

Reliability Improvement Works of Contaminated Water Processing Facilities

Feb. 27, 2012

Tokyo Electric Power Company



東京電力

TEPCO

All Rights Reserved ©2012The Tokyo Electric Power Company, Inc.

Work Outline

(1) Contaminated Water Processing Facilities

Installation of additional pumps to transfer oil-separated water (Improvement of maintenance and reliability)

Install two transfer pumps in the low-radiation area, because one of two existing pumps is out of operation due to a fault and they are also installed in the high-radiation area.

Installation of an additional transfer line for the second cesium adsorption apparatus (SARRY) (Operation improvement)

Install an additional transfer line enable SARRY to process accumulated water in the Process Main Building (PMB) without going through the cesium adsorption apparatus (KURION).

(2) Second Cesium adsorption Apparatus (SARRY)

Make valves electrical and pumps/valves remote controlled (Operation improvement)

Make valves electrical and install remote controlled switch in Central Control Room (CCR) so as to be able to remotely control accumulated water transfer pumps in the Miscellaneous Solid Waste Volume Reduction Treatment Building (High Temperature Incinerator Building, HTI) and pump outlet valves from the CCR.

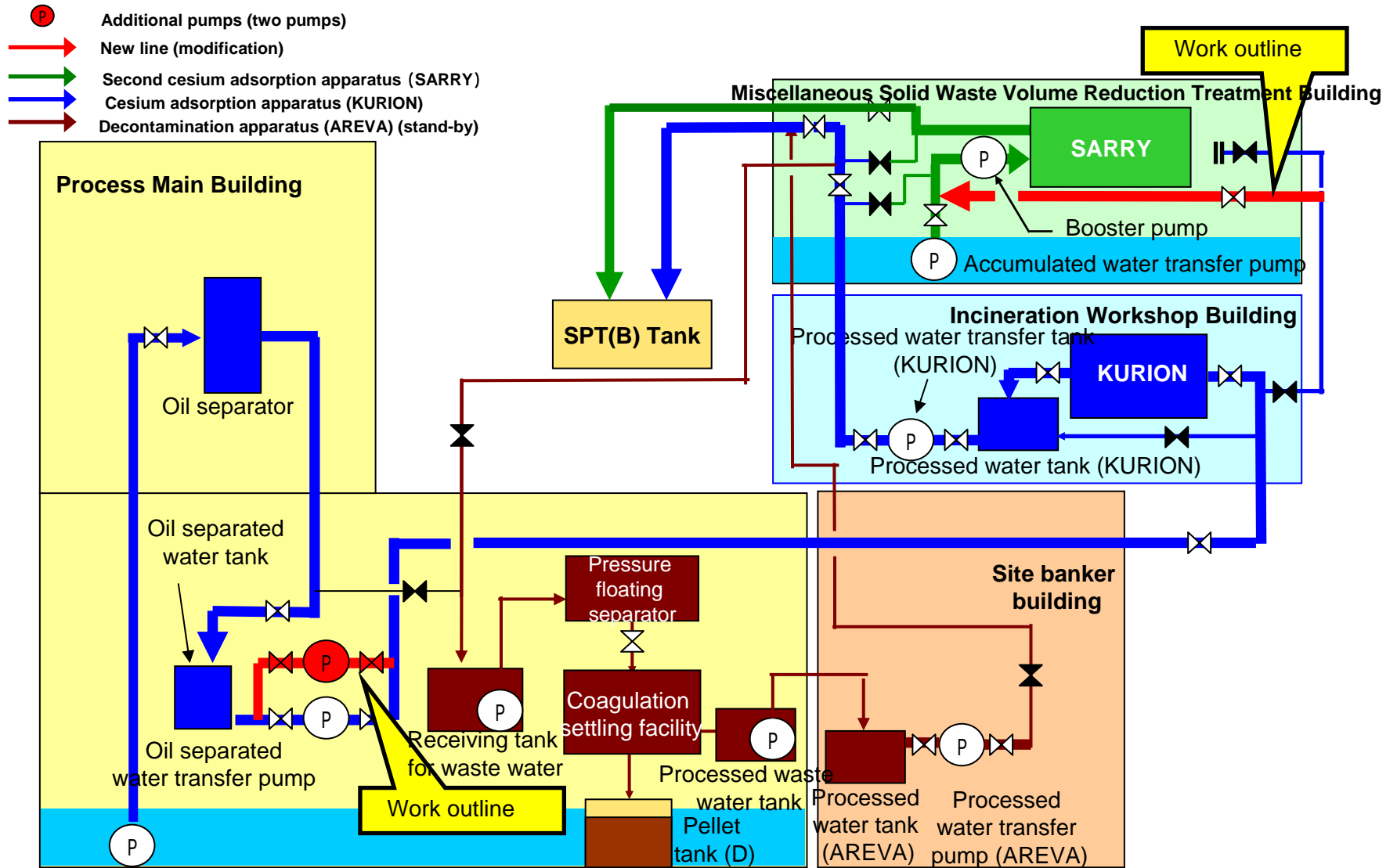
Partial pipe modification (Processing performance improvement)

Replace small-bore pipes at SARRY outlet line and metallic flexible tubes with large-bore pipes in order to improve margin of processing volume.

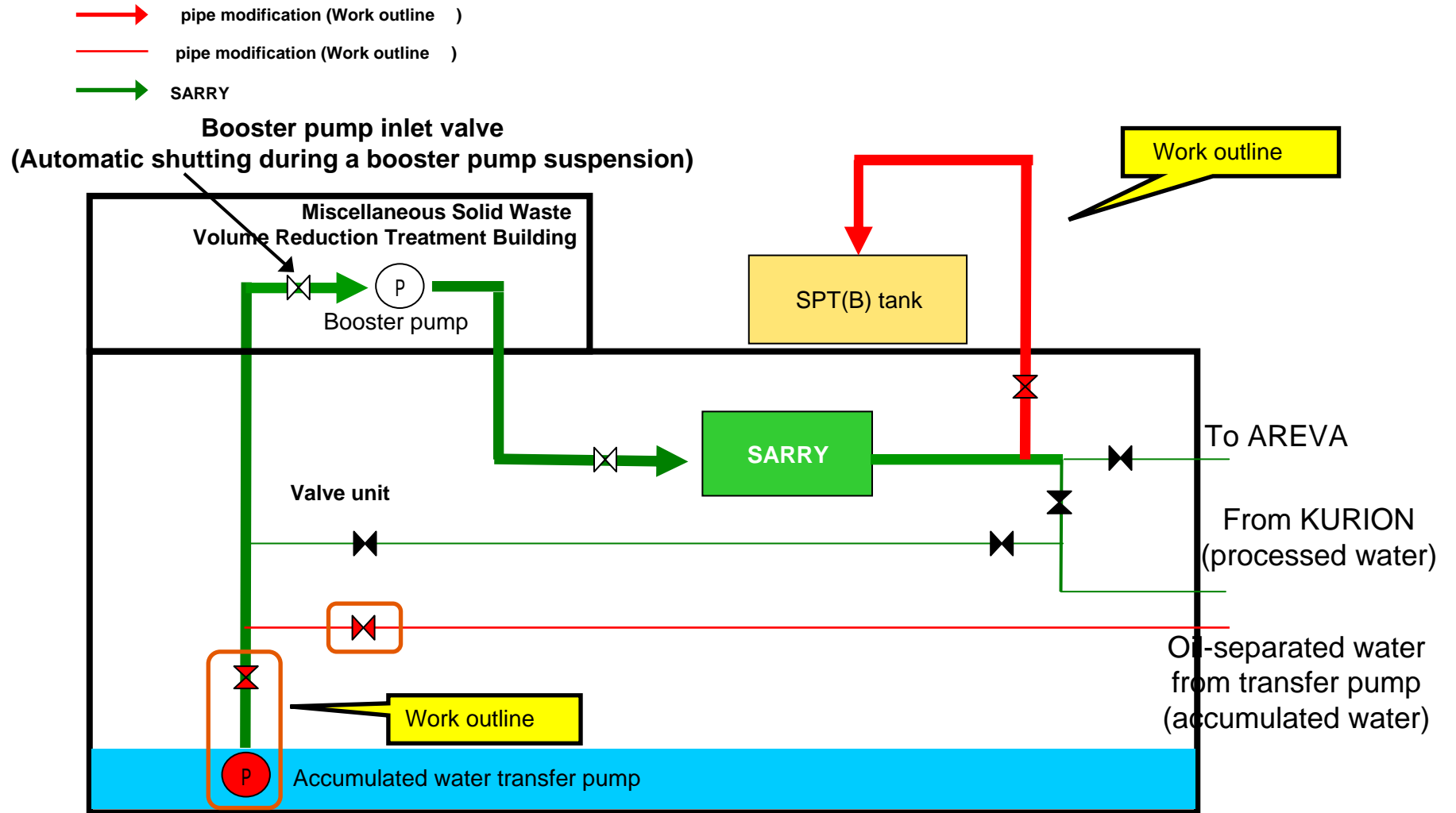
Install additional IA compressor (Reliability improvement)

Install one additional stand-by IA compressor which enables SARRY to quickly restart in case of an IA compressor fault.

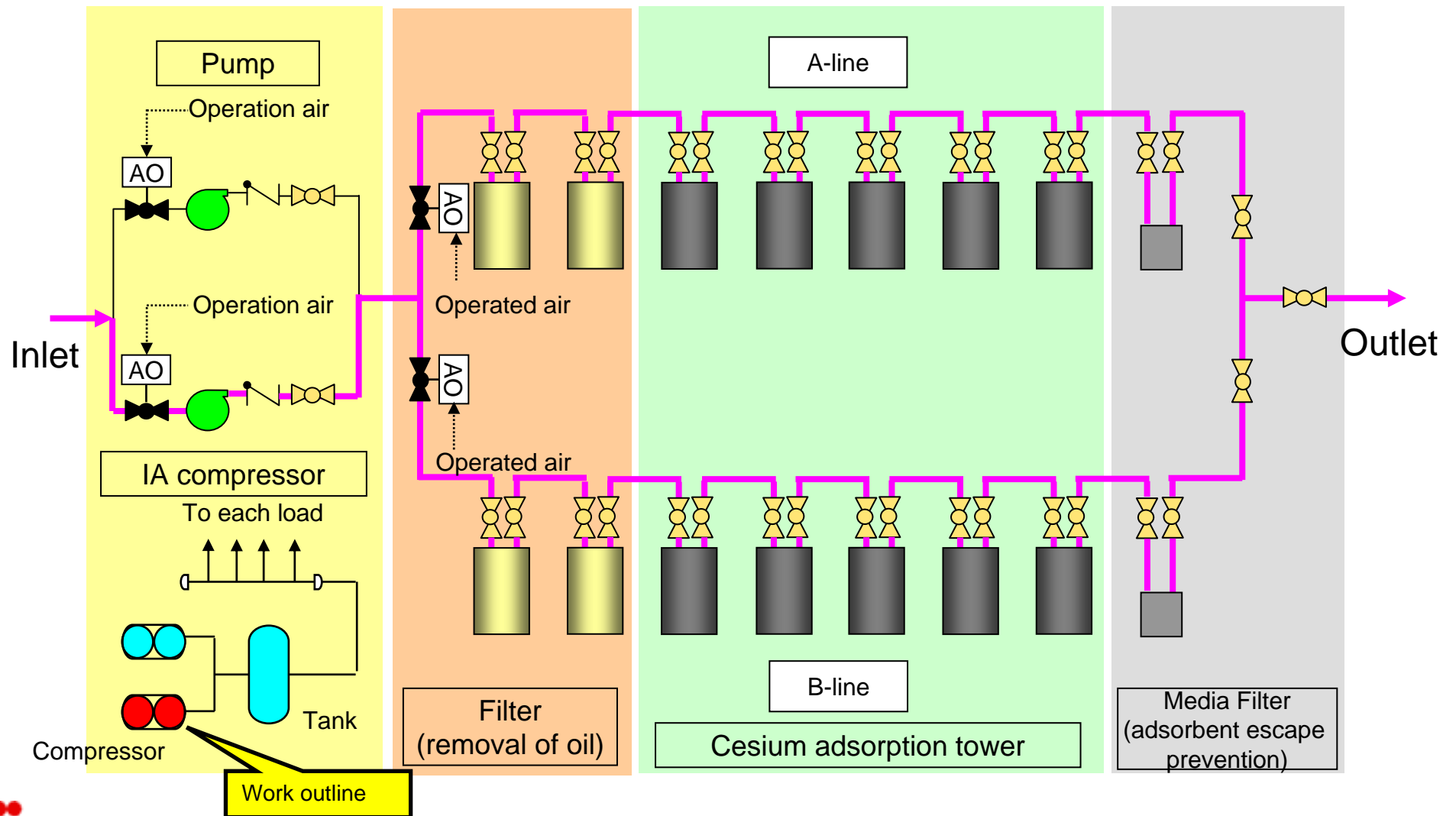
System Outline (1)



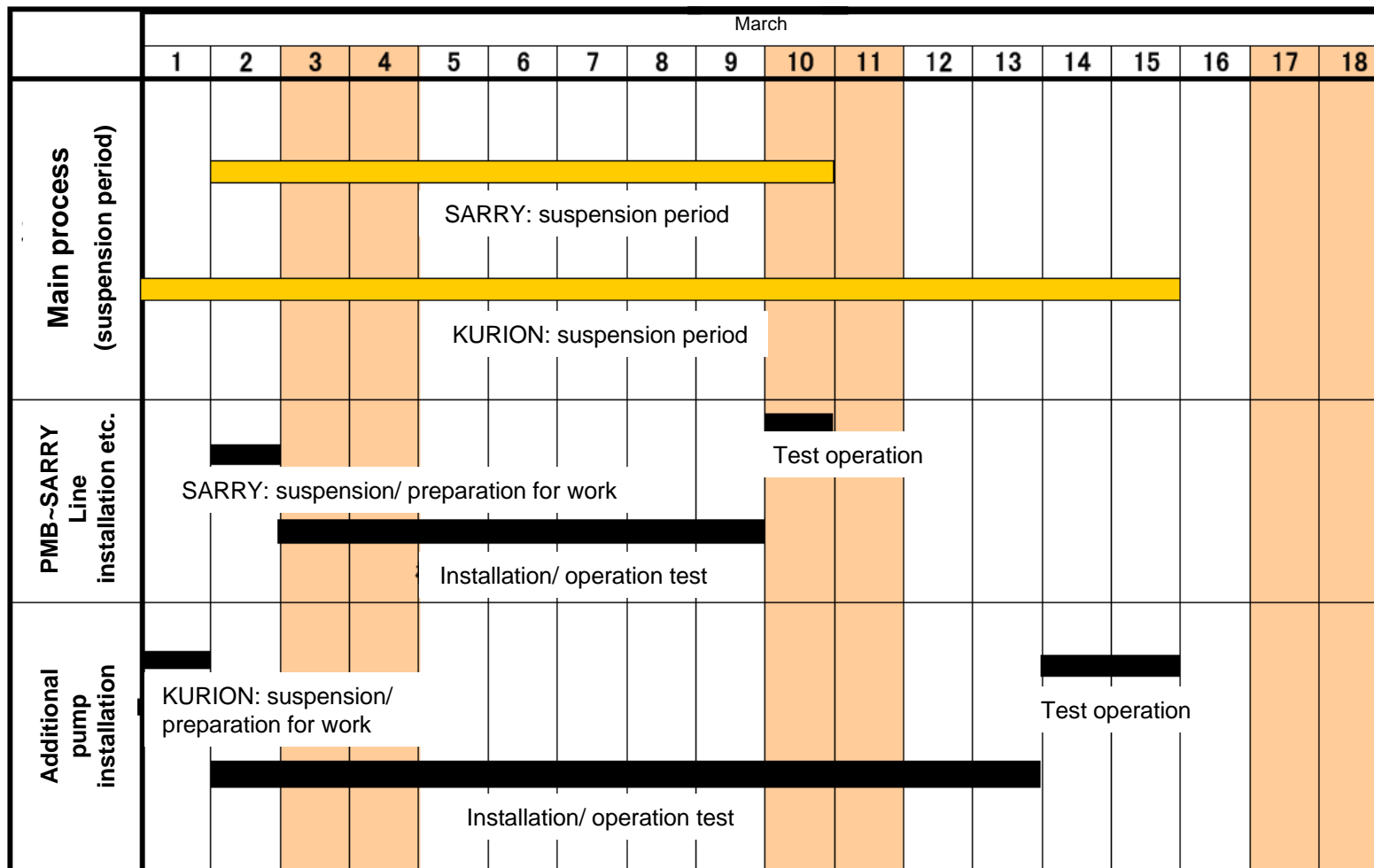
System Outline (2)



System Outline (3)



Future Plan



- Possible to keep water level of each building within the limit during processing facility suspension .
- During connecting pipes, possible to close isolation valve in case of emergency and to quickly start operation of KURION.