

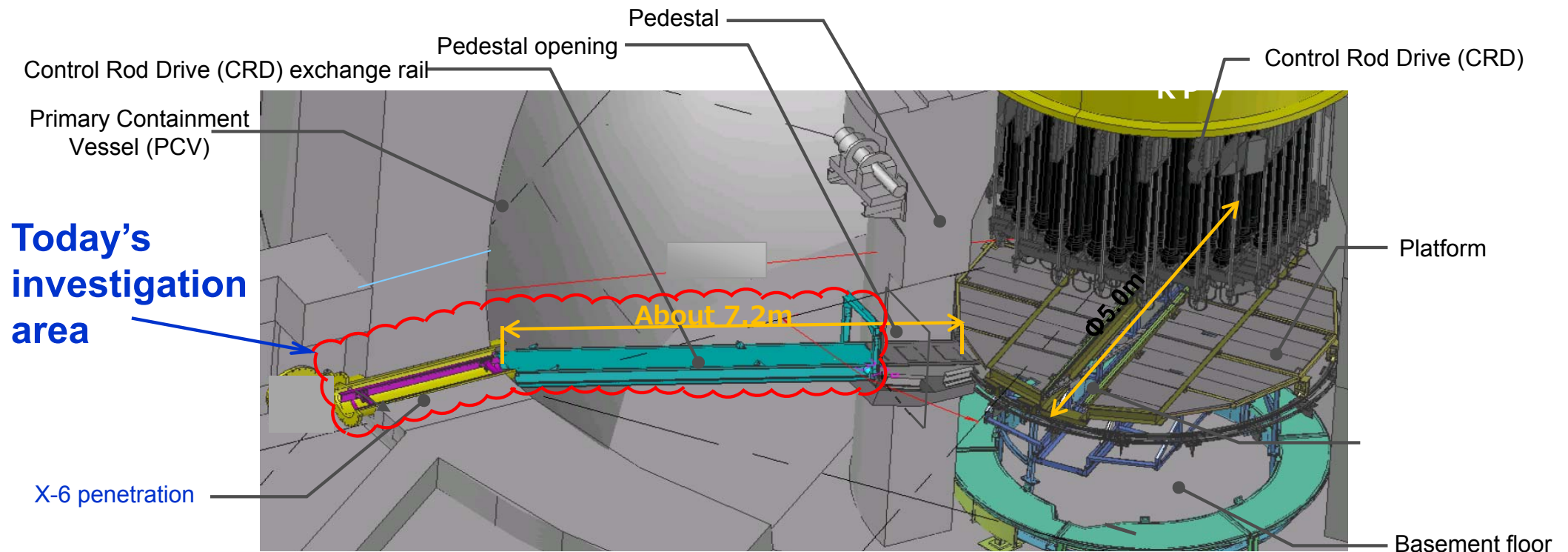
Pre-investigation results of X-6 penetration
for the Unit 2 Primary Containment Vessel Investigation
at Fukushima Daiichi Nuclear Power Station



1. Unit 2 Primary Containment Vessel investigation

The purpose of this investigation is to inspect the platform inside the pedestal, fuel debris fallen to the Control Rod Drive (CRD), and structures inside the pedestal.

Today, preparatory investigation was conducted for X-6 penetration and CRD exchange rail which the self-propelled Scorpion robot will take to the pedestal.



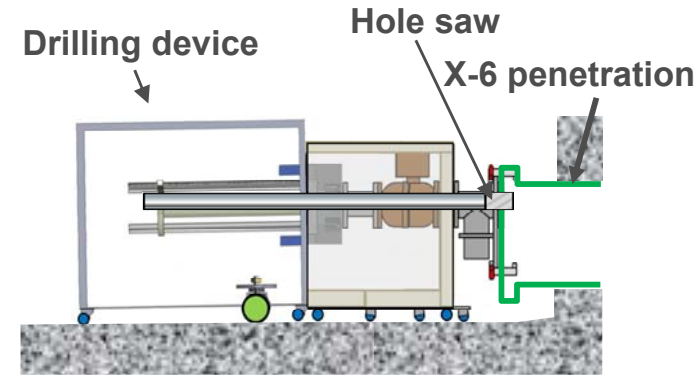
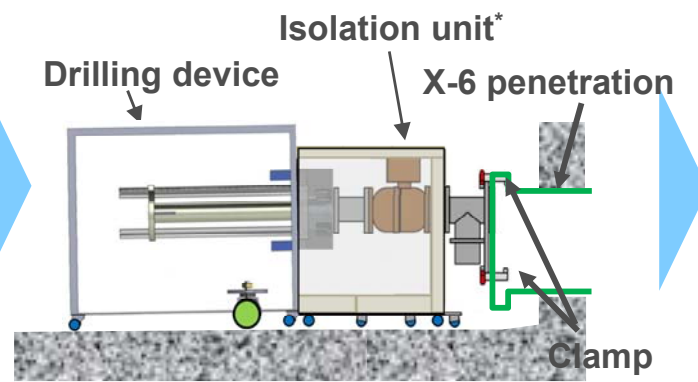
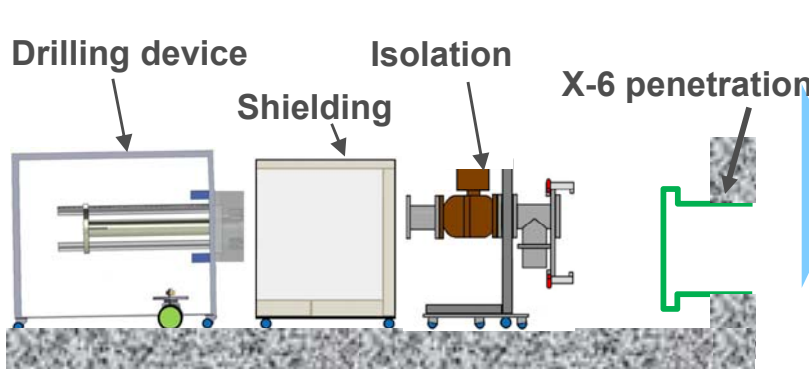
Investigation area inside the pedestal

3. Work steps for Unit 2 PCV investigation

Step 1. Drilling device carried in

Step 2. Drilling device set up

Step 3. Drilling on X-6 penetration



*Combination of isolation and shielding

The step taken today

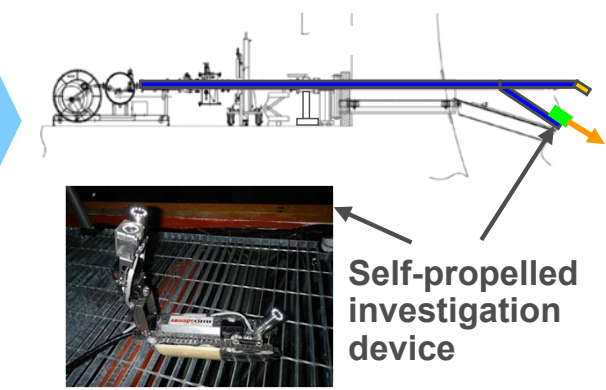
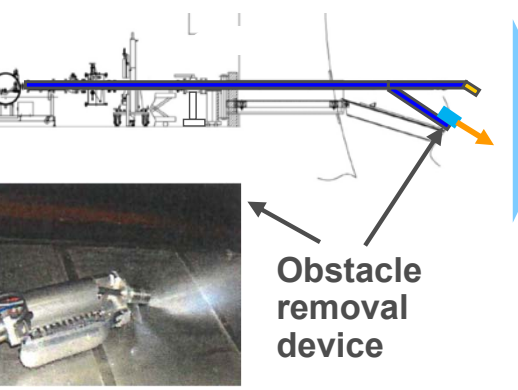
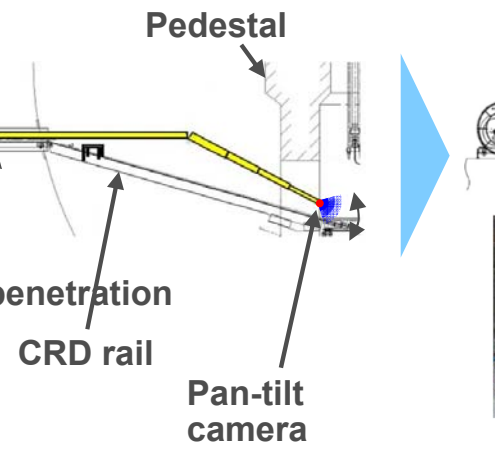
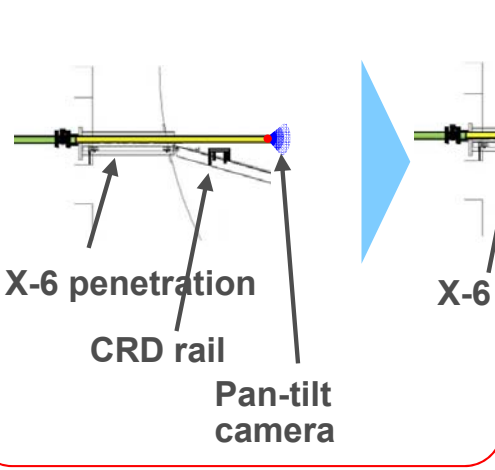
Step 4. Pre-investigation of X-6 penetration and CRD rail using guide pipe

Step 5. Pre-investigation inside pedestal using guide pipe

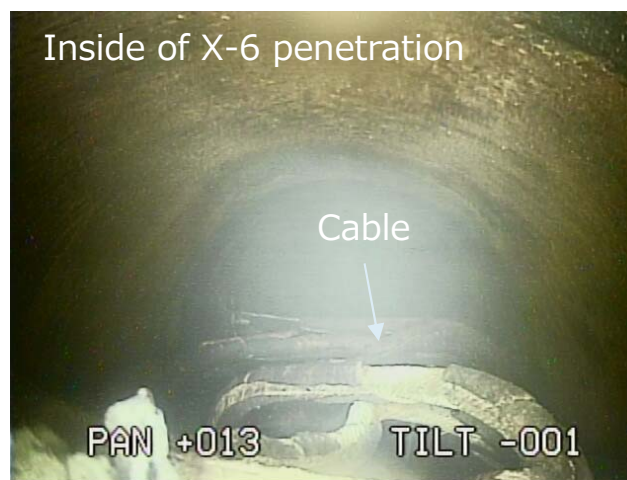
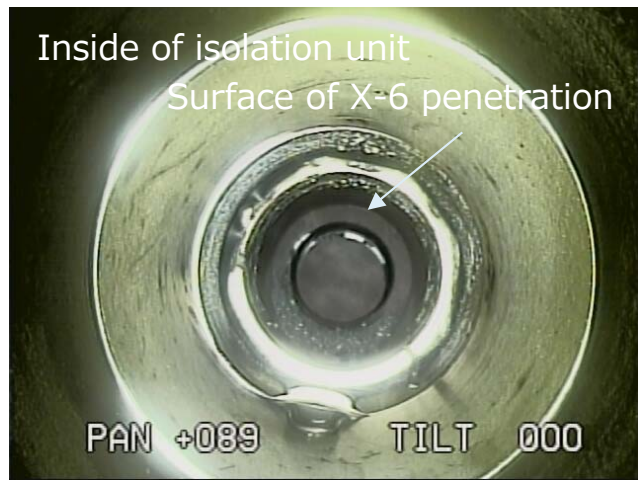
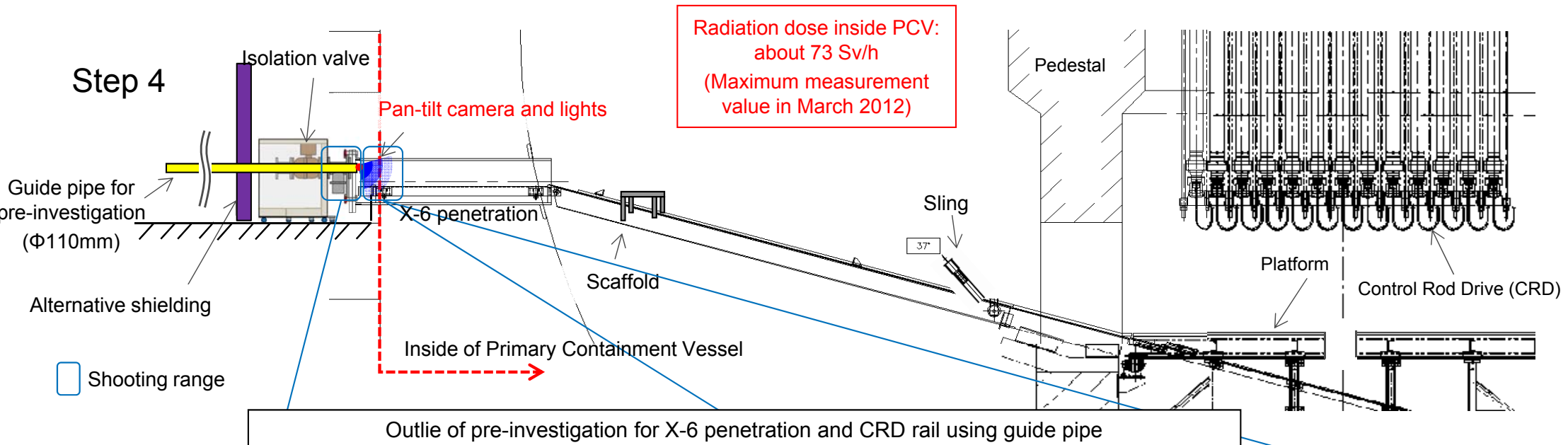
Step 6. Obstacle removal device inserted*

Step 7. Investigation using self-propelled investigation device

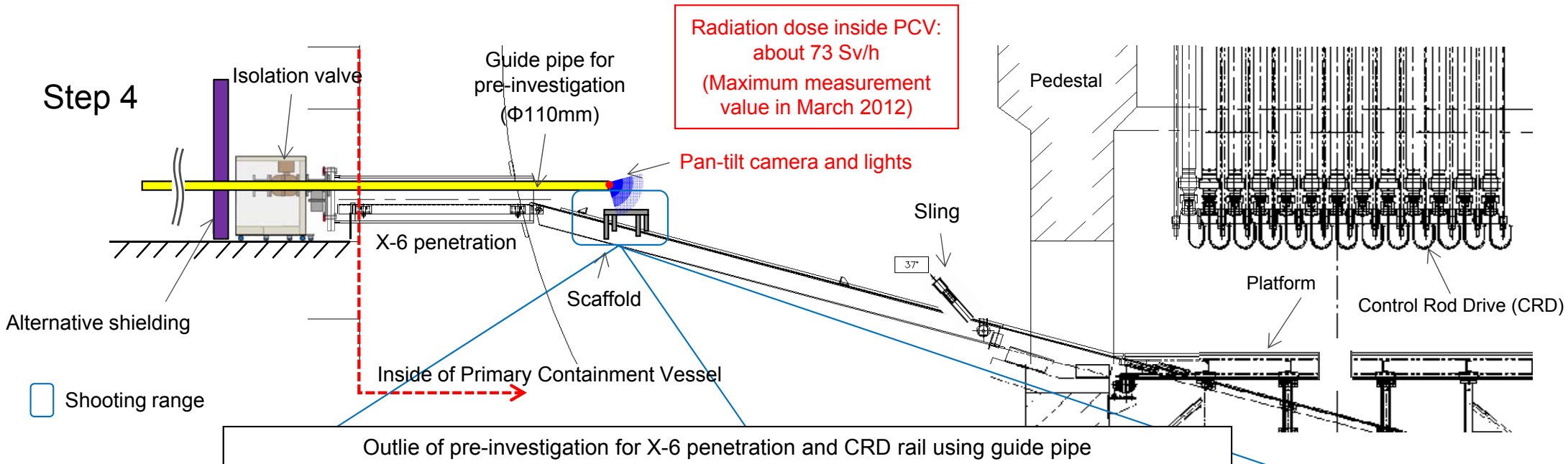
*The device may not be inserted depending on the obstacle conditions.



3. Pre-investigation results for X-6 penetration (1/3)



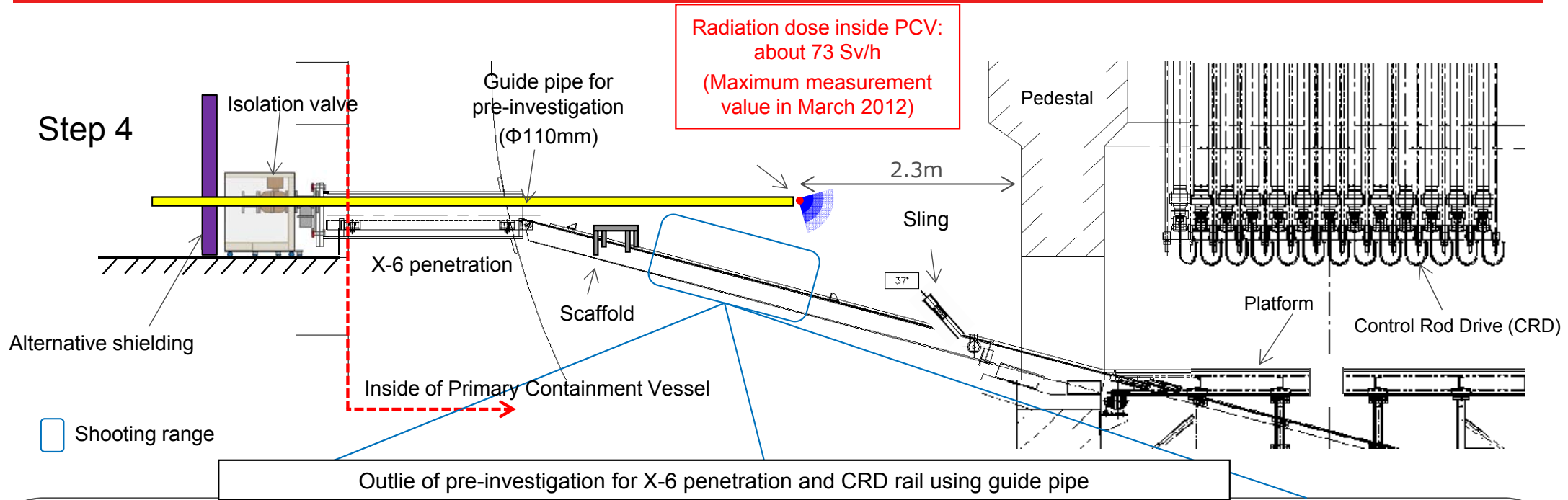
3. Pre-investigation results for X-6 penetration (2/3)



Radiation dose inside PCV:
about 73 Sv/h
(Maximum measurement
value in March 2012)



3. Pre-investigation results for X-6 penetration (3/3)



4. Summary

■ Investigation results

- As an investigation result for X-6 penetration, necessary space was found to insert the guide pipe (about $\Phi 110\text{mm}$) used in the next investigation steps.
- As an investigation result for CRD rail, no obstacles were found in today's investigation area, which could prevent next pre-investigation for the pedestal.
- Although the image is not clear around the pedestal opening due to mist, the conditions will be inspected in the next pre-investigation for the pedestal, as planned.

■ Future plans

Pre-investigation will begin after necessary preparation is made, reflecting today's pre-investigation results to the next pre-investigation plan for the pedestal.

The pre-investigation was conducted by remotely operating the camera at the field headquarters and by inserting/pulling out the guide pipe inside the Unit 2 Reactor Building.



Field headquarters



Inside of Unit 2 Reactor Building

Work site scenes