Response to Detection of Radioactive Materials Exceeding the Notification Level of Radioactive Concentration from Groundwater Near the Seawall

Tokyo Electric Power Company

November 26, 2013

(Reference) Summary of result of analysis of radioactive concentration (maximum value at the observation hole is shown)

Tritium concentration : greater than 60,000Bq/L

Gross β concentration : greater than 30,000Bq/L
3,000～30,000Bq/L
300～3,000Bq/L

Observation hole No.0-1
Gross β：300 (collected on 8/22)
Tritium：45,000 (collected on 8/29)
Cs-134：5.1 (collected on 10/20)
Cs-137：9.5 (collected on 10/20)

Well point
Gross β：7.0×10^{2} (collected on 9/23)
Tritium：4.6×10^{5} (collected on 8/19)
Cs-134：110 (collected on 9/23)
Cs-137：250 (collected on 9/23)

Observation hole No.1-4
Gross β：380 (collected on 8/19)
Tritium：98,000 (collected on 7/11)
Cs-134：1.5 (collected on 7/8)
Cs-137：3.6 (collected on 7/8)

Observation hole No.1-11
Gross β：72 (collected on 10/3)
Tritium：85,000 (collected on 9/13)
Cs-134：0.92 (collected on 10/14)
Cs-137：2.0 (collected on 10/10)

Observation hole No.1-5
Gross β：56,000 (collected on 8/5)
Tritium：72,000 (collected on 8/15)
Cs-134：310 (collected on 8/5)
Cs-137：650 (collected on 8/5)

Observation hole No.1-9
Gross β：600 (collected on 9/8)
Tritium：770 (collected on 10/1)
Cs-134：170 (collected on 9/3)
Cs-137：380 (collected on 9/3)

Observation hole No.1-8
Gross β：3,700 (collected on 10/21)
Tritium：2,500 (collected on 10/14)
Cs-134：31 (collected on 9/16)
Cs-137：67 (collected on 9/16)

Observation hole No.1-2
Gross β：9.0×10^{5} (collected on 7/5, 7/9)
Tritium：4.3×10^{5} (collected on 9/16)
Cs-134：11,000 (collected on 7/9)
Cs-137：22,000 (collected on 7/9)

Observation hole No.1
Gross β：1,900 (collected on 5/24)
Tritium：5.0×10^{5} (collected on 5/24, 6/7)
Cs-134：13 (collected on 8/29)
Cs-137：31 (collected on 8/29)

Observation hole No.2-1
Gross β：380 (collected on 7/29)
Tritium：440 (collected on 8/26)
Cs-134：0.66 (collected on 9/1)
Cs-137：1.1 (collected on 8/29, 9/1)

Observation hole No.2-6
Gross β：850 (collected on 10/27)
Tritium：1,100 (collected on 10/13, 10/17)
Cs-134：0.42 (collected on 9/22)
Cs-137：0.61 (collected on 10/13)

Observation hole No.2
Gross β：1,700 (collected on 7/8)
Tritium：850 (collected on 6/26)
Cs-134：0.5 (collected on 7/9)
Cs-137：1.2 (collected on 7/11, 8/1)

Observation hole No.1-3
Gross β：1.6×10^{5} (collected on 8/12, 8/15)
Tritium：2.9×10^{5} (collected on 7/12)
Cs-134：10 (collected on 9/2)
Cs-137：24 (collected on 9/2)

Observation hole No.1-16
Gross β：8.8×10^{5} (collected on 10/14)
Tritium：43,000 (collected on 9/26)
Cs-134：1.5 (collected on 10/3)
Cs-137：3.4 (collected on 10/10)

Observation hole No.3-1
Gross β：180 (collected on 8/1)
Tritium：460 (collected on 8/1)
Cs-134：1.2 (collected on 7/25, 8/8)
Cs-137：2.6 (collected on 8/1)

Observation hole No.0-4
Gross β：ND (collected on 10/27)
Tritium：being measured
Cs-134：ND (collected on 10/27)
Cs-137：ND (collected on 10/27)

Observation hole No.1-12
Gross β：730 (collected on 10/21)
Tritium：3.5×10^{5} (collected on 10/21)
Cs-134：74 (collected on 10/21)
Cs-137：170 (collected on 10/21)

Observation hole No.3-4
Gross β：ND
Tritium：170 (collected on 9/18)
Cs-134：1.0 (collected on 9/25, 10/23)
Cs-137：2.3 (collected on 10/23)

Observation hole No.2-5
Gross β：46,000 (collected on 9/29)
Tritium：1,500 (collected on 9/29)
Cs-134：3.7 (collected on 9/29)
Cs-137：10 (collected on 9/29)

Observation hole No.3
Gross β：1,400 (collected on 7/11)
Tritium：3,200 (collected on 12/12 (2012))
Cs-134：3.5 (collected on 7/25)
Cs-137：5.9 (collected on 8/8)

Observation hole No.0-2
Gross β：87 (collected on 10/13)
Tritium：ND
Cs-134：0.61 (collected on 10/13)
Cs-137：1.6 (collected on 10/13)

Observation hole No.1T-4
Gross β：9,500 (collected on 9/11)
Tritium：4,200 (collected on 9/13)
Cs-134：0.64 (collected on 9/13)
Cs-137：0.98 (collected on 10/11)

Observation hole No.1T-5
Gross β：8,500 (collected on 10/11)
Tritium：12,000 (collected on 10/11)
Cs-134：ND
Cs-137：ND

Observation hole No.2T-1
Gross β：ND
Tritium：20,000 (collected on 9/11)
Cs-134：ND
Cs-137：0.66 (collected on 9/11)

Observation hole No.2T-2
Gross β：830 (collected on 9/11)
Tritium：770 (collected on 9/11)
Cs-134：ND
Cs-137：ND

Observation hole No.4T-1
Gross β：ND
Tritium：1,800 (collected on 9/9)
Cs-134：ND
Cs-137：ND

Unit 1 seawater pipe trench shaft B
Gross β：63 (collected on 8/14)
Tritium：ND(130) (collected on 8/14)
Cs-134：3,800 (collected on 8/14)
Cs-137：7,800 (collected on 8/14)

Observation hole No.1T-2
Gross β：ND
Tritium：200 (collected on 9/19)
Cs-134：ND
Cs-137：ND

Unit 2 intake power cable trench B1-1
Gross β：7.5×10^{8} (collected on 7/26)
Tritium：8.7×10^{6} (collected on 7/26)
Cs-134：7.5×10^{8} (collected on 7/26)
Cs-137：1.6×10^{9} (collected on 7/26)

Unit 2 intake power cable trench B2
Gross β：2.3×107 (collected on 7/17)
Tritium：1.2×105 (collected on 7/17)
Cs-134：1.2×107 (collected on 7/17)
Cs-137：2.4×107 (collected on 7/17)

Unit 3 seawater pipe trench shaft B
The one with the largest value among depths of 1, 7, and 13m is shown
Gross β：3.4×10^{7} (7, 13m) (collected on 7/31)
Tritium：3.6×10^{5} (1m) (collected on 7/31)
Cs-134：1.3×10^{7} (1m) (collected on 7/31)

Unit 4 subdrain No.56
Gross β：12 (collected on 6/11 (2012))
Tritium：6,200 (collected on 6/11 (2012))
Cs-134：ND (10) (collected on 10/25)
Cs-137：ND (20) (collected on 10/25)

Observation hole No.1T-1
Gross β：ND
Tritium：200 (collected on 9/5)
Cs-134：ND
Cs-137：ND

Observation hole No.1T-3
Gross β：ND
Tritium：80,000 (collected on 9/5)
Cs-134：ND
Cs-137：ND

Unit 1 subdrain No.2
Gross β：25 (collected on 8/5)
Tritium：3,200 (collected on 8/5)
Cs-134：ND(14) (collected on 8/5)
Cs-137：20 (collected on 8/5)

Unit 1 subdrain No.1
Gross β：290 (collected on 8/5)
Tritium：110,000 (collected on 8/5)
Cs-134：140 (collected on 10/25)
Cs-137：350 (collected on 10/25)

Unit 2 seawater pipe trench shaft A
Gross β：Uncollected
Tritium：Uncollected
Cs-134：1.8×107 (collected on 5/30)
Cs-137：3.7×107 (collected on 5/30)

Unit 3 subdrain No.32
Gross β：ND (9) (collected on 11/12 (2012))
Tritium：97 (collected on 11/12 (2012))
Cs-134：17 (collected on 10/25)
Cs-137：46 (collected on 10/25)

Unit 4 seawater pipe trench shaft
Gross β：Uncollected
Tritium：Uncollected
Cs-134：6.2×10^{4} (collected on 6/18)
Cs-137：1.3×10^{5} (collected on 6/18)

Unit 2 seawater pipe trench shaft C
The value for 13m, which has the largest value among depths of 1, 7,13 m, is shown
Gross β：5.2×10^{8} (collected on 7/31)
Tritium：4.6×10^{6} (collected on 7/31)
Cs-134：3.0×10^{8} (collected on 7/31)
Cs-137：6.5×10^{8} (collected on 7/31)

Unit 3 seawater pipe trench shaft A
The value for 1m, which has the largest value among depths of 1, 7, and 13m, is shown
Gross β：6.7×10^{8} (collected on 7/10)
Tritium：1.2×10^{7} (collected on 7/10)
Cs-134：5.0×10^{7} (collected on 7/10)
Cs-137：1.0×10^{8} (collected on 7/10)

Unit 4 subdrain No.53, 55
The value for No.55, which has the largest value, is shown
Gross β：ND (26.1) (collected on 6/5 (2012))
Tritium：6,144 (collected on 6/5 (2012))
Cs-134：2.0 (collected on 5/17 (2012))
Cs-137：3.4 (collected on 5/17 (2012))

Observation hole No.1R-1
Gross β：ND
Tritium：150 (collected on 9/5)
Cs-134：0.64 (collected on 9/5)
Cs-137：1.3 (collected on 9/5)

Test excavation hole N3
Gross β：ND (21) (collected on 9/1)
Tritium：320 (collected on 9/1)
Cs-134：3.0 (collected on 9/1)
Cs-137：7.2 (collected on 9/1)

Test excavation hole N4
Gross β：62 (collected on 9/1)
Tritium：320 (collected on 9/1)
Cs-134：4.8 (collected on 9/1)
Cs-137：12 (collected on 9/1)

Unit 2 subdrain No.25, 26
The value for No.25, which has the largest value among No.25-26, is shown
Gross β：1,737 (collected on 6/17 (2012))
Tritium：1,302 (collected on 6/17 (2012))
Cs-134：645 (collected on 6/17 (2012))
Cs-137：890 (collected on 6/17 (2012))

Unit 2 subdrain No.27
Gross β：430 (collected on 11/12 (2012))
Tritium：470 (collected on 11/12 (2012))
Cs-134：96 (collected on 10/25)
Cs-137：220 (collected on 10/25)

Observation hole No.2R-1
Gross β：36 (collected on 9/3)
Tritium：31 (collected on 9/3)
Cs-134：ND
Cs-137：0.97 (collected on 9/3)

Unit 2 subdrain No.23, 24
The greater of No.23-24 is shown
Gross β：1,052 (No.23) (collected on 6/18 (2012))
Tritium：2,407 (No.24) (collected on 6/19 (2012))
Cs-134：276 (No.23) (collected on 6/18 (2012))
Cs-137：425 (No.23) (collected on 6/18 (2012))

Observation hole No.3R-1
Gross β：ND
Tritium：1,100 (collected on 9/25)
Cs-134：ND
Cs-137：ND

Observation hole No.4R-1
Gross β：ND
Tritium：ND
Cs-134：ND
Cs-137：ND

※：The unit used for radioactive concentration is Bq/L
※：Dates without the year indicate that samples were collected in 2013
※：The maximum value at the observation hole is shown (as of 10/27)
※：The detectable limit is shown in parentheses for measurements results showing ND

(Reference) Summary of result of analysis of radioactive concentration (latest value at the observation hole

Tritium concentration : greater than 60,000Bq/L

Gross β concentration : greater than 30,000Bq/L
3,000～30,000Bq/L
300～3,000Bq/L

Observation holeNo.0-1
Gross β：61(collected on 10/27)
Tritium：11,000(collected on 10/20)
Cs-134：2.4（collected on 10/27）
Cs-137：5.8（collected on 10/27）

Well point
Gross β：3.3×10^5(collected on 10/21)
Tritium：1.3×10^5(collected on 10/21)
Cs-134：5.0（collected on 10/21）
Cs-137：13（collected on 10/21）

Observation hole No.1-9
Gross β：78(collected on 10/27)
ﾄﾘﾁｳﾑ：540(collected on 10/24)
Cs-134：9.3（collected on 10/27）
Cs-137：22（collected on 10/27）

Observation hole No.1-2
Gross β：2.5×10^5(collected on 10/7)
Tritium：54,000(collected on 10/7)
Cs-134：1,400（collected on 10/7）
Cs-137：2,800（collected on 10/7）

Observation hole No.2-1
Gross β：29(collected on 9/4)
Tritium：380(collected on 9/4)
Cs-134：ND（0.40）(collected on 9/4)
Cs-137：0.82（collected on 9/4）

Observation hole No.1-4
Gross β：240(collected on 8/22)
Tritium：21,000(collected on 8/22)
Cs-134：1.0（collected on 8/22）
Cs-137：1.8（collected on 8/22）

Observation hole No.1-11
Gross β：32 (collected on 10/24)
Tritium：25,000(collected on 10/21)
Cs-134：0.43（collected on 10/24）
Cs-137：1.2（collected on 10/24）

Observation hole No.1-8
Gross β：3,700(collected on 10/21)
Tritium：2,000 (collected on 10/21)
Cs-134：24（collected on 10/21）
Cs-137：58（collected on 10/21）

Observation hole No.1
Gross β：380(collected on 10/24)
Tritium：2.5×10^5(collected on 10/21)
Cs-134：ND（0.44）(collected on 10/24)
Cs-137：0.57（collected on 10/24）

Observation hole No.2-6
Gross β：850(collected on 10/27)
Tritium：960(collected on 10/23)
Cs-134：ND（0.44）(collected on 10/27)
Cs-137：ND（0.54）(collected on 10/27)

Observation hole No.2
Gross β：230(collected on 10/27)
Tritium：700(collected on 10/23)
Cs-134：ND（0.43）(collected on 10/27)
Cs-137：0.72（collected on 10/27）

Observation hole No.1-5
Gross β：820 (collected on 9/5)
Tritium：23,000(collected on 9/5)
Cs-134：50（collected on 9/5）
Cs-137：110（collected on 9/5）

Observation hole No.1-3
Gross β：21,000 (collected on 9/2)
Tritium：2.0×10^5(collected on 9/2)
Cs-134：10(collected on 9/2)
Cs-137：24（collected on 9/2）

Observation hole No.3-1
Gross β：55 (collected on 8/22)
Tritium：240 (collected on 8/22)
Cs-134：0.68（collected on 8/22）
Cs-137：1.2（collected on 8/22）

Observation hole No.0-4
Gross β：ND（１９）(collected on 10/27)
Tritium：being measured
Cs-134：ND（0.38）(collected on 10/27)
Cs-137：ND（0.49）(collected on 10/27)

Observation hole No.1-16
Gross β：3.1×10^5（collected on 10/24）
Tritium：8,700（collected on 10/21）
Cs-134：ND（1.1）(collected on 10/24)
Cs-137：1.2（collected on 10/24）

Observation hole No.3-4
Gross β：ND（17）(collected on 10/23)
Tritium：ND（120）(collected on 10/23)
Cs-134：1.0（collected on 10/23）
Cs-137：2.3（collected on 10/23）

Observation hole No.1-12
Gross β：640 (collected on 10/24)
Tritium：3.5×10^5（collected on 10/21）
Cs-134：36（collected on 10/24）
Cs-137：80（collected on 10/24）

Observation hole No.2-5
Gross β：46,000 (collected on 9/29)
Tritium：1,500 (collected on 9/29)
Cs-134：3.7 (collected on 9/29)
Cs-137：10 (collected on 9/29)

Observation hole No.3
Gross β：ND（24）(collected on 9/5)
Tritium：1,100 (collected on 9/5)
Cs-134：3.0（collected on 9/5）
Cs-137：3.0（collected on 9/5）

Observation hole No.0-2
Gross β：22 (collected on 10/27)
Tritium：ND（130）(collected on 10/20)
Cs-134：ND（0.42）(collected on 10/27)
Cs-137：0.58（collected on 10/27）

Observation hole No.1T-4
Gross β：5,000 (collected on 10/11)
Tritium：2,500 (collected on 10/11)
Cs-134：ND（0.73）(collected on 10/11)
Cs-137：0.98（collected on 10/11）

Observation hole No.1T-5
Gross β：8,500 (collected on 10/11)
Tritium：12,000 (collected on 10/11)
Cs-134：ND（0.67）(collected on 10/11)
Cs-137：ND（0.74）(collected on 10/11)

Observation hole No.2T-1
Gross β：ND（24）(collected on 9/11)
Tritium：20,000 (collected on 9/11)
Cs-134：ND（0.36）(collected on 9/11)
Cs-137：0.66（collected on 9/11）

Observation hole No.2T-2
Gross β：830 (collected on 9/11)
Tritium：770 (collected on 9/11分)
Cs-134：ND（0.47）(collected on 9/11)
Cs-137：ND（0.60）(collected on 9/11)

Observation hole No.4T-1
Gross β：ND（17）(collected on 9/9)
Tritium：1,800（collected on 9/9）
Cs-134：ND（0.38）(collected on 9/9)
Cs-137：ND（0.44）(collected on 9/9)

Unit 1 seawater pipe trench shaft B
Gross β：63 (collected on 8/14)
Tritium：ND（130）(collected on 8/14)
Cs-134：3,800（collected on 8/14）
Cs-137：7,800（collected on 8/14）

Unit 2 intake power cable trench B1-1
Gross β：7.5×10^8（collected on 7/26）
Tritium：8.7×10^6（collected on 7/26）
Cs-134：7.5×10^8（collected on 7/26）
Cs-137：1.6×10^9（collected on 7/26）

Observation hole No.1T-2
Gross β：ND（18）（collected on 9/19）
Tritium：200（collected on 9/19）
Cs-134：ND（0.38）（collected on 9/19）
Cs-137：ND（0.45）（collected on 9/19）

Unit 2 intake power cable trench B2
Gross β：2.3×10^7（collected on 7/17）
Tritium：1.2×10^5（collected on 7/17）
Cs-134：1.2×10^7（collected on 7/17）
Cs-137：2.4×10^7（collected on 7/17）

Unit 3 seawater pipe trench shaft B
The one was largest value among depth of 1, 7, and 13m is shown
Gross β：3.4×10^7（7，13m）（collected on 7/31）
Tritium：3.6×10^5（1m）（collected on 7/31）
Cs-134：1.3×10^7（1m）（collected on 7/31）
Cs-137：2.6×10^7（1m）（collected on 7/31）

Unit 4 subdrain No.56
Gross β：12（collected on 6/11 (2012)）
Tritium：6,200（collected on 6/11 (2012)）
Cs-134：ND（10）（collected on 10/25）
Cs-137：ND（20）（collected on 10/25）

Observation hole No.1T-1
Gross β：ND（21）（collected on 9/5）
Tritium：200（collected on 9/5）
Cs-134：ND（0.37）（collected on 9/5）
Cs-137：ND（0.47）（collected on 9/5）

Observation hole No.1T-3
Gross β：ND（21）（collected on 9/5）
Tritium：80,000（collected on 9/5）
Cs-134：ND（0.54）（collected on 9/5）
Cs-137：ND（0.52）（collected on 9/5）

Unit 1 subdrain No.2
Gross β：25（collected on 8/5）
Tritium：3,200（collected on 8/5）
Cs-134：ND（14）（collected on 8/5）
Cs-137：20（collected on 8/5）

Unit 1 subdrain No.1
Gross β：290（collected on 8/5）
Tritium：110,000（collected on 8/5）
Cs-134：140（collected on 10/25）
Cs-137：350（collected on 10/25）

Unit 2 seawater pipe trench shaft A
Gross β：Uncollected
Tritium：Uncollected
Cs-134：1.8×10^7（collected on 5/30）
Cs-137：3.7×10^7（collected on 5/30）

Unit 3 subdrain No.32
Gross β：ND（9）（collected on 11/12 (2012)）
Tritium：97（collected on 11/12 (2012)）
Cs-134：17（collected on 10/25）
Cs-137：46（collected on 10/25）

Unit 4 seawater pipe trench shaft
Gross β：Uncollected
Tritium：Uncollected
Cs-134：6.2×10^4（collected on 6/18）
Cs-137：1.3×10^5（collected on 6/18）

Unit 2 seawater pipe trench shaft C
The value for 13m, which has the largest value among depth of 1, 7, 13m, is shown
Gross β：5.2×10^8（collected on 7/31）
Tritium：4.6×10^6（collected on 7/31）
Cs-134：3.0×10^8（collected on 7/31）

Unit 3 seawater pipe trench shaft A
The value for 1m, which has the largest value among depth of 1, 7, and 13m is shown
Gross β：6.7×10^8（collected on 7/10）
Tritium：1.2×10^7（collected on 7/10）
Cs-134：5.0×10^7（collected on 7/10分）
Cs-137：1.0×10^8（collected on 7/10）

Unit 4 subdrain No.53, 55
The value for No. 55, which has the largest value, is shown
Gross β：ND（26.1）(collected on 6/5 (2012))
Tritium：6,144（collected on 6/5 (2012)）
Cs-134：2.0（collected on 5/17 (2012)）
Cs-137：3.4（collected on 5/17 (2012)）

Observation hole No.1R-1
Gross β：ND（21）（collected on 9/5）
Tritium：150（collected on 9/5）
Cs-134：0.64 (collected on 9/5)
Cs-137：1.3 (collected on 9/5)

Test excavation hole N3
Gross β：ND（21）(collected on 9/1分)
Tritium：320（collected on 9/1）
Cs-134：3.0 (collected on 9/1)
Cs-137：7.2 (collected on 9/1)

Test excavation hole N４
Gross β：62（collected on 9/1）
Tritium：320（collected on 9/1）
Cs-134：4.8（collected on 9/1）
Cs-137：12（collected on 9/1）

Unit 2 subdrain No.25, 26
Tha value for No. 25, which has the largest value among No. 25, 26 is shown
Gross β：1,737（collected on 6/17 (2012)）
Tritium：1,302（collected on 6/17 (2012)）
Cs-134：645（collected on 6/17 (2012)）
Cs-137：900（collected on 6/17 (2012)）

Unit 2 subdrain No.27
Gross β：430（collected on 11/12 (2012)）
Tritium：470（collected on 11/12 (2012)）
Cs-134：96（collected on 10/25）
Cs-137：220（collected on 10/25）

Observation hole No.2R-1
Gross β：36 (collected on 9/3)
Tritium：31 (collected on 9/3)
Cs-134：ND（0.55）(collected on 9/3)
Cs-137：0.97(collected on 9/3)

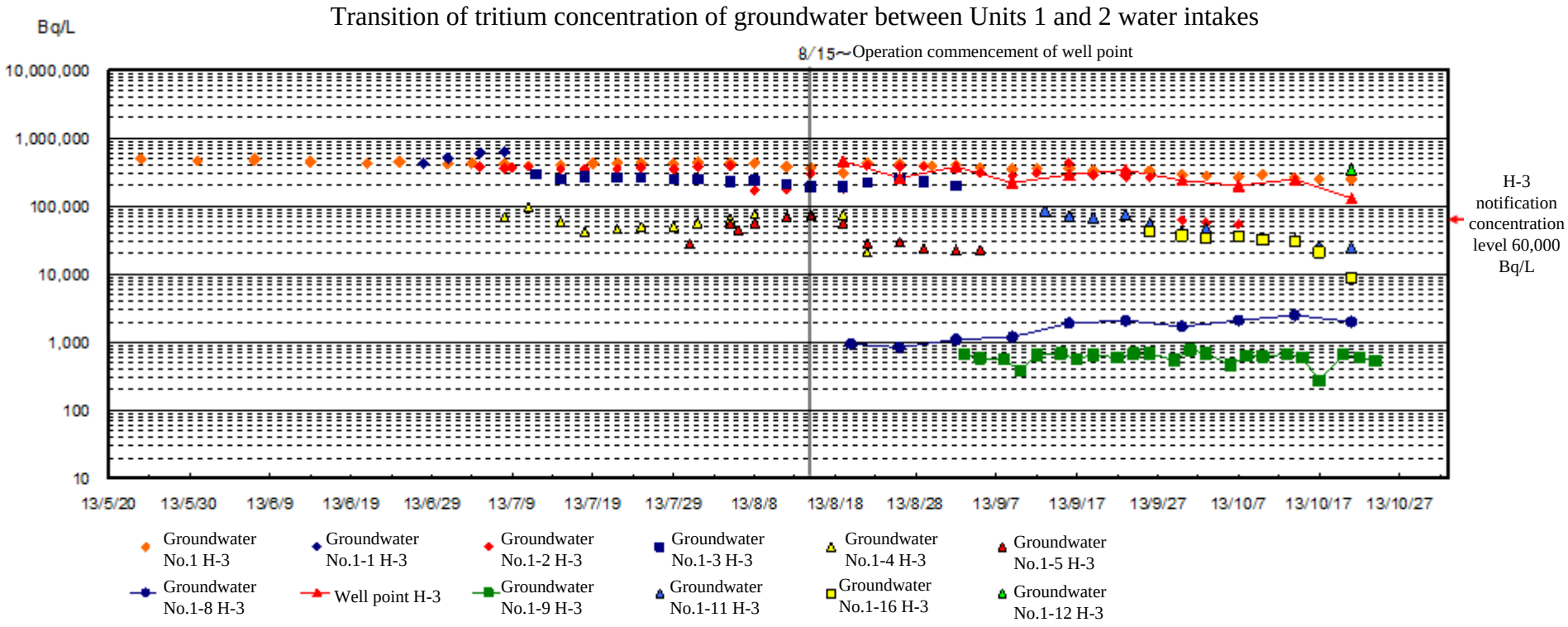
Unit 2 subdrain No.23、24
The greater of No. 23-24 is shown
Gross β：1,052（No.23）（collected on 6/18 (2012)分）
Tritium：2,407（No.24）（collected on 6/19 (2012)）
Cs-134：276（No.23）（collected on 6/18 (2012)）
Cs-137：425（No.23）（collected on 6/18 (2012)）

Observation hole No.3 R-1
Gross β：ND（17）（collected on 9/25）
Tritium：1,100（collected on 9/25）
Cs-134：ND（0.43）（collected on 9/25）
Cs-137：ND（0.58）（collected on 9/25）

Observation hole No.4 R-1
Gross β：ND（18）（collected on 9/18）
Tritium：ND（7）（collected on 9/18）
Cs-134：ND（0.46）（collected on 9/18）
Cs-137：ND（0.59）（collected on 9/18）

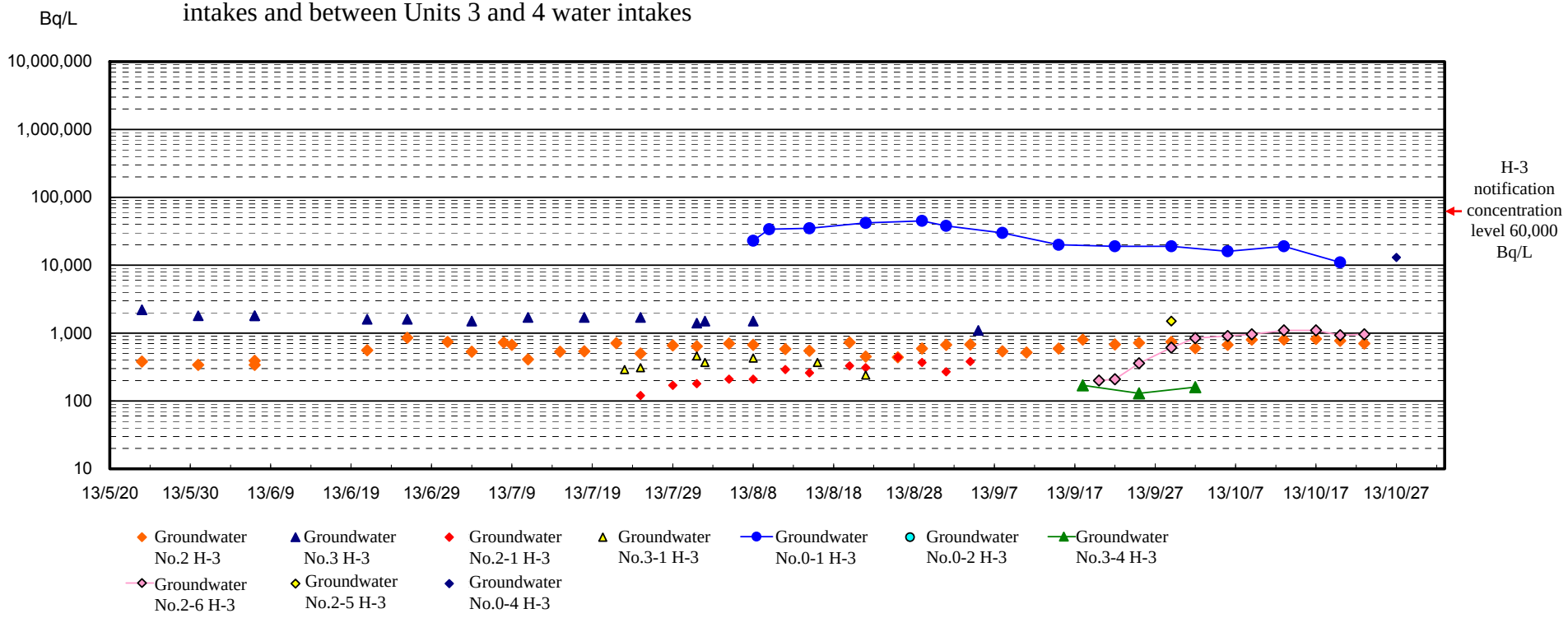
*：The unit used for radioactive concentration is Bq/L
*：Date without the year indicate that samples were collected in 2013
*：The maximum value at the observation hole is shown (as of 10/27)
*：The detectable limit is shown in parentheses for measurements results showing

(Reference) Monitoring data of groundwater (1/4)



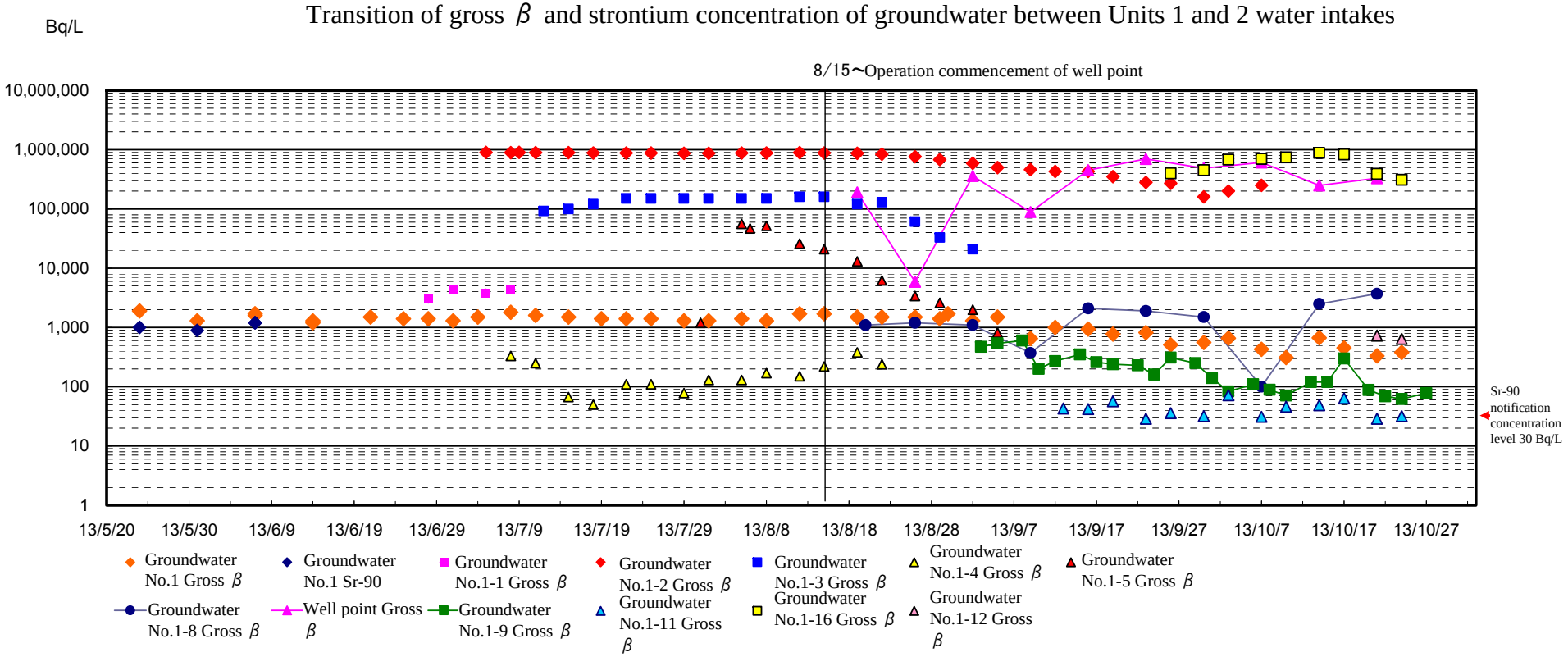
(Reference) Monitoring data of groundwater (2/4)

Transition of tritium concentration of groundwater on the north side of Unit 1, between Units 2 and 3 water intakes and between Units 3 and 4 water intakes



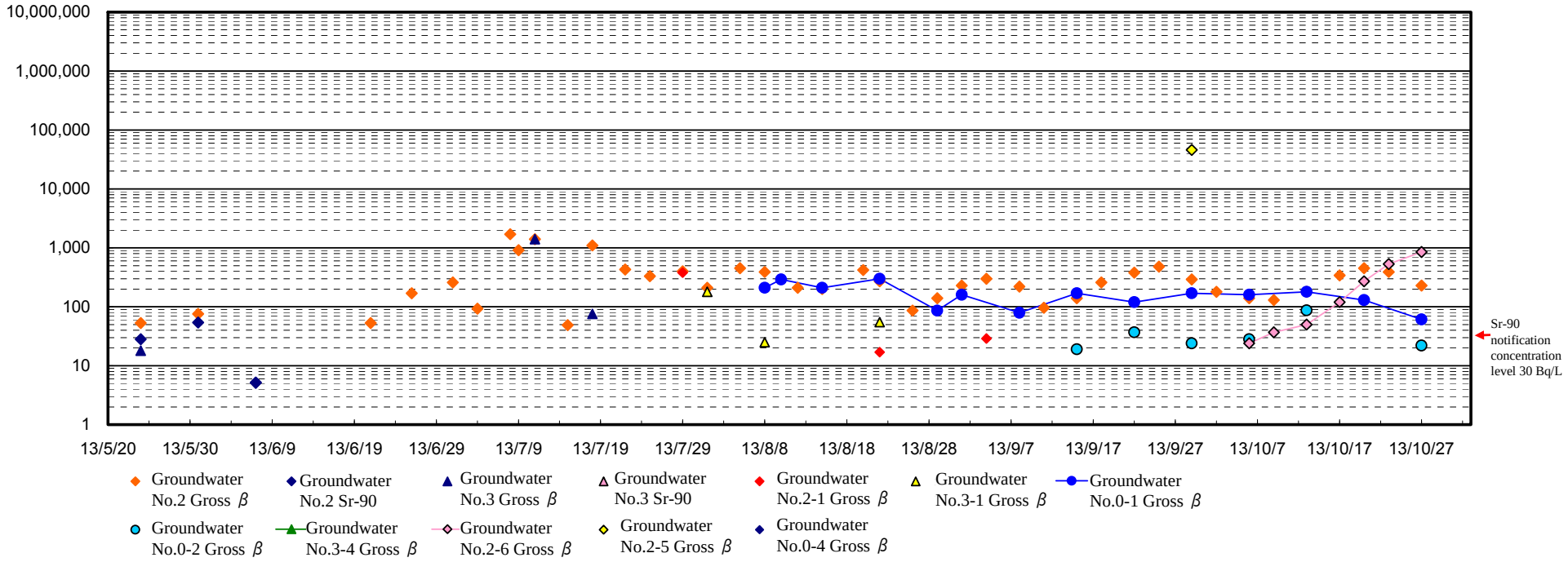
(Reference) Monitoring data of groundwater (3/4)

Transition of gross β and strontium concentration of groundwater between Units 1 and 2 water intakes



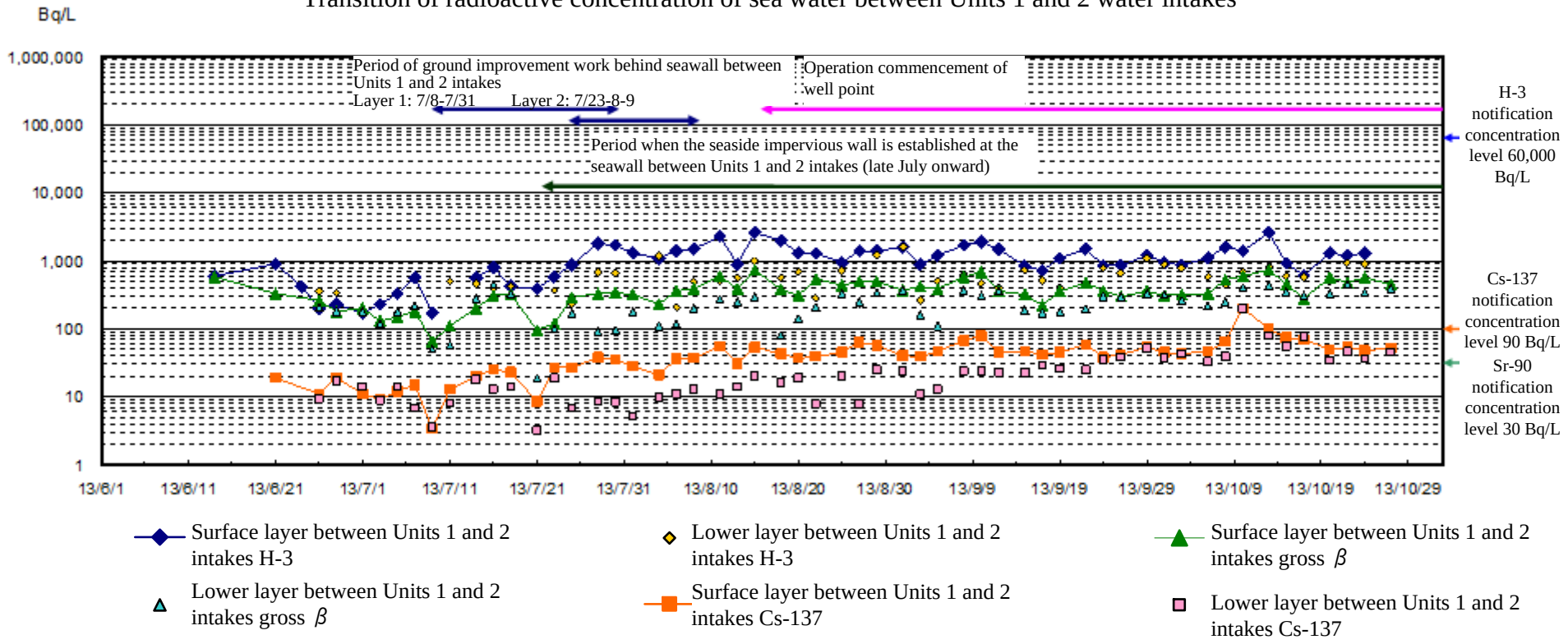
(Reference) Monitoring data of groundwater (4/4)

Transition of gross β and strontium concentration of groundwater on the north side of Unit 1, between Units 2 and 3 water intakes and between Units 3 and 4 water intakes



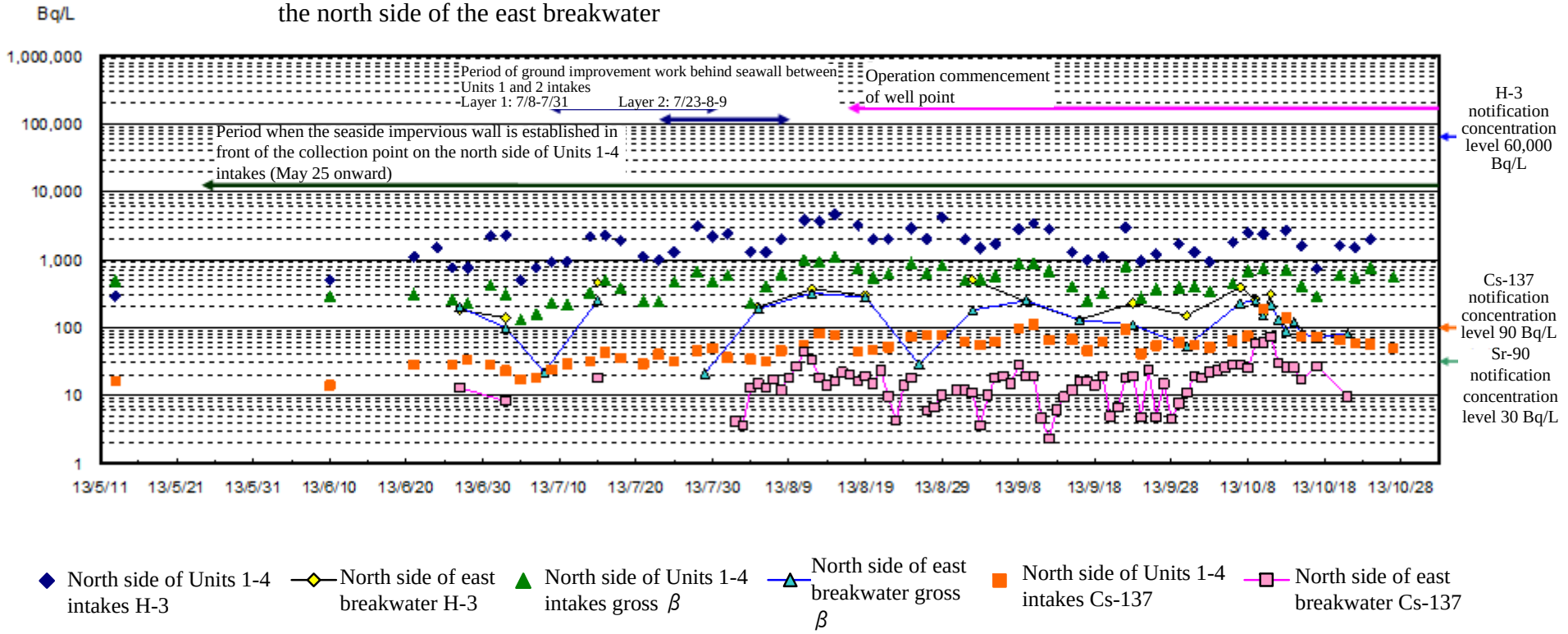
(Reference) Monitoring data of sea water (1/6)

Transition of radioactive concentration of sea water between Units 1 and 2 water intakes

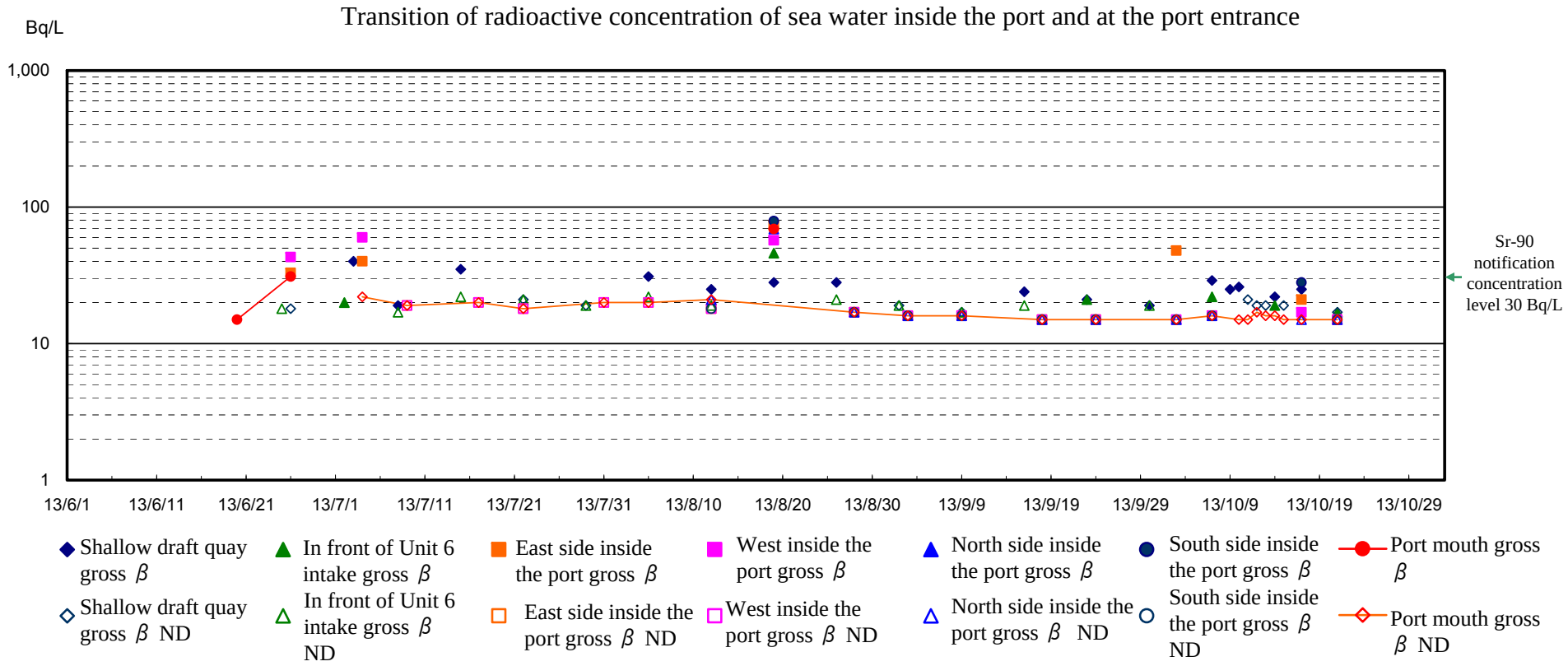


(Reference) Monitoring data of sea water (2/6)

Transition of radioactive concentration of sea water on the north side of Units 1-4 intakes and on the north side of the east breakwater

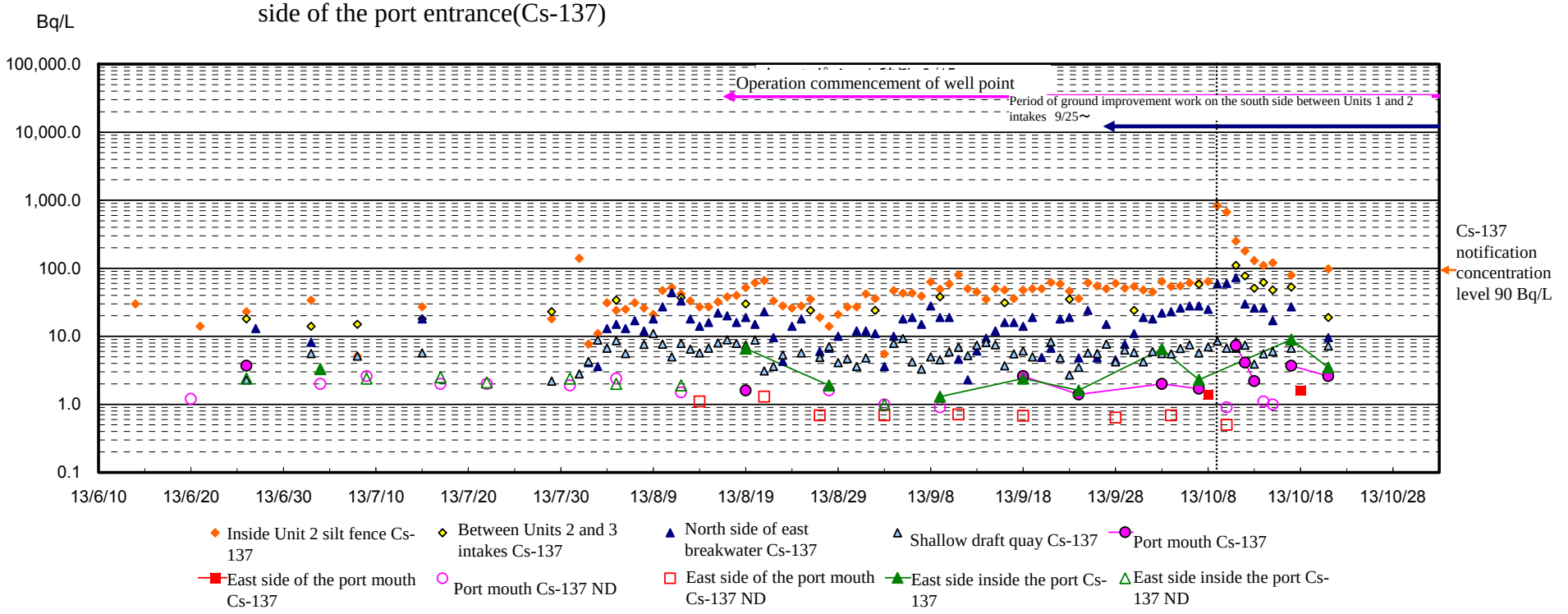


(Reference) Monitoring data of sea water (3/6)



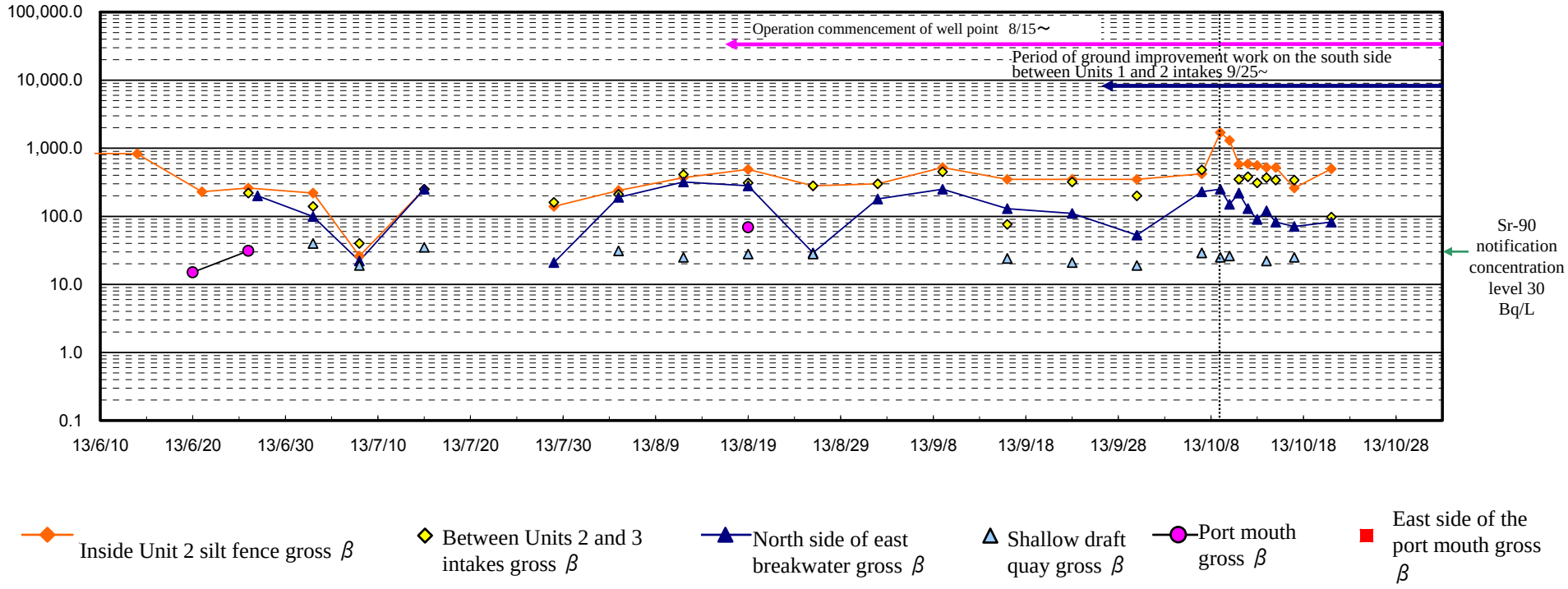
(Reference) Monitoring data of sea water (4/6)

Transition of radioactive concentration of sea water from the inside of Unit 2 silt fence to the east side of the port entrance(Cs-137)



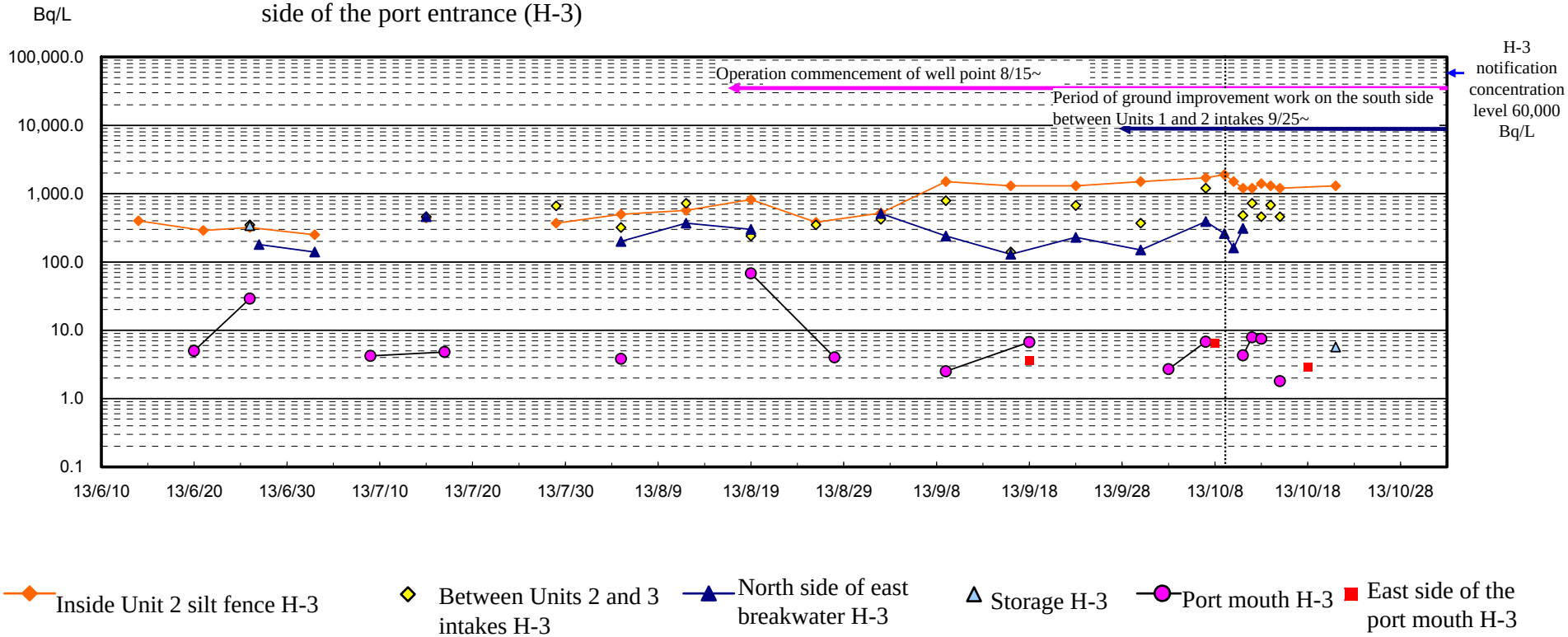
(Reference) Monitoring data of sea water (5/6)

Transition of radioactive concentration of sea water from the inside of Unit 2 silt fence to the east side of the port entrance (gross β)



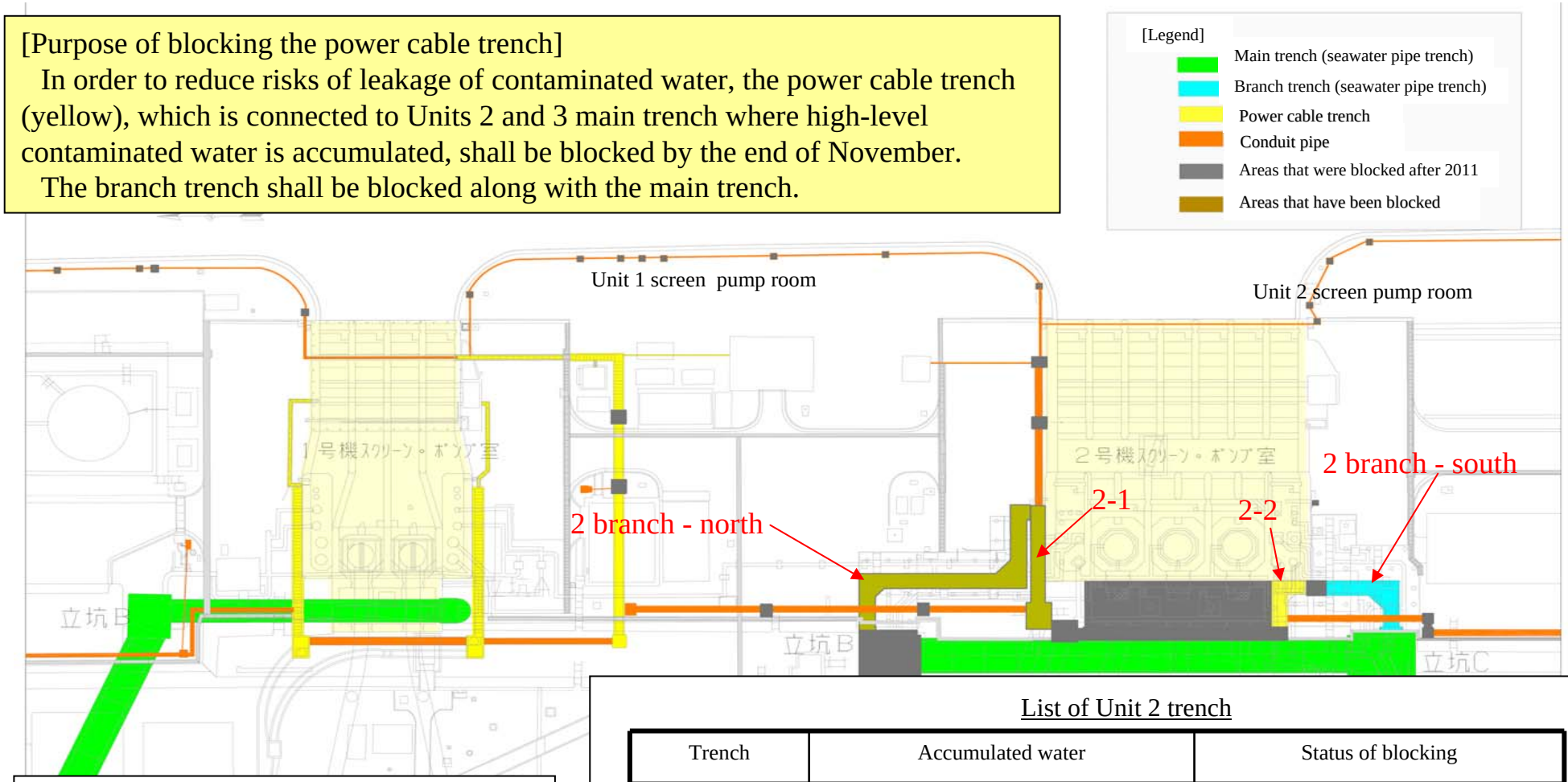
(Reference) Monitoring data of sea water (6/6)

Transition of radioactive concentration of sea water from the inside of Unit 2 silt fence to the east side of the port entrance (H-3)



(Reference) Blocking of the branch trench and power cable trench (Units 1-2, 2-3 intake areas)

[Purpose of blocking the power cable trench]
In order to reduce risks of leakage of contaminated water, the power cable trench (yellow), which is connected to Units 2 and 3 main trench where high-level contaminated water is accumulated, shall be blocked by the end of November.
The branch trench shall be blocked along with the main trench.



Unit 1 power cable trench is under consideration including the implementation period.

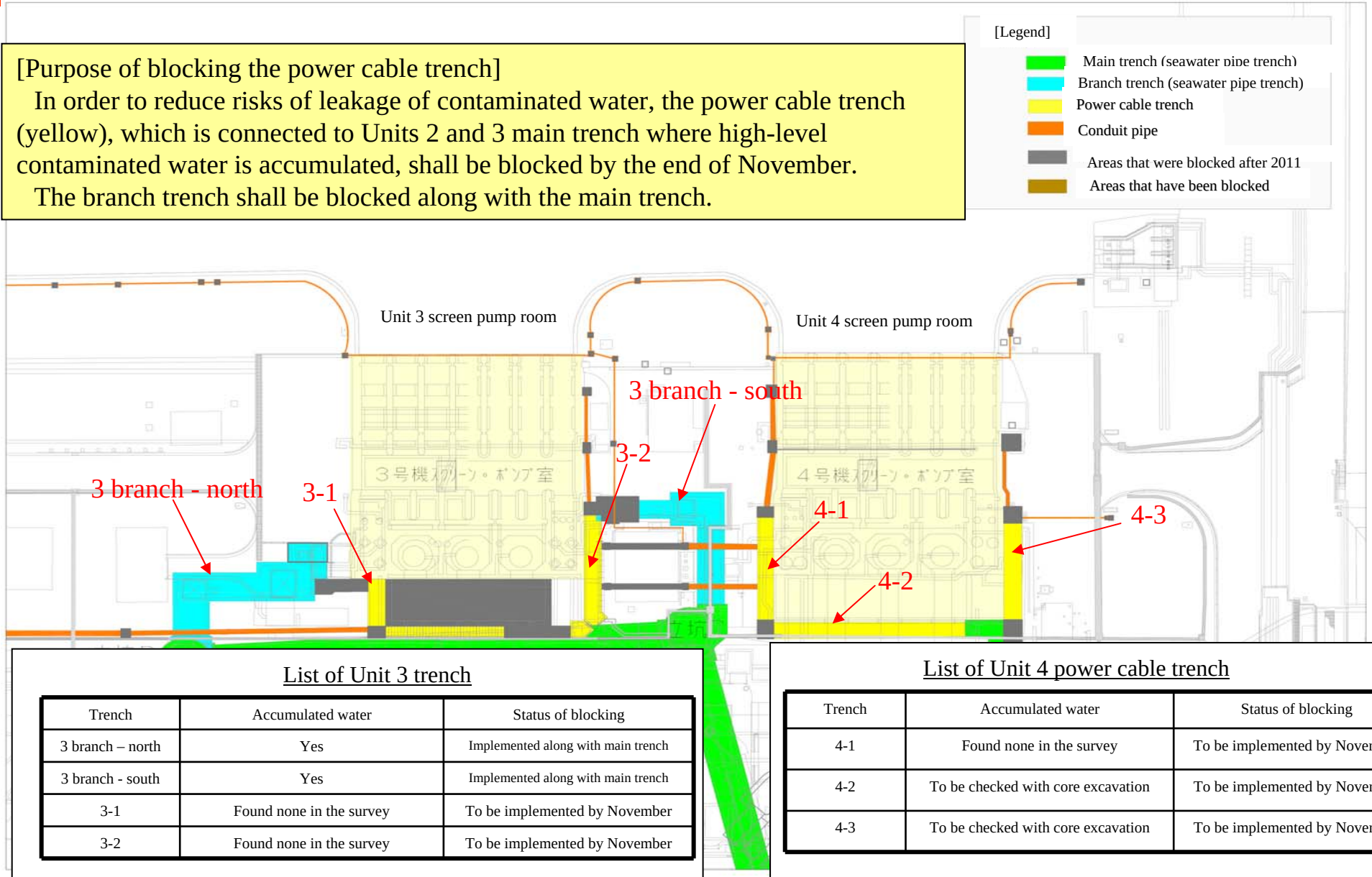
(trench No.1-1, 1-2, 1-3)

List of Unit 2 trench

Trench	Accumulated water	Status of blocking
2 branch – north	Yes	Blocking was completed on 9/19
2 branch - south	Yes	Implemented along with main trench
2-1	Yes	Blocking was completed on 9/30
2-2	To be checked with core excavation	To be implemented by November

(Reference) Blocking of the branch trench and power cable trench (Units 2-3, 3-4 intake areas)

[Purpose of blocking the power cable trench]
In order to reduce risks of leakage of contaminated water, the power cable trench (yellow), which is connected to Units 2 and 3 main trench where high-level contaminated water is accumulated, shall be blocked by the end of November.
The branch trench shall be blocked along with the main trench.



List of Unit 3 trench

Trench	Accumulated water	Status of blocking
3 branch – north	Yes	Implemented along with main trench
3 branch - south	Yes	Implemented along with main trench
3-1	Found none in the survey	To be implemented by November
3-2	Found none in the survey	To be implemented by November

※The survey result has been reported in the 3rd WG

List of Unit 4 power cable trench

Trench	Accumulated water	Status of blocking
4-1	Found none in the survey	To be implemented by November
4-2	To be checked with core excavation	To be implemented by November
4-3	To be checked with core excavation	To be implemented by November

※The survey result has been reported in the 3rd WG

(Reference) Water blocking of connection between main trench and turbine building (freezing method)

The frozen water blocking wall is formed by inserting the cooling pipe and packer* from the hole at the top of the trench and filling the packer with refrigerant.

Image of frozen water blocking wall

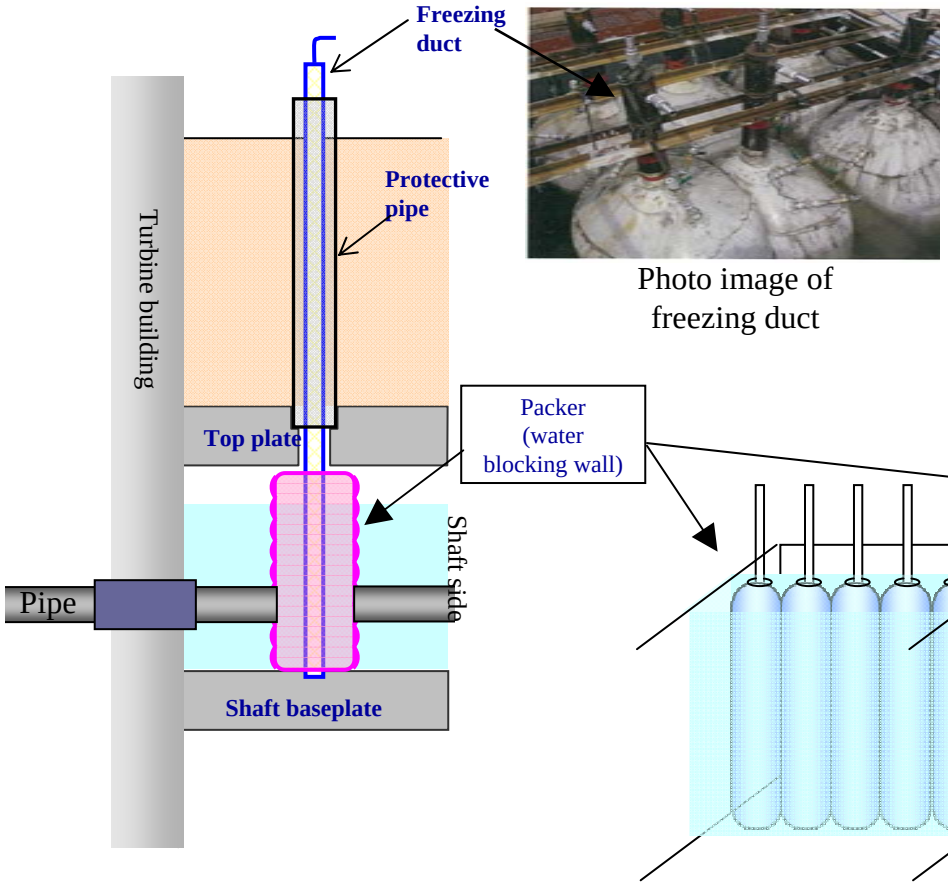


Photo image of freezing duct

[Forming water blocking wall by freezing]

・The packer is filled with cement solidification materials and pore water and its surroundings are frozen to form ice water blocking wall, thereby securing water blocking performance.

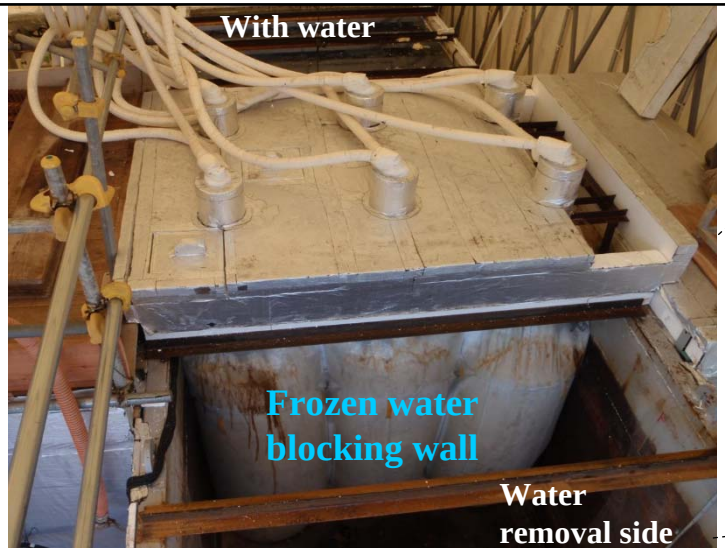
・The packer is also used to control the flow of water, thereby improving performance of freezing.

Photo image of packer

***Packer is a freezing duct wrapped with nylon cloth**

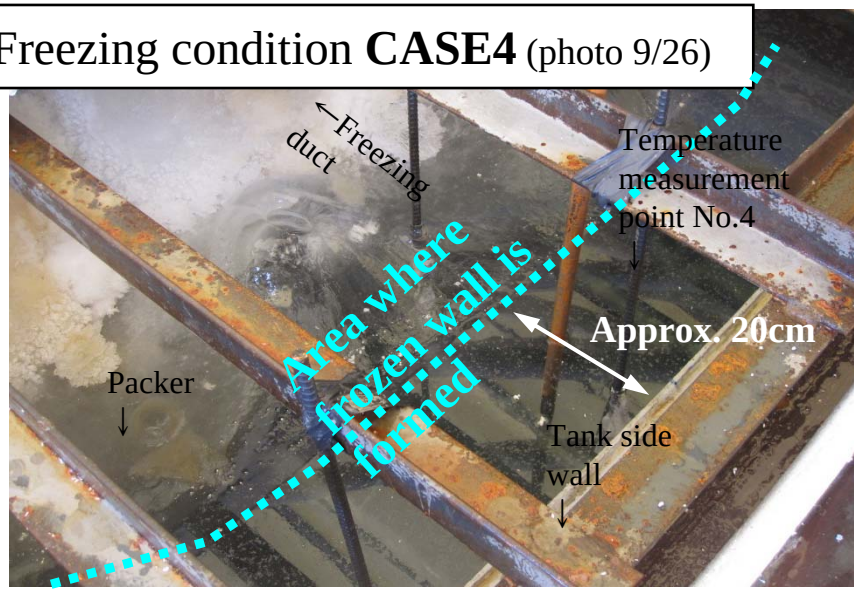
(Reference) Status of freezing test

Checking of water blocking **CASE1** (photo 10/12)



Checking of water blocking **CASE1** (photo 10/12)

Freezing condition **CASE4** (photo 9/26)



Freezing condition **CASE4** (photo 10/10)