwater (in the port)	・In the dike → in the ground → sea	Inside and outside the port (in front of the intake and in front of the outlet)	Once a week	・The method of inspection is examined based on the priority	-

(1) Needs to be inspected　(2) Countermeasures are necessary　(3) Countermeasures are currently being implemented　(4) Observing status after countermeasure had been taken　(5) At present additional measures are not required

No.	[1] Identification of risk location							[2] Risk analysis								[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
								(1) Water condition				(2) Outflow route							
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
135	**Groundwater (in the port)**	Risk of presence of accumulated water that becomes a source of contamination	Pits	(1) Needs to be inspected	SD pit (except the pits that are scheduled to be made operational in Units 1 - 4)	Sub-drains of Units 5, 6 (including deep wells) (not inspected)	・ Unit 6 D/G building sub-drain ・ Units 5, 6 deep wells	Northern side of Unit 6 Attachment (SD) # "existing and unrestored"	Approx. 15/pit	Not inspected	-	・ Groundwater ・ Rainwater	・ Inflow into the surrounding groundwater from the pit ・ Overflow due to increase in groundwater level during heavy rainfall	Groundwater (in the port)	・ Pit → in the ground →sea ・ Pit → earth's surface → drainage channel → sea	Inside and outside the port (in front of the intake and in front of the outlet)	Once a week	・ The method of inspection is examined based on the priority	-
136	**Groundwater (in the port)**	Risk of presence of accumulated water that becomes a source of contamination	Pits	(4) Observing status after countermeasures have been taken	SD pit (except the pits that are scheduled to be made operational in Units 1 - 4)	Unit 5, 6 sub-drains (filled with concrete)	・ Unit 5, 6 sub-drains (filled with concrete)	Around Units 5, 6 Attachment (SD) # "not targets for restoration"	Measures (filling) have been implemented	Measures (filling) have been implemented	Not applicable	・ None	-	Groundwater (in the port)	・ Pit → in the ground → sea	-	-	・ Filling with concrete	Implemented
137	**Groundwater (in the port)**	Risk of presence of accumulated water that becomes a source of contamination	Pits	(5) At present additional measures are not required	SD pit (except the pits that are scheduled to be made operational in Units 1 - 4)	Sub-drains of Units 5, 6 (including deep wells) (water quality has been inspected)	・ Units 5, 6 sub-drain pits	Around Units 5 - 6 Attachment (SD) # "targets for restoration"	Approx. 15/pit	Cs134：ND - 0.34 Cs134：ND - 0.95 Gross β D - 2.6 H-3：ND - 25 # Water sampling period: Aug 2014 - Nov 2014	Will be disclosed this time	・ Groundwater ・ Rainwater	・ Inflow into the surrounding groundwater from the pit ・ Overflow due to increase in groundwater level during heavy rainfall	Groundwater (in the port)	・ Pit → in the ground →sea ・ Pit → earth's surface → drainage channel → sea	Water in the pits	Irregular (Once a week for the representative pit)	-	-
138	**Groundwater (in the port)**	Risk of presence of accumulated water that becomes a source of contamination	Pits	(5) At present additional measures are not required	SD pit (except the pits that are scheduled to be made operational in Units 1 - 4)	Cask storage building sub-drain	・ Cask storage building sub-drain	Shallow draft quarry Western side	Approx. 15/pit	Cs134：1.0E+1 Cs137：1.4E+1 Co-60：<6.0E-01 Gross γ radioactivity：2.4E+1 (Jan 18, 2012)	Will be disclosed this time	・ Groundwater ・ Rainwater	・ Inflow into the surrounding groundwater from the pit ・ Overflow due to increase in groundwater level during heavy rainfall	Groundwater (in the port)	・ Pit → in the ground →sea ・ Pit → earth's surface → drainage channel → sea	Water in the pits	Irregular	-	-
139	**Groundwater (Outside the port)**	Risk of becoming the source of contamination of rainwater	Other structures	(1) Needs to be inspected	Ground surface	Ground surface and standing trees (locations where facing is not planned)	・ Ground surface and standing trees (locations where facing is not planned)	Northern side of the site Northern shore protection area etc.	-	-	Not applicable	・ Rainwater	・ Rainfall	Groundwater (Outside the port)	・ Earth's surface → in the ground → sea	-	-	・ The method of inspection is examined based on the priority	-
140	**Groundwater (Outside the port)**	Water generated during work	Work	(3) Countermeasures are currently being implemented	Work	Sprinkling of water within the premises after the accumulated water in Units 5, 6 has been cleaned up.	・ Sprinkling of water within the premises after the accumulated water in Units 5, 6 has been cleaned up.	Forests on the northern side of Units 5, 6 (near the spoil bank etc.)	Approx. 110m^3/day	Cs134：ND(<1.3) Cs137：ND(<1.4) (Oct 22, 2011)	Disclosed		・ Sprinkling of water	Groundwater (Outside the port)	・ In the ground → sea	Storage tank for accumulated water after it has been cleaned up.	Before sprinkling	・Before sprinkling, confirming that the water is "below the regulatory concentration limit ratio 0.22" which is the sprinkling water criteria, and then carrying out sprinkling	Being implemented

(1) Needs to be inspected (2) Countermeasures are necessary (3) Countermeasures are currently being implemented (4) Observing status after countermeasure had been taken (5) At present additional measures are not required

No.	[1] Identification of risk location							[2] Risk analysis								[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
								(1) Water condition				(2) Outflow route							
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
141	**Groundwater (Outside the port)**	Water generated during work	Work	(3) Countermeasures are currently being implemented	Work	Sprinkling of rainwater in the dikes around the accumulated water storage tanks	・ Sprinkling of rainwater in the dikes around the accumulated water storage tanks	・ Around the northern side of Units 5, 6 ・ Area where water is sprinkled in Okuma (southern side of the site)	Approx. 20 - 160m3/round (during rainfall)	Cs134：ND(<5.0E-1) Cs137：ND(<7.6E-1) Gross β: ND(<4.2E+0) (Mar 30, 2015)	Disclosed		・ Sprinkling of water	Groundwater (Outside the port)	・ In the ground → sea	Tank for after collecting rainwater	Before sprinkling	・Before sprinkling, confirming that the water is "below the regulatory concentration limit ratio 0.22" which is the sprinkling water criteria, and then carrying out sprinkling	Being implemented
142	**Groundwater (Outside the port)**	Water generated during work	Work	(1) Needs to be inspected	Work	Water associated with work carried out in other areas	・ Vehicle scraping work ・ Fire engine cleaning water (for decontamination) ・ Vehicle cleaning water etc.	・ Old heliport ・ On the side of the fire engine house ・ Vehicle decontamination area	(Old heliport) approx. 0.8 (On the side of the fire engine house) approx. 16 (Vehicle decontamination area collection tank) approx. 60	Not inspected	-	・ None	・ Scraping ・ Leakage due to tank damage	Groundwater (Outside the port)	・ Earth's surface → in the ground → sea	-	-	・ The method of inspection is examined based on the priority	-
143	**Groundwater (Outside the port)**	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(1) Needs to be inspected	Existing facilities	Concentrated RW indoor facilities	・ Each system and facility in the concentrated radioactive waste treatment building (piping, tank, pump etc.) ・ Underground granulating solidified substances storage tank etc.	Within the building	Not inspected	Not inspected	-	・ None	・ Leakage outside the system due to damage	Groundwater (Outside the port)	・ Equipment → building → groundwater → sea ・ Equipment → earth's surface → drainage channel → sea ・ Equipment → earth's surface → sea	SD(concentrated RW)	Everyday	・ The method of inspection is examined based on the priority	-
144	**Groundwater (Outside the port)**	Risk of presence of accumulated water that becomes a source of contamination	Building	(1) Needs to be inspected	Accumulated water in the building	Concentrated RW building (not inspected)	・ Incineration work building ・ On-site bunker building	10m ground	(Incineration & workshop building) approx. 570 (On-site bunker building) approx. 800	[Incineration building & workshop building] Not inspected after drawing the accumulated water in April 2014 [On-site bunker building] Not inspected 2012 onwards	-	・ Rainwater ・ Groundwater	・ Reversal of the building water level and the groundwater level	Groundwater (Outside the port)	・ Building → in the ground → sea	SD (concentrated RW)	Everyday	・ The method of inspection is examined based on the priority	-
145	**Groundwater (Outside the port)**	Risk of presence of accumulated water that becomes a source of contamination	Building	(2) Countermeasures are necessary	Accumulated water in the building	Concentrated RW building (water quality has been inspected)	・Process main building ・HTI building ・SPT building	10m ground	[Process main building, HTI building] approx. 20030 (April 16, 2015) [SPT building] approx. 3800 (Mar 24, 2015)	[Process main building] (Feb 10, 2015) Cs134：6.7E+6 Cs137：2.2E+7 [HTI building] (Feb 10, 2015) Cs134：6.8E+6 Cs137：2.5E+7 [SPT building] Cs134：1.2E+4 Cs137：2.6E+4 (Aug 22, 2013) Cs137：	Disclosed	・ Accumulated water in the buildings of Units 1 - 4, rainwater, groundwater etc.	・ Reversal of the building water level and the groundwater level	Groundwater (Outside the port)	・ Building → in the ground → sea	① Building water level ② Groundwater to the east of the turbine building ③ SD (concentrated RW)	① Regular ② Once a week ③ Every day	・ Reducing the quantity of inflow by means of groundwater BP	Being implemented
146	**Groundwater (Outside the port)**	Risk of presence of accumulated water that becomes a source of contamination	Building	(5) At present additional measures are not required	Accumulated water in the building	Common pool building	・ Common pool building	10m ground	Variation due to amount of rainfall (as of April 4, there is 1 drop of groundwater inflow in approx. 15sec from the underground piping penetration part)	Cs134：2.1E-2 Cs137：6.0E-2 Gross β：1.7E-1 (July 3, 2014)	Disclosed	・ Groundwater level	・ Leakage into the ground due to deterioration and damage of the pit	Groundwater (Outside the port)	・ Building → in the ground → sea	SD (concentrated RW) Locations where there is groundwater inflow	Every day Irregular	-	-

(1) Needs to be inspected (2) Countermeasures are necessary (3) Countermeasures are currently being implemented (4) Observing status after countermeasure had been taken (5) At present additional measures are not required

No.	[1] Identification of risk location						[2] Risk analysis (1) Water condition				[2] Risk analysis (2) Outflow route				[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
147	Groundwater (Outside the port)	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(4) Observing status after countermeasures have been taken	Existing outdoor tanks	SPT tank (Units 1 - 4) (A) (welded tanks)	・ SPT tank (Units 1 - 4) (A) (welded tanks)	SPT buildings	Approx. 2800 (As of Mar 25, 2015 water level is 8335mm)	Cs134：8.0E+4 Cs137：1.6E+5 Co60：6.5E+2 (Aug 27, 2013)	Will be disclosed this time	・ Contaminated water from the basement of the building	・ Leakage outside the system due to equipment damage ・ Accumulation of the leaked water in the SPT building	Groundwater (Outside the port)	・ Tank → building → in the ground → sea	Tank water level	Regular	・ Installing in the SPT building	Implemented
148	Groundwater (Outside the port)	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(4) Observing status after countermeasures have been taken	Existing outdoor tanks	SPT tank (Units 1 - 4) (B) (welded tanks)	・ SPT tank (Units 1 - 4) (B) (welded tanks)	SPT buildings	Approx. 3500 (Tank capacity)	<Upstream> [Water after being treated by the cesium adsorption device] Cs134：ND、Cs137：1.7E+2 (Feb 10, 2015) [A system water after being treated by second cesium adsorption device] Cs134：ND、Cs137：1.9E+2 (Feb 17, 2015) [B system water after being treated by second cesium adsorption device] Cs134：6.9E+2、Cs137：2.6E+3 (Feb 17, 2015) <Downstream> [Water purification device inlet water] Cs134：ND,Cs137：1.8E+3,H3：4.1E+5 (Feb 10, 2015)	Disclosed	・ None	・ Leakage outside the system due to equipment damage ・ Accumulation of the leaked water in the SPT building	Groundwater (Outside the port)	・ Tank → building → in the ground → sea	① Tank water level ② Patrol monitoring	① Regular ② Every day	・ Installing in the SPT building	Implemented
149	Groundwater (Outside the port)	Risk of presence of accumulated water that becomes a source of contamination	Pits	(1) Needs to be inspected	Other wells, etc.	Units 7/8 test tunnels	・ Units 7/8 test tunnels	Within the premises (site for expansion in Units 7/8)	Not inspected	Not inspected	-	・ Rainwater ・ Groundwater	・ Outflow from within the pit into the surrounding groundwater	Groundwater (Outside the port)	・ Pit → in the ground → sea	-	-	・ The method of inspection is examined based on the priority	
150	Groundwater (Outside the port)	Risk of presence of accumulated water that becomes a source of contamination	Pits	(2) Countermeasures are necessary	SD pit (except the pits that are scheduled to be made operational in Units 1 - 4)	Sub-drains around concentrated rad	・ Sub-drains around concentrated rad	In the neighborhood of various buildings such as the Main process building Attached document (SD)	Approx. 15/pit	Cs134：ND - 53 Cs137：ND - 130 Gross β：ND - 240 H-3：14 - 210 # Water sampling period：Dec 12, 2013 - Dec 19, 2013	Disclosed	・ Groundwater ・ Rainwater	・ Inflow into the surrounding groundwater from the pit ・ Overflow due to increase in groundwater level during heavy rainfall	Groundwater (Outside the port)	・ Pit → in the ground →sea ・ Pit → earth's surface → drainage channel → sea	Groundwater to the east of the turbine building	Once a week	-	-
151	Groundwater (Outside the port)	Risk of presence of accumulated water that becomes a source of contamination	Pits	(5) At present additional measures are not required	Other wells, etc.	Deep wells	・ Deep wells	Around the power plant site etc.	Approx. 6 / hole	Deep well No. 3 Cs134:0.010 - 0.015 (May 30 - Jun 13, 2012) Cs137:0.012 - 0.027 (May 30 - Jun 13, 2012) Sr90:ND(<0.0067) (May 30 - Jun 13, 2012) H3:9 (May 30 - Jun 13, 2012)	Disclosed	・ Rainfall that seeps into the ground and flows off-site	・ Flow of groundwater	Groundwater (Outside the port)	・ In the ground → sea	1 hole (Deep well No. 3)	Implemented 2 times in 2012	-	-
152	Water flowing on the surface	Risk of becoming the source of contamination of rainwater	Other structures	(3) Countermeasures are currently being implemented	Rubble	Rubble at the 4m ground around Units 1 - 4	・ Rubble around the sea-water pump at the 4m ground on the sea-side	Area at the 4m ground on the sea-side of Units 1 - 4	-	-	Not applicable	・ Rainwater	・ Rainfall	Water flowing on the surface	・ Earth's surface → sea ・ Earth's surface → in the ground → sea	Sea-water	Once a week	・ Removing the rubble	・ Under construction

(1) Needs to be inspected (2) Countermeasures are necessary (3) Countermeasures are currently being implemented (4) Observing status after countermeasure had been taken (5) At present additional measures are not required

No.	[1] Identification of risk location						[2] Risk analysis								[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
							(1) Water condition				(2) Outflow route							
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
153	**Water flowing on the surface**	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(4) Observing status after countermeasures have been taken	Other facilities added after the earthquake disaster	Equipment for moving well points	・ Tank, piping etc.	Outdoors and inside the building	Approx. 30	[Water drawn from well points between Units 1, 2] Cs134:16 (Collected on Mar 30, 2015) Cs137:59 (Collected on Mar 30, 2015) Gross β:5.7E+05 (Collected on Mar 30, 2015) H3:5.3E+04 (Collected on Mar 23, 2015) [Water drawn from the well points between Units 2, 3] Cs134:ND(0.38) (Collected on Mar 29, 2015) Cs137:0.57 (Collected on Mar 29, 2015) Gross β:700 (Collected on Mar 29, 2015) H3:380 (Collected on Mar 25, 2015)	Disclosed	・ None	・ Leakage outside the system due to damage	Water flowing on the surface	・ Equipment → earth's surface → drainage channel → sea ・ Equipment → earth's surface → sea ・ Equipment → in the ground → sea	① Sea-water (inside and outside the port) ② Groundwater to the east of the turbine building	① Once a week ② Once a week	・ Installing tank dikes ・ Leakage construction ・ Patrol	Implemented
154	**Water flowing on the surface**	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(1) Needs to be inspected	Existing outdoor tanks	Existing outdoor tanks on the sea-side of Units 5, 6	・ SPT tanks (Units 5 - 6)	To the north of the shallow draft quarry	Approximately 250 (as of Mar 11, 2011)	Not inspected	-	・ Rainwater	・ Leakage outside the system due to equipment damage	Water flowing on the surface	・ Tank → in the dike → earth's surface → sea	Inside and outside the port (in front of the intake and in front of the outlet)	Once a week	・ The method of inspection is examined based on the priority	-
155	**In the port**	In the port	In the port	(3) Countermeasures are currently being implemented	Marine soil etc.	Marine soil in the port	・ Marine soil ・ Functional deterioration of port equipment (Sea-wall etc.)	Sea bed in the port	-	[Sea water in the port] Cs134：ND - 11 Cs137：ND - 42 Gross β：ND - 400 H3：3.1 - 1100 (Samples collected on Mar 23, 2015; Mar 30, 2015)	Disclosed	-	-	-	-	-	-	・ Covering the marine soil	Being implemented
156	**In the port**	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(5) At present additional measures are not required	Other	Mega float	・ Mega float	In the port	Approx. 8000	Cs134(2), Cs137(6), H3(ND), Co60(5)、Sr90(ND) Bq/L (Sept 12, 2014)	Will be disclosed this time	・ During the transfer through the port, all the initially accumulated water was transferred, and filtered water was filled in as ballast water.	・ If the mooring rope is completely cut off due to tsunami, it is likely to collide with the shore protection in the port leading to leakage.	In the port	・ Mega float → sea	Water in the mega float	-	・ The mooring rope of the mega float is regularly inspected and in addition is inspected as needed when there is an impact of ocean waves, such as during a typhoon or a major cyclone.	-
157	**Common**	Other	Other	(1) Needs to be inspected	Other	Leakage of oil, chemicals etc. from the equipment	・ Units 1 - 6 light oil tank ・ Environmental Facility heavy oil tank ・ Units 1 - 4 chemical tank (sulfuric acid & caustic) ・ Units 5, 6 chemical tank (sulfuric acid & caustic) etc.	-	-	-	Not applicable	・ None	・ Leakage outside the system due to equipment damage	Common	・ Source of risk → off-site	-	-	-	-

(1) Needs to be inspected (2) Countermeasures are necessary (3) Countermeasures are currently being implemented (4) Observing status after countermeasure had been taken (5) At present additional measures are not required

No.	[1] Identification of risk location							[2] Risk analysis								[3] Consolidation of the risk monitoring status		[4] Current status of countermeasures	
								(1) Water condition				(2) Outflow route							
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific main location name	Location	Quantity (m3)	Concentration of radioactive substances [Bq/L]	Disclosure of the concentration data mentioned on the left	Assumed source of outflow	Factors causing the outflow	Main off-site outflow locations	Outflow route (may be multiple) (towards the off-site premises)	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress
158	Common	Other	Other	(3) Countermeasures are currently being implemented	Other	Leakage of from the equipment due to fire	・ Fire	-	-	-	Not applicable	-	・ Leakage of from the equipment due to fire	Common	・ Source of risk → off-site	-	-	・ Patrol, goods management etc.	Being implemented
159	Common	Other	Other	(3) Countermeasures are currently being implemented	Other	Leakage outside the site due to human factors (including carrying away stuff etc.)		-	-	-	Not applicable	-	・ Outflow of water contaminated due to erroneous operation by the workers, outside the site	Common	・ Source of risk → off-site	-	-	・ Training & education of the operators ・ Patrol, entry & exit management etc.	Being implemented

(1) Needs to be inspected (2) Countermeasures are necessary (3) Countermeasures are currently being (4) Observing status after countermeasures have been tal (5) At present additional measures are not

No.	[1] Identification of risk location				[2] Risk analysis (1) Assumption of dust generation	[3]Consolidation of the risk monitoring status			[4] Consolidation of the status of countermeasures		Need for countermeasures
	Category		Type	Specific name	Assumed event	Availability of monitoring results	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress	
160	Dust generation risk	Dust generated during work	Removing (waste from the top) of the building	Equipment installation work around the buildings in Units 1 - 4	The dust attached to the frame of the building got scattered during demolition	Yes	MP	Regular	Spraying anti-scattering agent, deluge system etc.	Will be implemented after starting engineering work	(1) Needs to be inspected
161				Unit 2 reactor building partial demolition	The dust attached to the frame of the building got scattered during demolition	Yes	MP	Regular	Measures for controlling the scattering of dust and demolition methods are being examined	Will be implemented after starting engineering work	(1) Needs to be inspected
162			Other work	Other work	Dust is generated during other work.	Yes	MP Implemented suitably for each work	Regular	Implemented suitably for each work	—	(1) Needs to be inspected
163			Tank dismantling	Flange tank dismantling & residual water treatment	During dismantling & residual water treatment the dust that generated from the internal surface of the tank gets scattered at high concentration.	Yes	Dust from the tank surface MP	3 times / day Regular	The contamination is flushed out by sprinkling water on the surface of the tank before dismantling, a local exhauster is installed under the tank to continuously suck in the dust during dismantling & residual water treatment.	Will be implemented after starting engineering work	(2) Countermeasures are necessary
164				Flange tank disconnection	Dust generated during disconnection scatters outside the building in the area where disconnection is being carried out.	Yes	Dust from the disconnected part MP	1 time / day Regular	The disconnection is carried out indoors （in the outage equipment warehouse) and ventilating equipment with a weak negative pressure control is deployed in the said building.	Will be implemented after starting engineering work	(2) Countermeasures are necessary
165			Removing (waste from the top) of the building	Removing the rubble on the refueling floor of the Unit 1 reactor building	The dust attached to the rubble got scattered when the rubble was being removed	Yes	On the refueling floor MP	24 hours Regular	Spraying anti-scattering agent, deluge system, rubble suction etc,	Related work is being carried out	(3) Countermeasures are currently being implemented
166				Unit 2 Reactor building truck bay entrance rooftop water-proofing maintenance	The dust attached to roof block etc. got scattered when it was being removed	Yes	MP	Regular	Installing provisional roof	Being implemented	(3) Countermeasures are currently being implemented
167				Removing the rubble from the refueling floor of the Unit 3 reactor building and decontaminating	The dust attached to the rubble and concrete floor got scattered when the rubble was being removed and decontaminated.	Yes	On the refueling floor MP	24 hours Regularly	Spraying anti-scattering agent	Being implemented	(3) Countermeasures are currently being implemented
168				Unit 3 Rubble in the SFP	Since the disconnection work is being carried out at the yard to the west of Unit 3, the dust concentration is likely to have increased.	Yes	MP	Regular	・ Application of anti-scattering agent in case of large rubble	Being implemented	(3) Countermeasures are currently being implemented
169				Heavy equipment for removing the rubble and heavy equipment for decontamination	Dust attached to the heavy equipment for dismantling and decontamination got scattered	Yes	MP	Regular	Regular decontamination	Being implemented	(3) Countermeasures are currently being implemented
170		Dust generated due to sheet damage	Existing air conditioning equipment	Unit 2 reactor building exhaust equipment	Leakage outside the system due to duct damage	Yes	MP	Regular	Monitoring is being carried out from the said system exhaust outlet.	Under operation	(1) Needs to be inspected
171				Existing reactor facility in Unit 1 - 4 (HVAC system)	Scattering of dust within the pipes due to duct damage	Yes	MP	Regular	—	—	(1) Needs to be inspected
172				Existing reactor facility in Unit 1 - 4 (AC system)	Scattering of dust within the pipes due to pipe damage	Yes	MP	Regular	—	—	(1) Needs to be inspected
173				Existing reactor facility in Unit 1 - 4 (SGTS system)	Scattering of dust within the pipes due to pipe damage	Yes	MP	Regular	—	—	(1) Needs to be inspected

(1) Needs to be inspected (2) Countermeasures are necessary (3) Countermeasures are currently being (4) Observing status after countermeasures have been tak (5) At present additional measures are not

No.	[1] Identification of risk location				[2] Risk analysis (1) Assumption of dust generation	[3]Consolidation of the risk monitoring status			[4] Consolidation of the status of countermeasures		Need for countermeasures
	Category		Type	Specific name	Assumed event	Availability of monitoring results	Monitoring targets & sites	Frequency	Details of the countermeasures	Have been implemented / Work in progress	
182	Dust generation risk	Dust generated irrespective of work and damage	Ground facilities etc.	Other ground surfaces and equipment	Scattering of dust attached to the ground surfaces due to the wind	Yes	MP	Regular	–	–	(1) Needs to be inspected
183			Building rooftop	Rooftops in the premises	Collapsing of the fall out rubble on the building rooftop due to strong winds or earthquake and scattering of dust attached to it	Yes	MP	Regular	–	–	(1) Needs to be inspected
184			Waste storage area	Area for temporary storage of rubble (collected outdoors)	Scattering of dust attached to the rubble due to the wind	Yes	In the vicinity of the inlet MP	Once / 3 months Regular	–	–	(2) Countermeasures are necessary
185				Area for temporary storage of felled trees (collected outdoors)	Scattering of dust attached to the felled trees (trunk & roots) due to the wind	Yes	In the vicinity of the inlet MP	Once / 3 months Regular	Removing high dose sites	Implemented	(4) Observing status after countermeasures have been taken
186			Ground facilities etc.	Rubble storage area on top of the reactor building	The dust attached to the rubble that is temporarily stored in the high dose rubble storage area	Yes	MP	Regular	Spraying anti-scattering agent	Being implemented	(3) Countermeasures are currently being implemented
187				Ground around Units 1 - 4	Scattering of the dust attached to the fallout rubble scattered at the ground level around the buildings	Yes	MP	Regular	Rubble removal & facing	Being implemented	(3) Countermeasures are currently being implemented
188			Other	The open portion in the basement of the T/B, RW/B, HTI, and process Sb buildings of Units 1 - 4	Scattering of dust from the open portion of the basement of each building	Yes	Each building MP	Once / 3 months Regular	Closing the open portion of the basement of each building by means of a balloon, non-combustible sheet	Implemented	(4) Observing status after countermeasures have been taken
189	Common	Common	Common	Fire	Scattering of dust due to fire	Yes	MP	Regular	・ Patrol, goods management etc.	Being implemented	(3) Countermeasures are currently being implemented
190				Other	Scattering of dust due to human factors	Yes	MP	Regular	・ Training & education of the operators ・ Patrol, entry & exit management etc.	Being implemented	(3) Countermeasures are currently being implemented

[Accumulated water investigation result of trenches connected to buildings with accumulated water.]

N

Legend

- : Accumulate water with Cs concentration >= 10E7Bq/L is confirmed or assumed.
- : Accumulate water with Cs concentration >= 10E6Bq/L.
- : Accumulate water with Cs concentration >= 10E5Bq/L.
- : Accumulate water with Cs concentration =< 10E4Bq/L.
- : No accumulated water area
- : Areas where investigation was not possible due to high radiation or obstacles.
- : Sealing Area
- : Areas where investigation was not carried out by the end of FY2014 due to high radiation or obstacles.

* Seawater pipe trenches of units 2,3 and 4 are currently under sealing work.
Seawater pipe trenches of units 2 and 3 are excluded from the investigation scope because highly contaminated water was confirmed in the investigation before January 2012.

1-1:Unit 1 pump room circulating water pump delivery valve pit
1-4:Unit 1 power cable trench
1-6: Unit 1 sea-water piping trench
1-15:Unit 2 pump room circulating water pump delivery valve pit
1-17: Unit 2 power cable trench
1-24:Unit 3 pump room circulating water pump delivery valve pit
1-41: Unit 2 sea-water piping trench
1-42: Unit 3 sea-water piping trench
1-28:Unit 3 power cable trench
1-38: Units 4 power cable trenches
1-32:Unit 4 pump room circulating water pump delivery valve pit
1-39:Unit 4 sea-water piping trench
1-31:Unit 4 sea-water piping trench(SW system)
1-20:Unit 2 chemical tank connecting duct
1-18:Unit 2 sea-water piping trench(SW system)
1-23:Unit 3 chemical tank connecting duct
1-8:Unit 1 common piping duct (eastern side)
1-14:Unit 2 common piping duct
1-13:Unit 2 radiating fluid piping duct
1-22:Unit 3 radiating fluid piping duct
1-36:Unit 4 common piping duct
1-29:Unit 4 radiating fluid piping duct
1-27: Heavy oil piping trench (Eastern side of Units 3,4)
1-19: Unit 2 light oil piping trench
1-30:Unit 4 chemical tank connecting duct
1-16:Unit 2 – 3 emergency power cable connecting duct
1-3:Unit 1 radiating fluid piping duct
1-7:Unit 1 common piping duct (northern side)
1-2:Unit 1 chemical tank connecting duct
1-11:Water treatment building~Unit 1 connecting duct
1-10: Unit 1 hot shower drain tank connecting duct
1-9: Unit 1 control cable duct
1-5:Unit 1 spare power cable trench
1-21: Unit 3 start-up transformer cable duct
1-35: Unit 4 off-gas piping duct
1-26:Unit 3 off-gas piping duct (sothern side)
1-25: Unit 3 off-gas piping duct (northern side)
1-33:Centralized environmental facility waste system common piping duct (Unit 2 waste system common piping duct)
1-33:Centralized environmental facility waste system common piping duct
1-12: Units 2 – 4 DG connecting duct
1-37:Connecting duct between the radioactive waste treatment buildings
1-43: HTI connecting duct
1-34:Common pool connecting duct (higrly concentrated contaminated water confirmation rang

#1 T/B
#2 T/B
#3 T/B
#4 T/B
#1 C/B
#1 R/B
#1 Rw/B
#2 Rw/B
#2 R/B
#3 Rw/B
#3 R/B
#4 Rw/B
#4 R/B
Process main building
Incineration workshop building
Site bunker building
Miscellaneous solid waste volume reduction treatment building
SPT building
Common pool building

[Accumulated water investigation result of trenches without connection to buildings containing accumulated water.]

N

Legend

- : Accumulate water with Cs concentration >= 10E7Bq/L is confirmed or assumed.
- : Accumulate water with Cs concentration >= 10E6Bq/L.
- : Accumulate water with Cs concentration >= 10E5Bq/L.
- : Accumulate water with Cs concentration =< 10E4Bq/L.
- : No accumulated water area
- : Areas where investigation was not possible due to high radiation or obstacles.
- : Sealing Area

2-37 Fire protection piping trench (Western side of heavy oil tank)
2-6 Heavy oil piping trench Eastern side of Units 1)
Addition1 Unit 1 drainage canal
2-3 Heavy oil piping trench (Southern side of Units 1 PP gate)
2-1 Unit 1 heavy oil piping trench
2-4 Unit 1 boiler room electrical appliances room connecting rack trench
2-5 Trench connected to the nitrogen gas cylinder room for injection into the generators in Units 1 - 4
Addition2 Unit 2 drainage canal
2-27 utility piping duct
2-52 Fire protection piping trench (Northern side of drainage canal exit)
Addition4 Unit 4 drainage canal
2-28 Unit 4 sea-water piping duct(SW system)
Addition5 Unit 1 backwash valve pit
Addition6 Unit 2 backwash valve pit
2-43 Fire protection piping trench (eastern side of Unit 3)
Addition7 Unit 3 backwash valve pit
2-53 Fire protection piping trench (eastern side of Unit 4)
Addition8 Unit 4 backwash valve pit
2-20 Fire protection piping trench (between Units 2 - 3 T/B)
2-51 Fire protection piping trench (southern side of Unit 4)
2-21 Fire protection piping trench (southwest side of Unit 2 T/B)
2-25 Unit 3 nitrogen pipe trench for industrial safety
2-33 Unit 4 trench connected to machine room
#1 T/B
#2 T/B
#3 T/B
#4 T/B
#1 C/B
#1 R/B
#1Rw/B
#2 Rw/B
#2 R/B
#3 Rw/B
#3 R/B
#4 Rw/B
#4 R/B
2-14 Unit 2 main transformer cable duct
2-7 Unit 1 main transformer cable duct
2-22 Fire protection piping trench (southern side of Unit 2 R/B)
2-23 Unit 3 main transformer cable duct
2-26 Heavy oil piping trench (Western side of Units 3,4)
2-29 Unit 4 main transformer cable duct
2-15 Unit 2 transformer disaster prevention trench
2-10 Unit 1 waste surge tank connecting duct
2-24 Unit 3 transformer disaster prevention trench
2-30 Unit 4 transformer disaster prevention trench
Process main building
2-50 Fire protection piping trench (southwest side of Unit 4)
ALAP
2-8 Unit 3 start-up transformer cable duct
2-11 Unit 1 off-gas piping duct
2-17 Unit 2 waste surge tank connecting duct
2-18 Unit 2 - 3 common house boiler trench
2-44 Fire protection piping trench (northern side of Unit 3)
2-46 Fire protection piping trench (northwest side of stack Units 3,4)
2-47 Fire protection piping trench (northwest side of Unit 4)
2-9 Unit 1 transformer disaster prevention trench
2-16 Unit 2 off-gas piping duct
2-32 Unit 4 western side trench connected to electrical facilities
Incineration workshop building
Site bunker building
2-38 Fire protection piping trench (Northwest side of Unit 2)
2-42 Units 1 - 2 cable duct
2-39 Fire protection piping trench (Western side of Unit 2)
2-35 Fire protection piping trench (Eastern side of SPT building)
Miscellaneous solid waste volume reduction treatment building
SPT building
2-31 Units 4、5 light oil piping trench
2-45 Fire protection piping trench (western side of Unit 3)
2-19 Unit 2 hydrogen gas piping trench
2-13 Unit 1 - 4 common house boiler trench
Common pool building
2-34 Fire protection piping trench (eastern side of Common pool building)
2-36 Fire protection piping trench (Northern side of SPT building)
2-40 oxygen gas・hydrogen gas piping trench
Unit 1 duct for activated carbon type gas hold-up system
2-12
2-49 Fire protection piping trench (western side of Unit 4)
2-42 Fire protection piping trench (Western side of common house boiler building)
2-41 Fire protection piping trench (Southwest side of Unit 2)
2-48 Fire protection piping trench (northern side of Common pool building)

[Accumulated water investigation result of surrounding of units 5 and 6 ad other trenches.①]

N

Legend

: Accumulate water with Cs concentration >= 10E7Bq/L is confirmed or assumed.

: Accumulate water with Cs concentration >= 10E6Bq/L.

: Accumulate water with Cs concentration >= 10E5Bq/L.

: Accumulate water with Cs concentration =< 10E4Bq/L.

: No accumulated water area

: Areas where investigation was not possible due to high radiation or obstacles.

: Sealing Area

3-30 Unit 6 piping duct (pump room – WG set building)

3-23 Unit 6 pump room circulating water pump delivery valve pit

3-1 Unit 5 pump room circulating water pump delivery valve pit

3-24 Unit 6 power cable trench

3-2 Unit 5 power cable trench

3-28 Unit 6 chemical tank connecting duct

3-4 Unit 5 sea-water piping trench

3-7 Unit 5 heavy oil and light oil piping trench

3-27 Unit 6 sea-water piping trench (SW system)

3-5 Unit 5 sea-water piping trench (SW system)

3-11 Common suppression pool water surging pipe trench

3-12 Unit 5 heavy oil piping trench (eastern side)

3-22 Fire protection piping trench (Southern side of Unit 5)

3-52 Fire protection piping trench (Northeast side of Unit 6)

3-25 Unit 6 sea-water piping trench (Northern side)

3-29 Unit 6 common piping duct

3-26 Unit 6 sea-water piping trench (Southern side)

#6 T/B

3-8 Units 5, 6 storm drain piping trench

3-13 Unit 5 radiating fluid piping duct

#5 T/B

3-3 Unit 5 common piping duct

3-9 Unit 5 chemical tank connecting duct

3-10 Suppression pool water piping trench

3-32 Unit 6 DG connecting duct

3-6 Unit 3 light oil piping trench

3-46 Unit 5 oxygen gas and carbonic acid gas piping trench

3-31 Unit 6 light oil piping trench

C/B

3-38 Unit 6 centralized environmental facility waste system common piping duct

3-34 Stand by gas treatment piping duct

3-33 Unit 6 main transformer cable duct

3-20 Unit 5 centralized environmental facility waste system common piping duct

#6 R/B

#5 R/B

3-36 Unit 6 radiating fluid piping duct

3-37 Unit 6 off-gas piping duct

3-21 Fire protection piping trench (Western side of Unit 5)

Rw/B

3-49 Fire protection piping trench (Northwest side of Unit 6)

3-48 Fire protection piping trench (Southern side of Unit 6)

3-50 Fire protection piping trench (Northern side of Unit 6)

3-16 Units 5-6 communication cable piping route

3-51 Fire protection piping trench (Northern side of Unit 6)

3-39 Fire protection piping trench (western side of Unit 6)

3-35 Unit 6 western side trench connected to electronical facilities

3-19 Unit 5 off-gas piping duct

3-17 Unit 5 heavy oil piping trench (Southwest side)

3-47 Fire protection piping trench (Southwest side of Unit 5)

3-18 Unit 5 western side trench connected to electronical facilities

3-54 Units 5-6 transformer disaster prevention trench (Northern side)

3-53 Units 5-6 transformer disaster prevention trench (Southern side)

3-14 Unit 5 main transformer cable duct

3-15 Unit 5 start-up transformer cable duct

[Accumulated water investigation result of surrounding of units 5 and 6 ad other trenches.②]

trench
5)

N

Legend

: Accumulate water with Cs concentration >= 10E7Bq/L is confirmed or assumed.

: Accumulate water with Cs concentration >= 10E6Bq/L.

: Accumulate water with Cs concentration >= 10E5Bq/L.

: Accumulate water with Cs concentration =< 10E4Bq/L.

: No accumulated water area

: Areas where investigation was not possible due to high radiation or obstacles.

: Sealing Area

#1 R/B

Rw/E

3-40 Northern side of old main administrative building

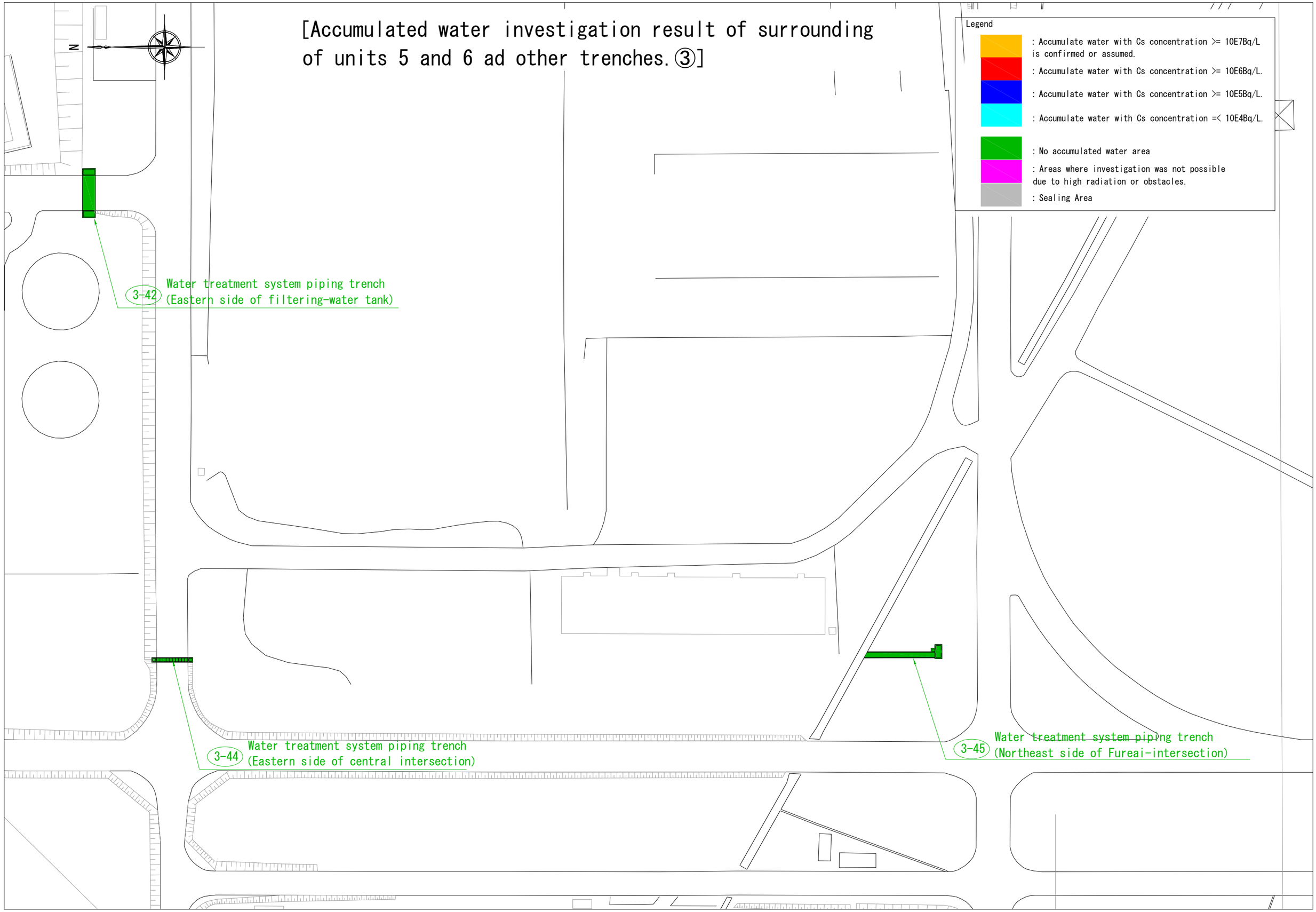
ble piping route

3-16 Units 5-6 communication cable piping route

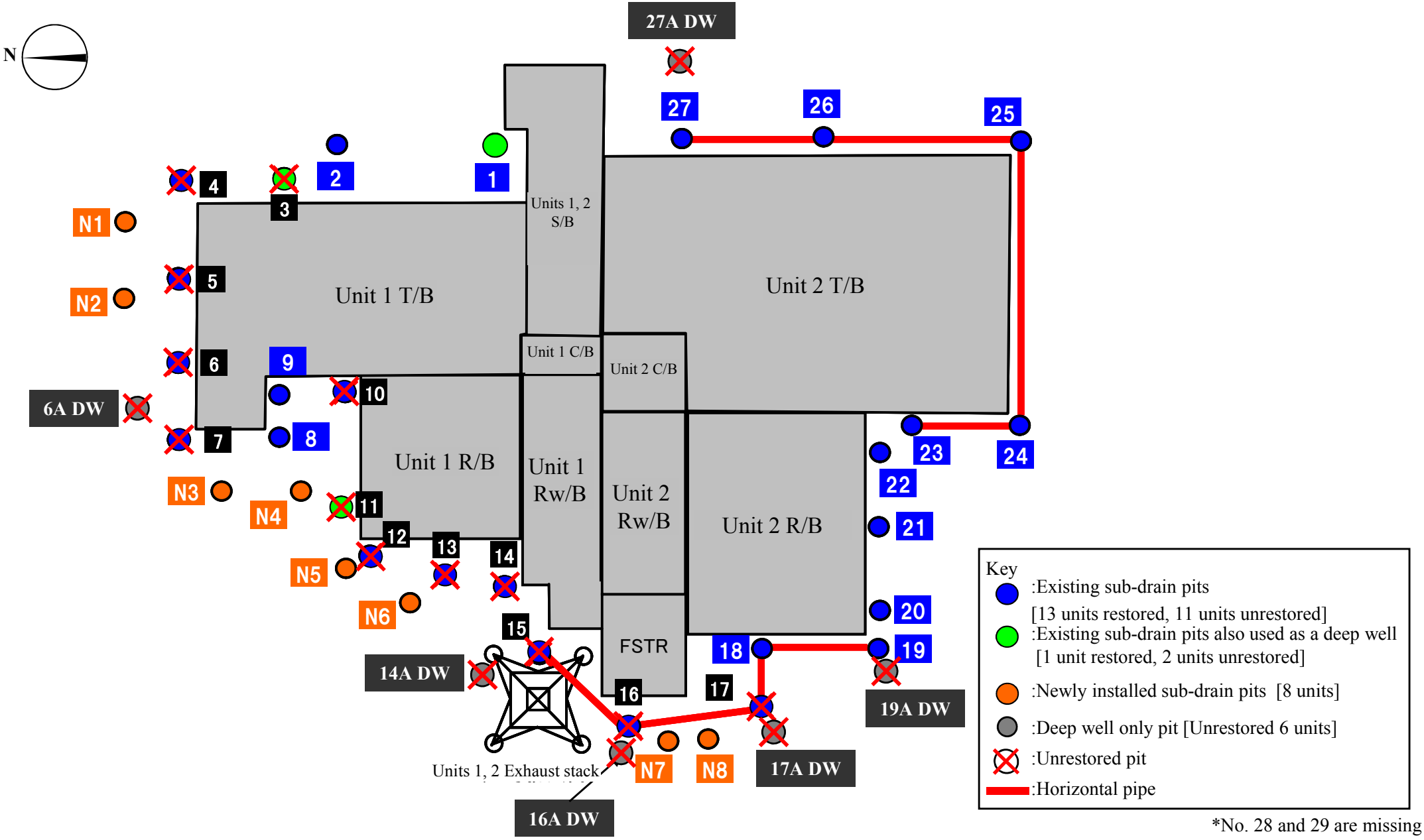
3-41 Water treatment system piping trench (Eastern side of main administrative building)

3-43 Water treatment system piping trench (Northern side of main administrative building)

[Accumulated water investigation result of surrounding of units 5 and 6 ad other trenches.③]

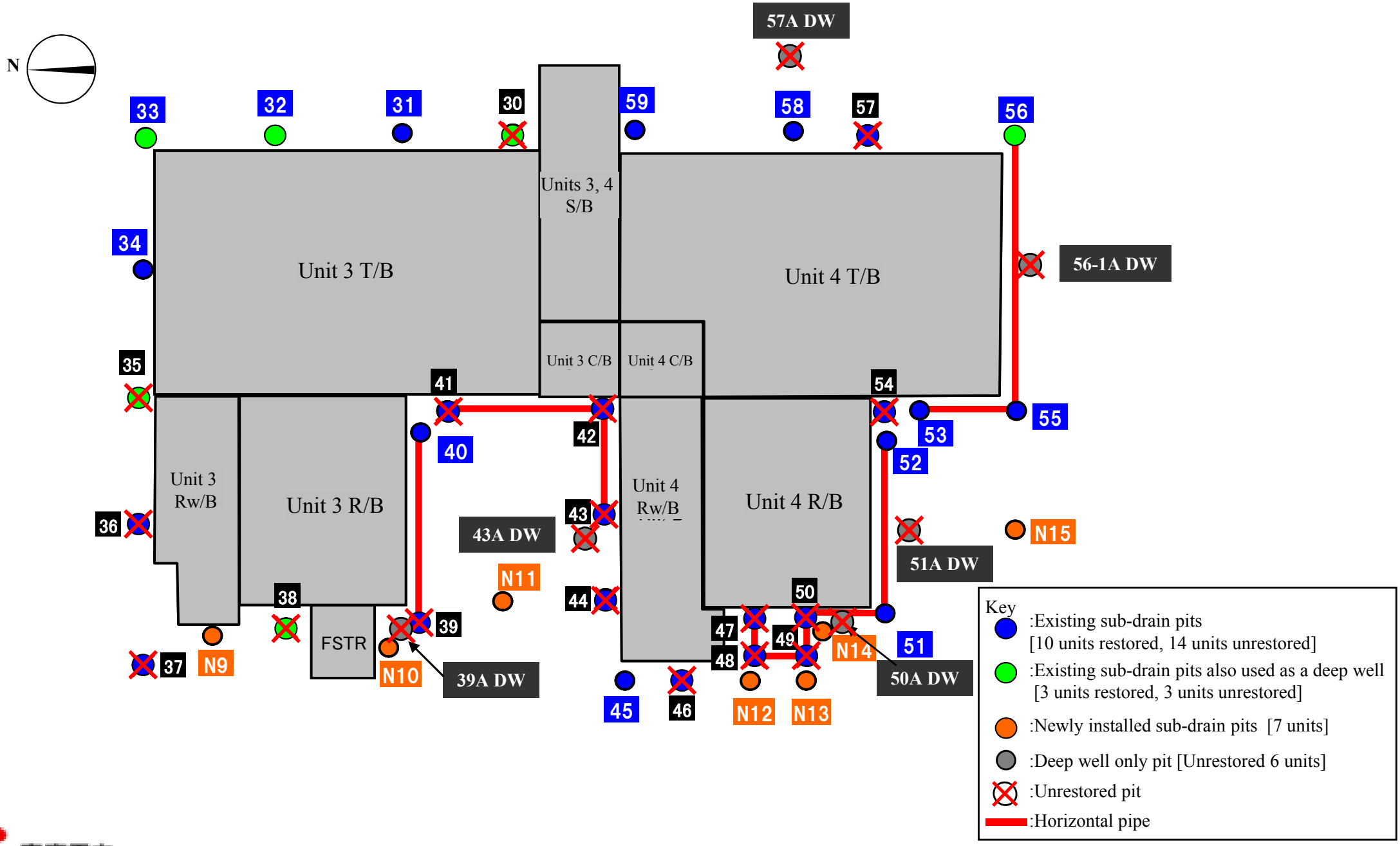


Positioning of sub-drain pits / deep wells (around Units 1 and 2)



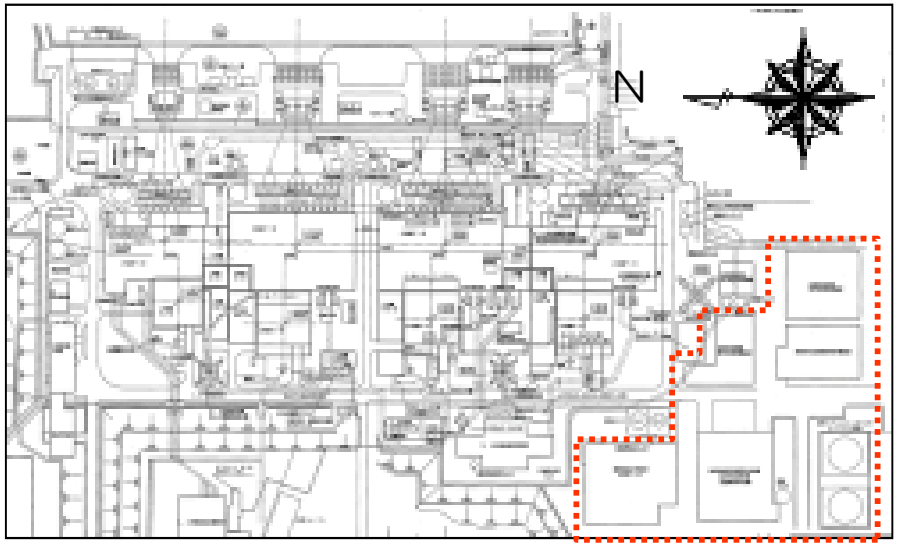
*No. 28 and 29 are missing

Positioning of sub-drain pits / deep wells (around Units 3 and 4)



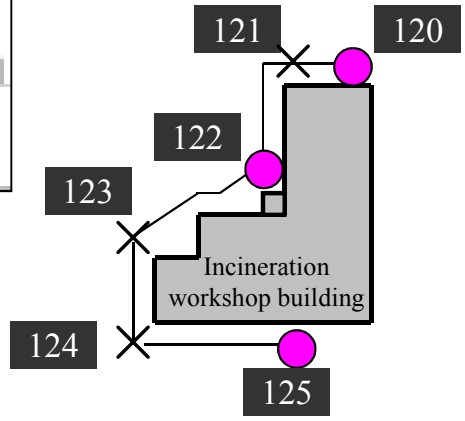
【Reference】Regarding water quality investigation of each building's sub-drain pit

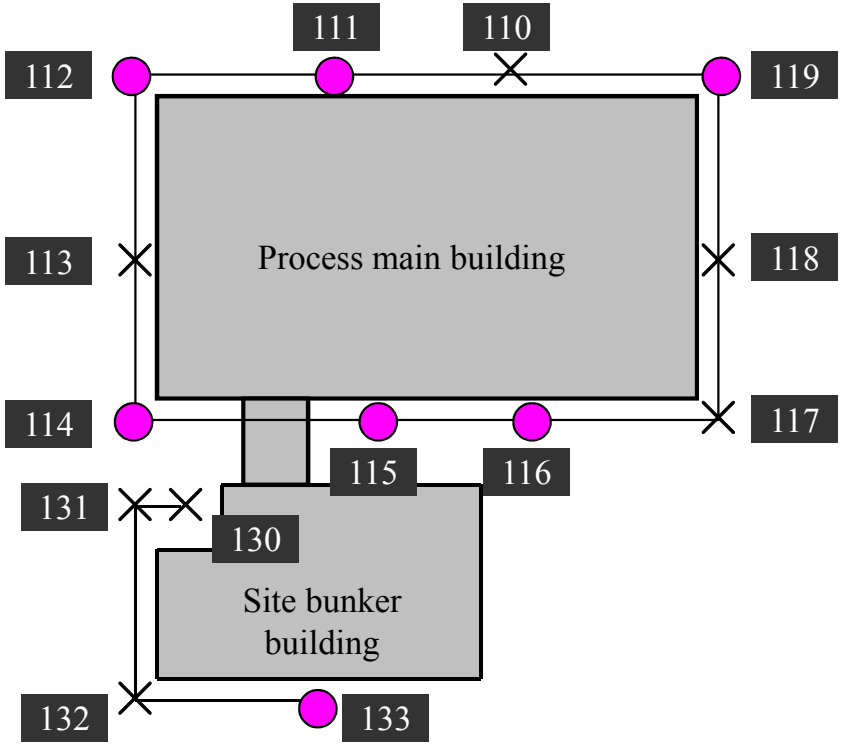
- Conducted water quality investigation of water accumulated in the 17 existing sub-drain pits from December 12 to draft a method for restoring the sub-drains in each building.

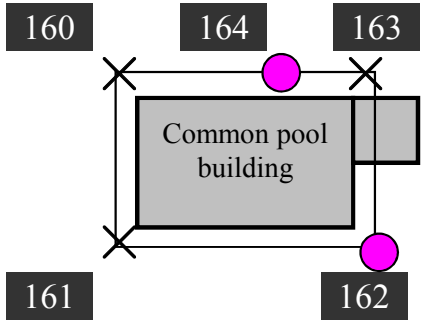


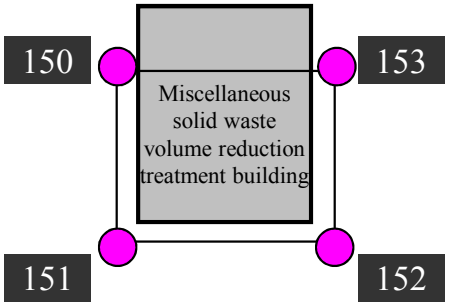
● : Investigated [17 units]

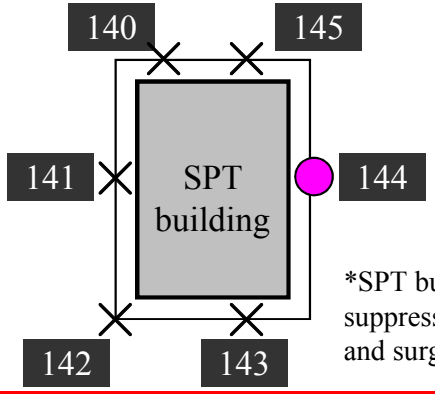
× : Unable to investigate [18 units]





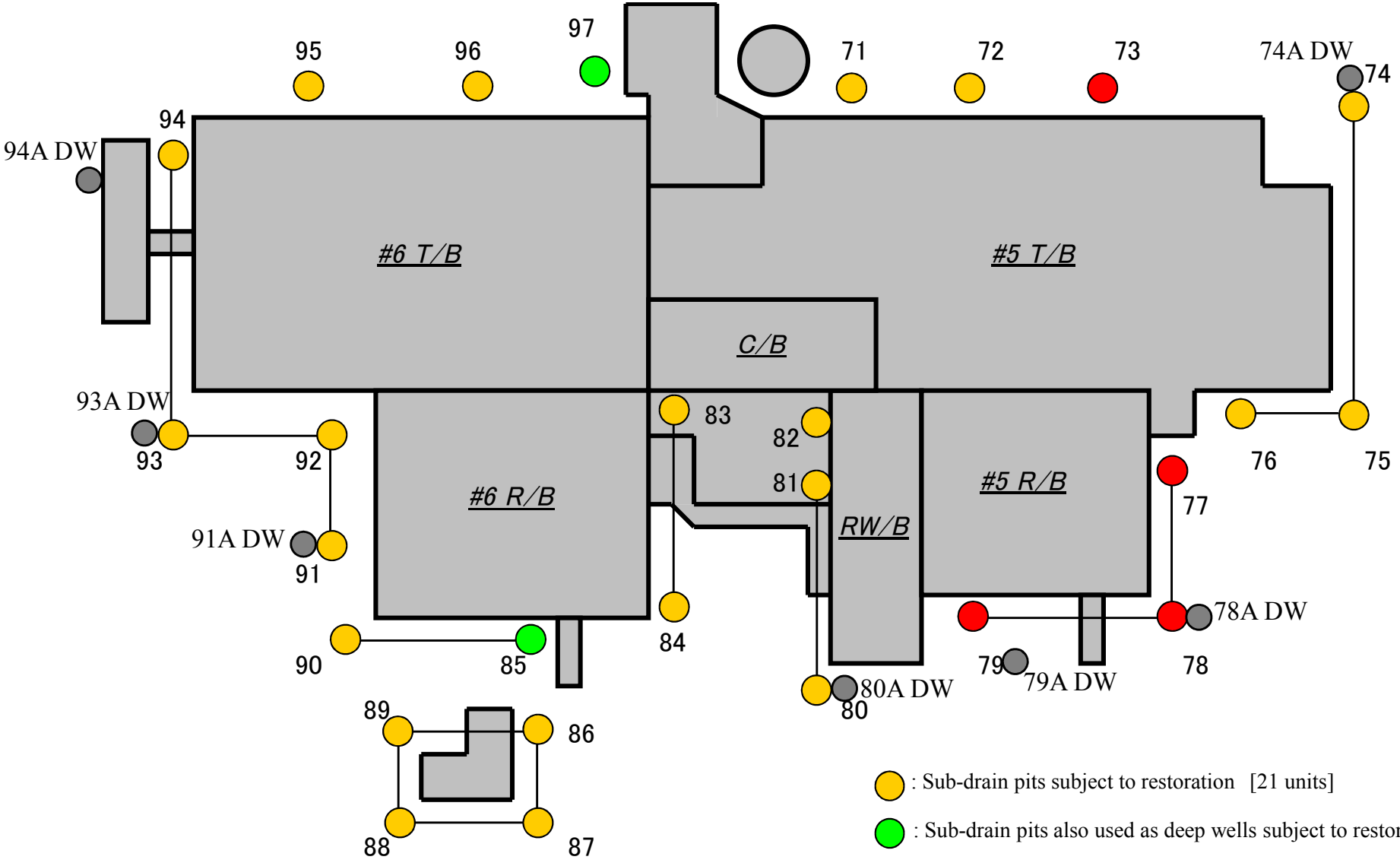






*SPT building: short for suppression pool water and surge tank building

Positioning of sub-drain pits / deep wells (around Units 5 and 6)



: Sub-drain pits subject to restoration [21 units]

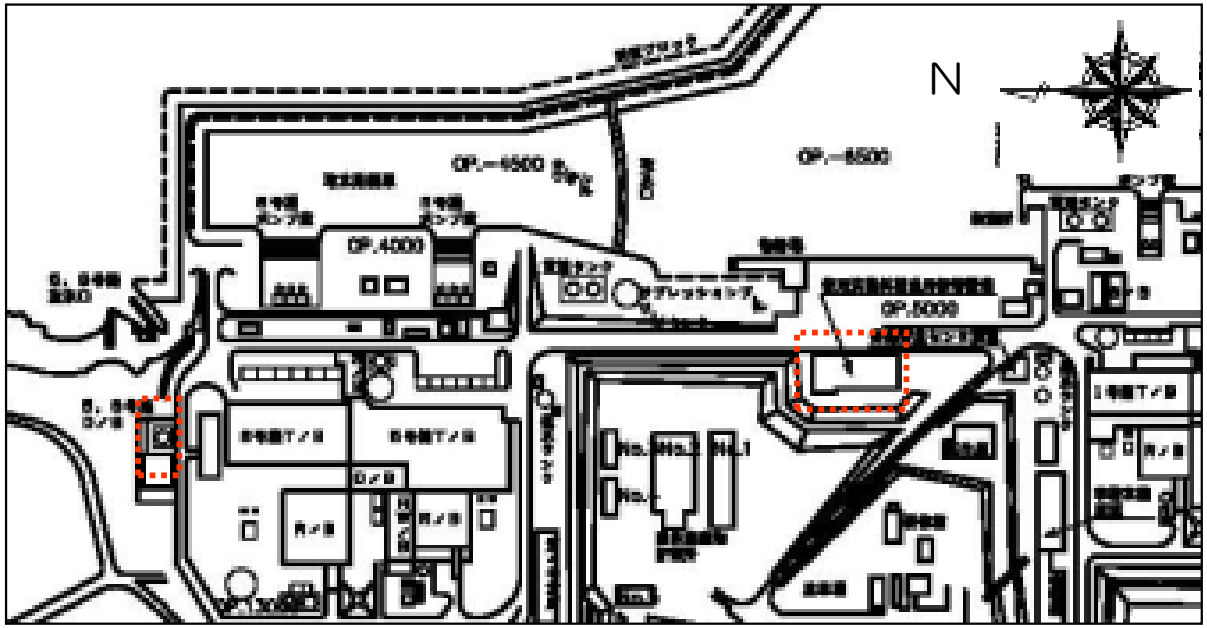
: Sub-drain pits also used as deep wells subject to restoration [2 units]

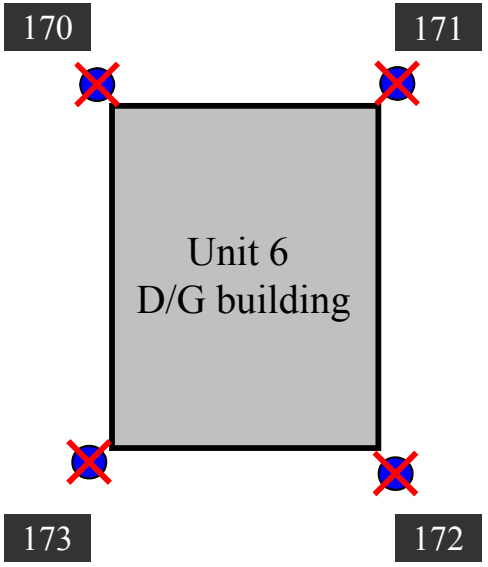
: Sub-drain pits not subject to restoration [4 units]

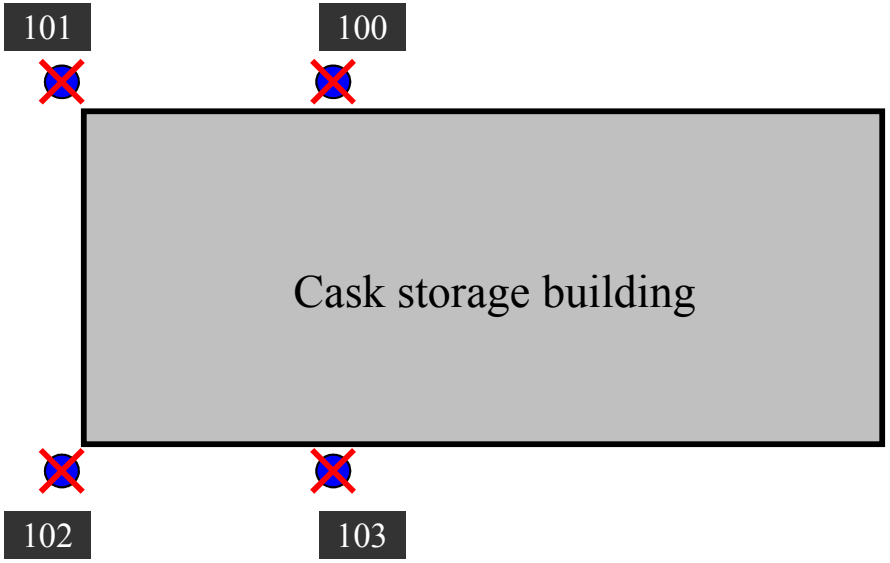
(Pit was filled with concrete due to higher density of radioactivity compared to other pits after cleaning)

: Deep well only pit [7 units]

Sub-drain pit positioning diagram (other)







: Existing sub-drain pits [4 units unrestored]

: Existing sub-drain pits [4 units restored]

[Attachment] The approach towards classification

① Items classified as "(1) Needs to be inspected" are inspected in order starting from the risks that are assumed to have a high priority.
② For the items classified as "(2) Countermeasures are necessary" the respective response guidelines for the future are as mentioned in the table below.
③ Items classified as "(3) Countermeasures are currently being implemented" are verified based on the results of implementing the countermeasures
④ For Items classified as "(4) Observing status after countermeasures have been taken" if the circumstances change additional measures are taken
⑤ For items classified as "(5) At present additional measures are not required" the respective reasons why the measures are not necessary are as mentioned in the table below.

	【1】 Identification of risk location							【Verification of the need for additional countermeasures】				
No.	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific name	Response Status	Concentration (High concentration: Cs137>10^6Bq/L, Comparatively high concentration: Cs137>10^3Bq/L, Low concentration:	Boundary Solid／Fragile	Priority	Response guidelines for the future
8	K Drainage Channel	Risk of becoming the source of contamination of rainwater	Other structures	(2) Countermeasures are necessary	Building roof	Unit 2 R/B	・ Unit 2 R/B	(2) Countermeasures are necessary	Comparatively high concentration	Fragile	Promptly	・ Sheet installation or water-proofing construction (to keep away) ・ Roof block removal (clearing away) ・ Cleaning of the rainwater flowing out from the roof (clearing away)
9	K Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(2) Countermeasures are necessary	Accumulated water treatment facilities in Units 1 - 4	Accumulated water transfer equipment	・ Piping, pump, etc.	(2) Countermeasures are necessary	High concentration	Solid	Sequentially	・ Creation of a small loop so as to reduce the risk of leakage from the piping (so that there is no leakage) ・ Cleaning the water accumulated in the buildings to mitigate the impact in the event of leakage (clearing away) ・ Removal of residual water in the equipment that is not used (isolated) (clearing away)
17	K Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(2) Countermeasures are necessary	Spent fuel pool, reactor well, DSP	Units 1 - 4 SFP etc.	・Units 1 - 4 SFP ・Unit 4 RPV, reactor well, DSP	(2) Countermeasures are necessary	Comparatively high concentration	Solid	Sequentially	・ Inspection of the boundary functions such as that of pool gate etc. (so that there is no leakage) ・ Careful removal of the rubble in the pool so that the water-proofing function of the pool gate of Unit 3 can be maintained (so that there is no leakage)
30	A Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(2) Countermeasures are necessary	Accumulated water storage tanks for Units 5 and 6	Units 5, 6 storage tanks (flange tanks)	・ Units 5, 6 storage tanks (flange tanks)	(2) Countermeasures are necessary	Low concentration	Fragile	Sequentially	・ Consideration of replacement (so that there is no leakage)
36	B & C Drainage Channel	Risk of becoming the source of contamination of rainwater	Waste storage area	(2) Countermeasures are necessary	Water treated secondary waste storage area	Temporary adsorption vessel storage facility (Sarry / Kurion)	・ Temporary adsorption vessel storage facility (Facility 1, Facility 4)	(2) Countermeasures are necessary	Comparatively high concentration	Solid	Sequentially	・ Continued monitoring and confirming that there is no leakage. ・ Long-term storage in facilities where rainwater cannot infiltrate. (to keep away)
45	B & C Drainage Channel	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(2) Countermeasures are necessary	Storage tanks for contaminated water etc.	Liquid waste supply tank (Rectangular tank)	・ Liquid waste supply tank	(2) Countermeasures are necessary	Comparatively high concentration	Solid	Sequentially	・ Removing from the accumulated water treatment loop while creating a small loop. (clearing away)
72	Other Drainage Channels	Risk of presence of accumulated water that becomes a source of contamination	Pits	(2) Countermeasures are necessary	Backwash valve pit and delivery valve pits	Units 5, 6 backwash valve pit and delivery valve pits (water quality inspected)	・ Unit 5 pump room circulating water pump delivery valve pit ・ Unit 6 pump room circulating water pump delivery valve pit	(2) Countermeasures are necessary	Low concentration	Fragile	Sequentially	・ Prevention of inflow of rainwater (to keep away) ・ Cleaning measures (clearing away) ・ Removal of puddle water (clearing away)
75	Groundwater (in the open culvert)	Risk of becoming the source of contamination of rainwater	Contaminated soil	(2) Countermeasures are necessary	Contaminated soil	Contaminated soil (in areas other than around the H4 area)	・ Soil near the eastern side of Units 1 - 4 turbine buildings ・ Soil that could not be collected when there was leakage in the past (in areas other than around the H4 area)	(2) Countermeasures are necessary	Comparatively high concentration	Fragile	Promptly	・ Continuing with drawing of contaminated groundwater (so that there is no leakage) ・ Collection of soil (clearing away)
79	Groundwater (in the open culvert)	Risk of becoming the source of contamination of rainwater	Other structures	(2) Countermeasures are necessary	Building roof	Roof of the Units 1 - 4 turbine buildings (water quality inspected)	・Unit 1 T/B ・Unit 2 T/B	(2) Countermeasures are necessary	Comparatively high concentration	Fragile	Promptly	・ Sheet installation or water-proofing construction (to keep away) ・ Roof block removal (clearing away) ・ Cleaning of the rainwater flowing out from the roof (clearing away)
110	Groundwater (in the open culvert)	Risk of presence of accumulated water that becomes a source of contamination	Pits	(2) Countermeasures are necessary	SD pit (except the pits that are scheduled to be made operational in Units 1 - 4)	Units 1 - 4 sub-drain pit No. 16 (Unrestored pits)(water quality has been inspected)	・ Sub-drain pit No. 16	(2) Countermeasures are necessary	High concentration	Fragile	Immediately	・ Drawing out puddle water (clearing away)
111	Groundwater (in the open culvert)	Risk of presence of accumulated water that becomes a source of contamination	Pits	(2) Countermeasures are necessary	SD pit (except the pits that are scheduled to be made operational in Units 1 - 4)	Other sub-drains of Units 1 - 4 (including deep wells) (unrestored pits)(water quality inspected)	・ Unit 1 - Unit 4 sub-drains	(2) Countermeasures are necessary	Comparatively high concentration	Fragile	Promptly	・ Drawing out puddle water (clearing away)
112	Groundwater (in the open culvert)	Risk of presence of accumulated water that becomes a source of contamination	Pits	(2) Countermeasures are necessary	Backwash valve pit and delivery valve pits	Units 1 - 4 backwash valve pit and delivery valve pits (water quality inspected)	・ Unit 1 backwash valve pit ・ Unit 2 backwash valve pit ・ Unit 3 backwash valve pit ・ Unit 4 backwash valve pit ・ Unit 1 pump room circulating water pump delivery valve pit ・ Unit 4 pump room circulating water pump delivery valve pit	(2) Countermeasures are necessary	Comparatively high concentration	Fragile	Promptly	・ Prevention of inflow of rainwater (to keep away) ・ Cleaning measures (clearing away) ・ Removal of puddle water (clearing away)
124	Groundwater (in the port)	Risk of presence of accumulated water that becomes a source of contamination	Building	(2) Countermeasures are necessary	Stagnant water in the building	Accumulated water in the building (other than the buildings around Units 1 - 4) (water quality has been inspected)	・ Accumulated water in the buildings of Units 5/6 ・ Solid waste storage facility (buildings in Units 6 - 8) & Administrative building	(2) Countermeasures are necessary	Low concentration	Solid	Sequentially	・ Implementation of measures to ensure that the accumulated water in the buildings in Units 5, 6 does not increase and does not leak (to keep away, clearing away)

No.	【1】 Identification of risk location							【Verification of the need for additional countermeasures】				
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific name	Response Status	Concentration (High concentration: Cs137>10^6Bq/L, Comparatively high concentration: Cs137>10^3Bq/L, Low concentration:	Boundary Solid／Fragile	Priority	Response guidelines for the future
132	**Groundwater (in the port)**	Risk of presence of accumulated water that becomes a source of contamination	Trenches	(2) Countermeasures are necessary	Trenches in Units 5, 6 etc.	Trenches in Units 5, 6 etc. that have been inspected (that have water)	・ Unit 5 sea-water piping trench ・ Units 5, 6 storm drain piping trench ・ Unit 5 heavy oil piping trench (eastern side) ・ Unit 5 radiating fluid piping duct ・ Unit 5 main transformer cable duct etc.	(2) Countermeasures are necessary	Low concentration	Solid	Sequentially	・ Removal of puddle water (clearing away)
145	**Groundwater (Outside the port)**	Risk of presence of accumulated water that becomes a source of contamination	Building	(2) Countermeasures are necessary	Accumulated water in the building	Concentrated RW building (water quality has been inspected)	・Process main building ・HTI building ・SPT building	(2) Countermeasures are necessary	High concentration	Solid	Sequentially	・ Cleaning measures (clearing away) ・ Removal of puddle water (clearing away)
150	**Groundwater (Outside the port)**	Risk of presence of accumulated water that becomes a source of contamination	Pits	(2) Countermeasures are necessary	SD pit (except the pits that are scheduled to be made operational in Units 1 - 4)	Sub-drains around concentrated rad	・ Sub-drains around concentrated rad	(2) Countermeasures are necessary	Low concentration	Fragile	Sequentially	・ Drawing out puddle water (clearing away)
6	**K Drainage Channel**	Risk of becoming the source of contamination of rainwater	Other structures	(5) At present additional measures are not required	Building roof	Buildings that have been erected after the earthquake disaster	・ Sub-drain transfer pump building ・ Provisional cesium adsorption vessel, Second provisional storage facility folding tent and crane operation room ・ Upland reactor cooling water injection pump rooftop ・ Freezing plant building (1), (20) / electrical appliances building etc.	(5) At present additional measures are not required	-	-	-	・ Since the risk of contamination is low (Roof installed after the accident)
29	**A Drainage Channel**	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(5) At present additional measures are not required	Existing facilities	No.2 filtered water system equipment	・ Tank, piping etc.	(5) At present additional measures are not required	-	-	-	・ Since the radioactive concentration of the stored water is low (lower than the regulatory concentration limit)
60	**B & C Drainage Channel**	Risk of presence of accumulated water that becomes a source of contamination	Pits	(5) At present additional measures are not required	Other wells, etc.	Power cable pit (inspected)	・ Hand-hole ・ South side 66kV switch-yard cable pit ・ Provisional transformer cable pit ・ Open trench	(5) At present additional measures are not required	-	-	-	・ Since there is no puddle water
67	**Other Drainage Channels**	Risk of becoming the source of contamination of rainwater	Drainage channel & river	(5) At present additional measures are not required	River	River Jinbazawa	・ River Jinbazawa	(5) At present additional measures are not required	-	-	-	・ Since the radioactive concentration of the water is low (lower than regulatory concentration limit) Trying to enhance monitoring
73	**Other Drainage Channels**	Risk of presence of accumulated water that becomes a source of contamination	Pits	(5) At present additional measures are not required	Drainage canal	Unit 5 drainage canal (Being used as a route for sea-water used for cooling)	・ Unit 5 drainage canal (Being used as the sea-water route for cooling)	(5) At present additional measures are not required	-	-	-	・ Since the radioactive concentration of the water is low (lower than the regulatory concentration limit)
74	**Other Drainage Channels**	Risk of presence of accumulated water that becomes a source of contamination	Pits	(5) At present additional measures are not required	Drainage canal	Unit 6 drainage canal (Being used as a route for sea-water used for cooling)	・ Unit 6 drainage canal (Being used as the sea-water route for cooling)	(5) At present additional measures are not required	-	-	-	・ Since the radioactive concentration of the water is low (lower than the regulatory concentration limit)
107	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Trenches	(5) At present additional measures are not required	Trenches connecting buildings of Units 1 - 4	Trenches connecting buildings of Units 1 - 4, which have been inspected (that do not have water)	・ Unit 2 radiating fluid piping duct ・ Unit 3 radiating fluid piping duct ・ Unit 1 common piping duct (northern side) ・ Unit 2 common piping duct etc.	(5) At present additional measures are not required	-	-	-	・ Since there is no puddle water
108	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Trenches	(5) At present additional measures are not required	Trenches that do not connect buildings of Units 1 - 4 etc.	Trenches that do not connect buildings of Units 1 - 4 Trenches that have been inspected (that do not have water)	・Unit 1 light oil piping trench ・Units 1 - 2 cable duct ・Unit 1 boiler room electrical appliances room connecting rack trench ・Trench connected to the nitrogen gas cylinder room for injection into the generators in Units 1 - 4 ・Unit 1 - 4 common house boiler trench etc.	(5) At present additional measures are not required	-	-	-	・ Since there is no puddle water
118	**Groundwater (in the open culvert)**	Risk of presence of accumulated water that becomes a source of contamination	Pits	(5) At present additional measures are not required	Drainage canal	Unit 4 drainage canal (outlet has been blocked)	・ Unit 4 drainage canal (outlet has been blocked)	(5) At present additional measures are not required	-	-	-	・ Since there is no puddle water
120	**Groundwater (in the port)**	Water generated during work	Work	(5) At present additional measures are not required	Work	Discharge of water during the work carried out in the area around Units 5 - 6	・ Sprinkling of water during the fire-fighting training	(5) At present additional measures are not required	-	-	-	・ Since the radioactive concentration of the water is low (lower than the regulatory concentration limit)
122	**Groundwater (in the port)**	Risk of presence of accumulated water that becomes a source of contamination	Water retained in the equipment	(5) At present additional measures are not required	Existing facilities	Existing facilities within the buildings of Units 5, 6	・ Each system and facility in Units 5, 6 (piping, tanks, pumps etc.)	(5) At present additional measures are not required	-	-	-	・ Since it was confirmed through patrols that the level of reliability of the equipment is being maintained (inspection and maintenance at par with that of ordinary power stations is carried out)

No.	【1】 Identification of risk location							【Verification of the need for additional countermeasures】				
	Main outflow routes	Category		Need for countermeasures	Type	Risk existing location	Specific name	Response Status	Concentration (High concentration: Cs137>10^6Bq/L, Comparatively high concentration: Cs137>10^3Bq/L, Low concentration:	Boundary Solid／Fragile	Priority	Response guidelines for the future
125	Groundwater (in the port)	Risk of presence of accumulated water that becomes a source of contamination	Building	(5) At present additional measures are not required	Accumulated water in the building	Unit 6 DG6B building	・Unit 6 DG6B building	(5) At present additional measures are not required	-	-	-	・Since there is no puddle water
126	Groundwater (in the port)	Risk of presence of accumulated water that becomes a source of contamination	Building	(5) At present additional measures are not required	Accumulated water in the building	Cask storage building	・Cask storage building	(5) At present additional measures are not required	-	-	-	・Since the radioactive concentration of the stored water is low (lower than the regulatory concentration limit)
129	Groundwater (in the port)	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(5) At present additional measures are not required	Reactor, well, DSP	Unit 5, 6 RPV, well, DSP	・Unit 5, 6 RPV, well, DSP	(5) At present additional measures are not required	-	-	-	・Since it was confirmed through patrols that the level of reliability of the equipment is being maintained (inspection and maintenance at par with that of ordinary power stations is carried out)
130	Groundwater (in the port)	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(5) At present additional measures are not required	Spent Fuel Pool	Units 5, 6 SFP	・Units 5, 6 SFP	(5) At present additional measures are not required	-	-	-	・Since it was confirmed through patrols that the level of reliability of the equipment is being maintained (inspection and maintenance at par with that of ordinary power stations is carried out)
131	Groundwater (in the port)	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(5) At present additional measures are not required	Existing outdoor tanks	Unit 5 Waste Surge Tank (welded tank)	・Unit 5 Waste Surge Tank (welded tank)	(5) At present additional measures are not required	-	-	-	・Since the radioactive concentration of the stored water is low (lower than the regulatory concentration limit)
133	Groundwater (in the port)	Risk of presence of accumulated water that becomes a source of contamination	Trenches	(5) At present additional measures are not required	Trenches in Units 5, 6 etc.	Trenches in Units 5, 6 etc. that have been inspected (that don't have water)	・Unit 5 common piping duct ・Unit 3 light oil piping trench ・Unit 5 heavy oil piping trench ・Unit 5 chemical tank connecting duct ・Suppression pool water piping trench etc.	(5) At present additional measures are not required	-	-	-	・Since there is no puddle water
137	Groundwater (in the port)	Risk of presence of accumulated water that becomes a source of contamination	Pits	(5) At present additional measures are not required	SD pit (except the pits that are scheduled to be made operational in Units 1 - 4)	Sub-drains of Units 5, 6 (including deep wells) (water quality has been inspected)	・Units 5, 6 sub-drain pits	(5) At present additional measures are not required	-	-	-	Since the radioactive concentration of the stored water is low (lower than the regulatory concentration limit)
138	Groundwater (in the port)	Risk of presence of accumulated water that becomes a source of contamination	Pits	(5) At present additional measures are not required	SD pit (except the pits that are scheduled to be made operational in Units 1 - 4)	Cask storage building sub-drain	・Cask storage building sub-drain	(5) At present additional measures are not required	-	-	-	・Since the radioactive concentration of the stored water is low (lower than the regulatory concentration limit)
146	Groundwater (Outside the port)	Risk of presence of accumulated water that becomes a source of contamination	Building	(5) At present additional measures are not required	Accumulated water in the building	Common pool building	・Common pool building	(5) At present additional measures are not required	-	-	-	・Since the radioactive concentration of the water is low (lower than the regulatory concentration limit)
151	Groundwater (Outside the port)	Risk of presence of accumulated water that becomes a source of contamination	Pits	(5) At present additional measures are not required	Other wells, etc.	Deep wells	・Deep wells	(5) At present additional measures are not required	-	-	-	・Since the radioactive concentration of the stored water is low (lower than the regulatory concentration limit)
156	In the port	Risk of presence of accumulated water that becomes a source of contamination	Tanks & reservoirs	(5) At present additional measures are not required	Other	Mega float	・Mega float	(5) At present additional measures are not required	-	-	-	・Since the radioactive concentration of the stored water is low (lower than the regulatory concentration limit)

No.	[1] Identification of risk location				[Verification of the need for additional countermeasures]		
	Category		Type	Specific name	Response Status	Priority	Response guidelines for the future
163	Dust generation risk	Dust generated during work	Tank dismantling	Flange tank dismantling & residual water treatment	(2) Countermeasures are necessary	Promptly	・ Sprinkling of water on the surface of the tank (so that dust does not blow away) ・ Sucking in the dust (getting rid of the dust) ・ Spraying anti-scattering agent on the inner surface of the tank
164	Dust generation risk	Dust generated during work	Tank dismantling	Flange tank disconnection	(2) Countermeasures are necessary	Promptly	・ Indoor (vacuum control) dismantling (so that dust does not blow away)
174	Dust generation risk	Dust generated due to sheet damage	Waste storage area	Temporary storage facility	(2) Countermeasures are necessary	Promptly	・ Advanced preparation for restoration at the time of damage (trapping)
175	Dust generation risk	Dust generated due to sheet damage	Waste storage area	Temporary rubble storage area (covered with sheets)	(2) Countermeasures are necessary	Promptly	Moving to enclosed container (trapping)
184	Dust generation risk	Dust generated irrespective of work and	Waste storage area	Area for temporary storage of rubble (collected outdoors)	(2) Countermeasures are necessary	Promptly	・ Storage form improvement (trapping)