ISIS IMAGERY BRIEF

May 27, 2009

## Commercial Satellite Imagery of Yongbyon Nuclear Site from May 26, 2009

Several South Korean news agencies have reported that North Korea may have begun reprocessing spent nuclear fuel at its plutonium separation plant at Yongbyon<sup>1</sup>. These reports apparently reference recent classified US imagery which reportedly show steam present at the reprocessing facility. North Korea runs an adjacent coal-fired plant to generate steam for processes at the reprocessing plant. Commercial satellite imagery from DigitalGlobe taken on May 26, 2009 does not show any steam from the pipes running from the coal-fired plant to the reprocessing plant (see figure 1). The May 26<sup>th</sup> imagery also does not show any smoke from the chimney at the coal-fired plant, nor any plume from the stacks at the reprocessing plant (see figures 2 and 3). North Korea announced in April that it intended to reprocess spent fuel at the facility. It is difficult to know when that reprocessing will start or finish.

There also does not appear to be any construction activity at the site of the destroyed cooling tower for the 5MW reactor at Yongbyon (see figure 4). North Korea had disabled the cooling tower in a dramatic implosion in June of 2008.

<sup>&</sup>lt;sup>1</sup> N. Korea 'Restarts Reprocessing Plant', Chosun Ilbo, May 27, 2009: http://english.chosun.com/site/data/html dir/2009/05/27/2009052700263.html



Figure 1. May 26, 2009 DigitalGlobe image of the coal-fired plant at the Yongbyon nuclear site in North Korea. The coal-fired plant is used to generate steam for several processes at the adjacent reprocessing plant, including plutonium separation. There does not appear to be any smoke coming out of the chimney in the May 26 image. There also does not appear to be any steam emitted from the piping leading to the reprocessing plant.

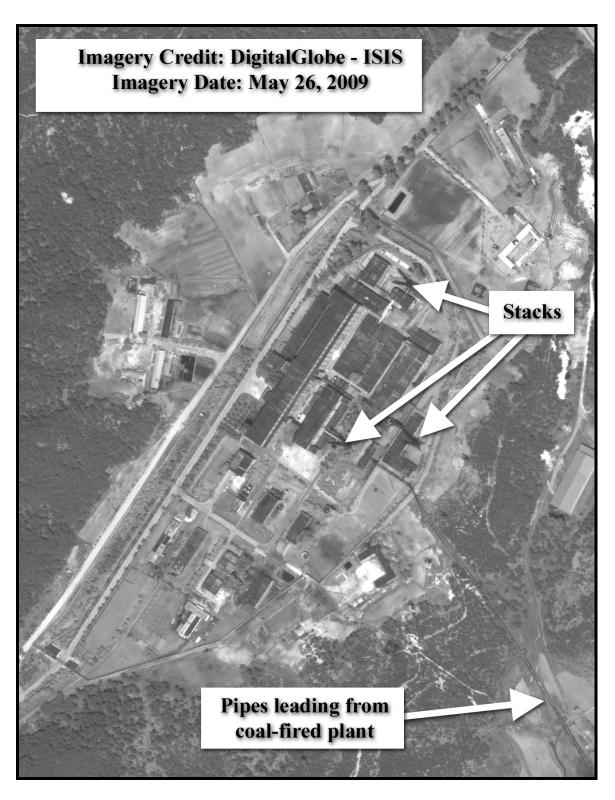


Figure 2. May 26, 2009 DigitalGlobe image of the reprocessing buildings at Yongbyon. There does not appear to be any plume coming from the stacks at this facility. There also does not appear to be any steam emitting from the pipes leading from the coal-fired steam generation plant to the reprocessing buildings.

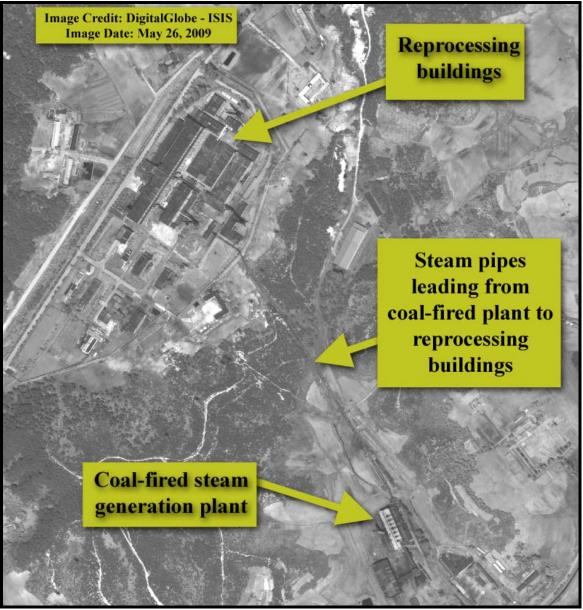


Figure 3. May 26, 2009 wide area view showing location of the reprocessing buildings, the coal-fired steam generation plant, and the pipes connecting the two compounds.



Figure 4. May 26, 2009 DigitalGlobe image showing the site of the destroyed cooling tower. There does not appear to be any construction activity near where the cooling tower had previously stood. North Korea imploded the cooling tower in June 2008 as a disablement measure.