

Setting up water treatment facility for subdrain etc. at Unit 1 to 4, Fukushima Daiichi NPS

July 14, 2014

Tokyo Electric Power Company



東京電力

1-1. Purification performance confirmation test

Purpose

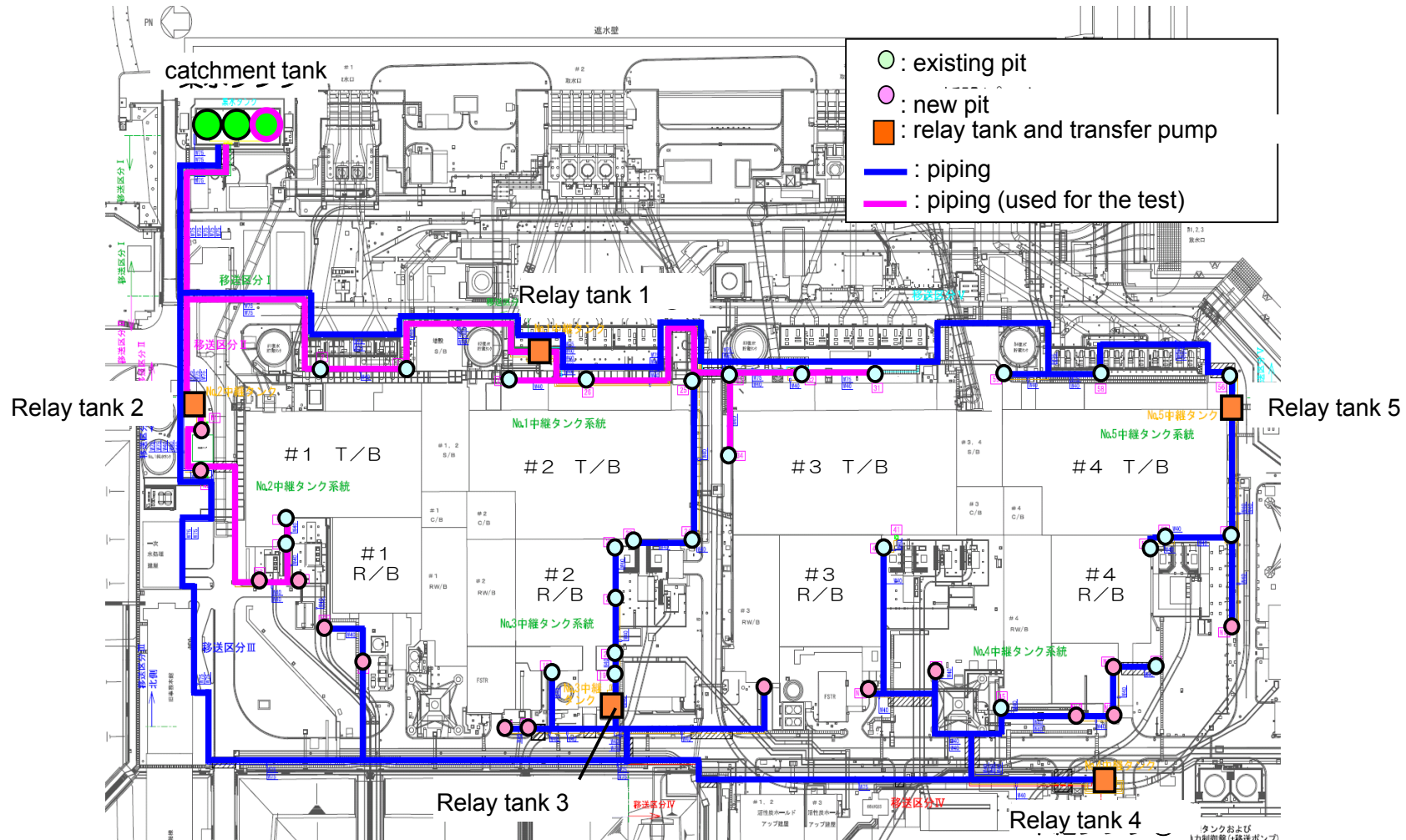
Since part of the water treatment facility for subdrain etc. will soon be installed, the **purification performance confirmation test** is due to be implemented to test multi-nuclide (except tritium) removal performance in the actual machines.

Procedure

- 1) Pump up water through existing/new subdrain pit
- 2) Testing elimination performance by comparing the radioactive material density of samples taken at inflow and outflow of the purification facility.
- 3) Water purified through the facility is stored in downstream sample tank

1-2. Purification performance confirmation test (area: subdrain facility)

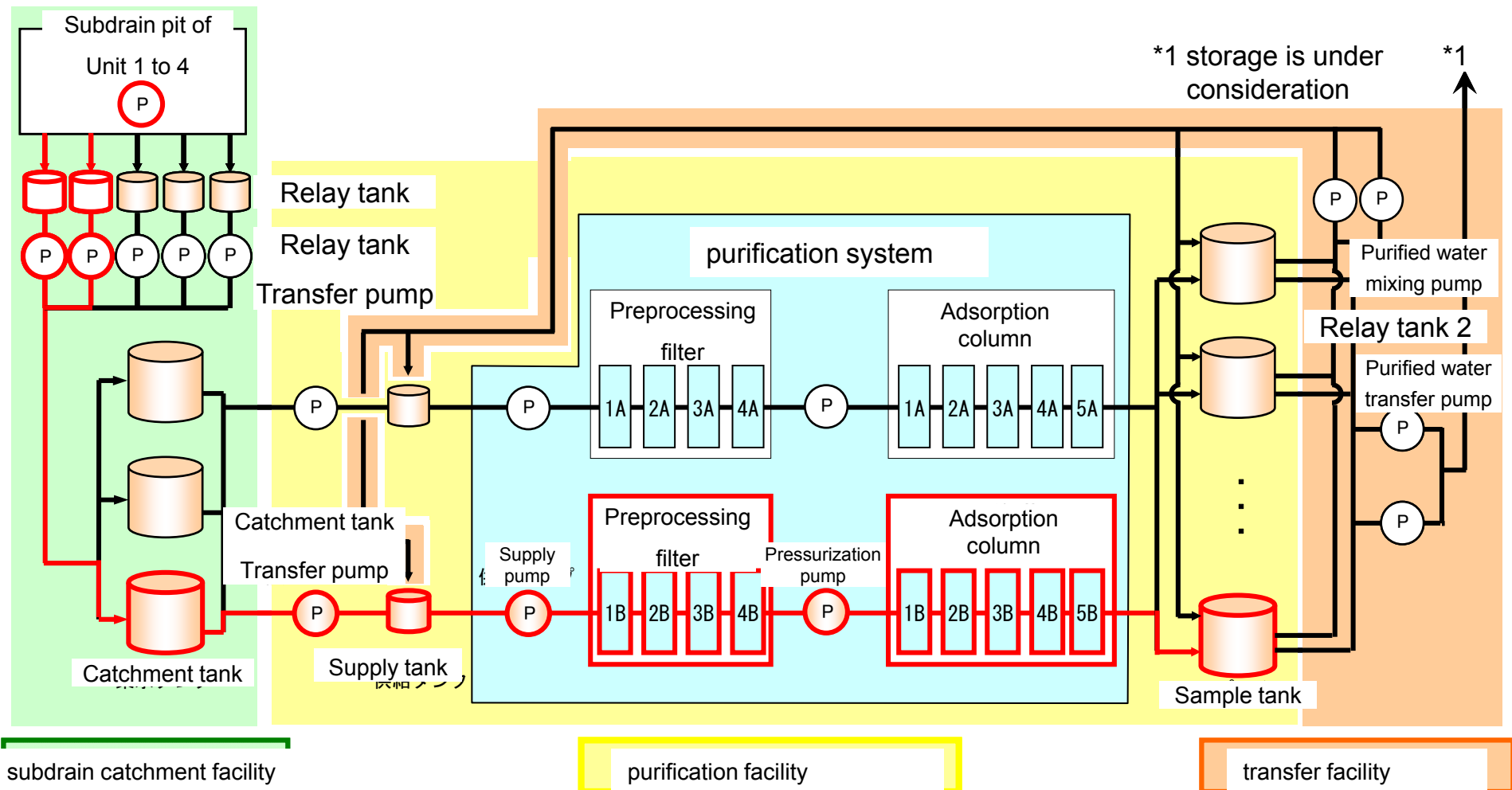
- Facilities used (pink line)
 - Subdrain pit : 14 (14 out of 42)
 - Relay tank: 2 (2 out of 5)
 - Catchment tank: 1 (1 out of 3)



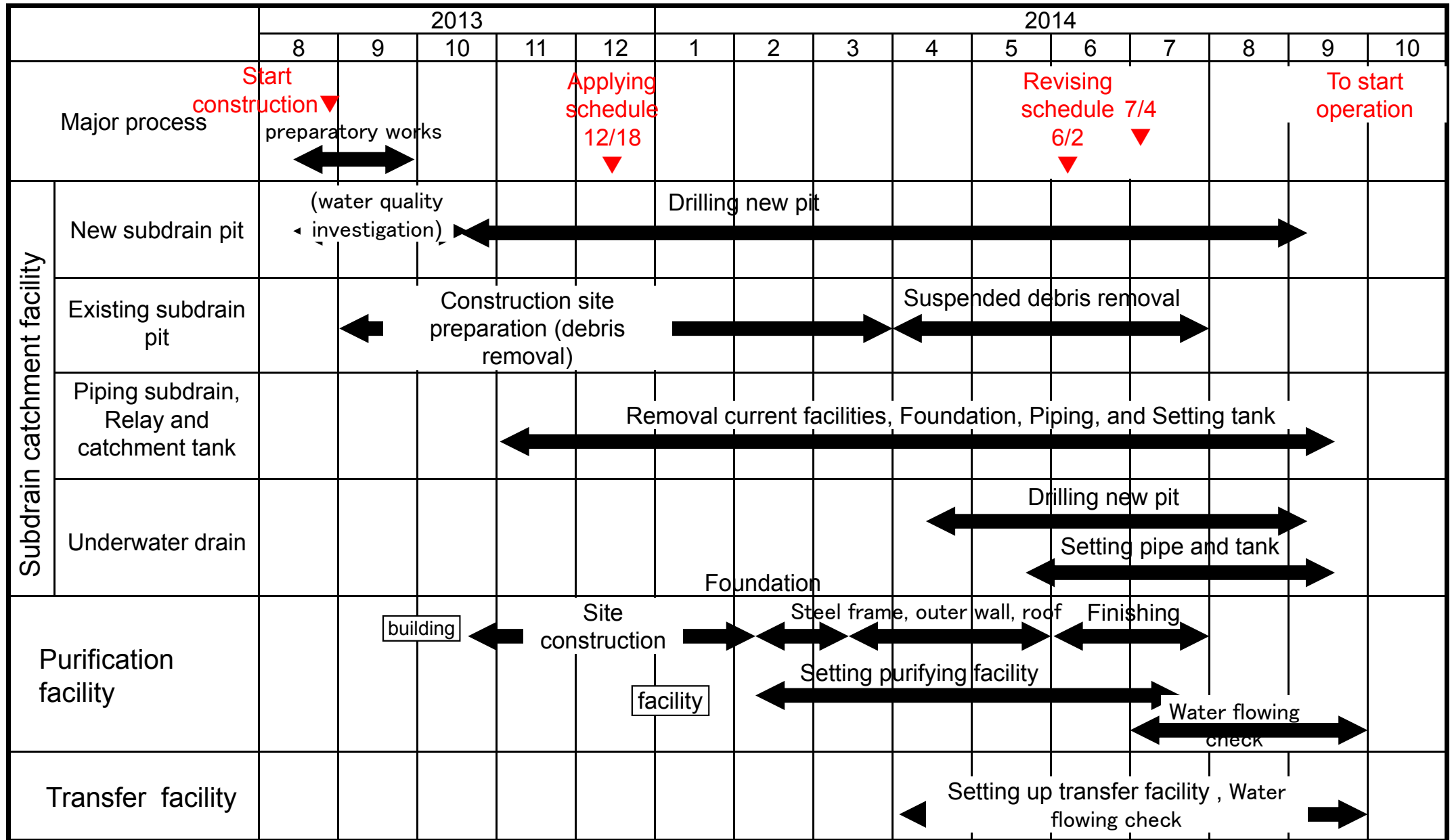
* We may revise the schedule at circumstances.

1-3. Purification performance confirmation test (used area)

- Facilities used (**red line**)
 - subdrain and water treatment system: 1 (system B, one out of two systems)
 - Sample tank: 1 (1 out of 8)

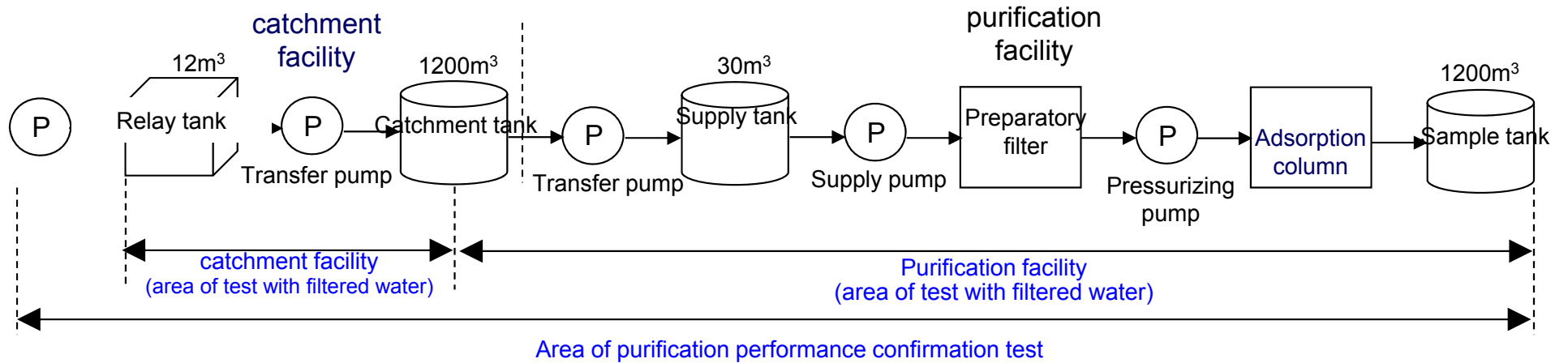


2-1. Total Schedule



* We may reschedule at interference with other construction.

2-2. Confirmation test schedule (contains analysis)



	June			July			August			September			October-
	beginning	middle	end	beginning	middle	end	beginning	middle	end	beginning	middle	end	
Total	Construction (System B)			Construction (System A)									▽ Start operation
Pre-use Inspection *													Relay tank 1
Catchment/purification facility				Water flow check with filtered water			Purification performance confirmation test*						
Analysis *							▽ Start drawing through subdrain pit *			simplified analysis			
										detailed analysis (in-house)			
										detailed analysis (outside and the third party)			

* After approval of plan

<reference>Construction of Subdrain catchment facility 1(on July, 2014)



Pit for new subdrain N9



Pit for new subdrain N12



Pit for new subdrain N14

<reference>Construction of Subdrain catchment facility 2(on July, 2014)



Setting up relay tank #1



Setting up relay tank #2



Foundation work for relay tank #3



Foundation work for relay tank #5

<reference>Construction of Subdrain and catchment facility 3(on July, 2014)



Setting up transfer pipe (north side of Unit 1)



Setting up transfer pipe (east side of Unit 1)



Setting up catchment tank

<Reference>Construction of subdrain and water purification building (on July, 2014)



Construction site panorama (north side)



exterior of the building (southeast side)



interior of the building

<Reference>Construction of subdrain and water treatment facility (on July, 2014)



Setting up adsorption columns



Setting up sample tank



Setting up supply tank for treatment system



Setting up pre-processing skid