183-H Solar Evaporation Basins

Post-Closure Unit #2

- Four basins near H Reactor, about 500 feet from the Columbia River.
- Treated contaminated liquids by letting them evaporate, leaving sludge for later disposal.
- Received mostly neutralized acid process waste, chromium and cyanide, vanadium pentoxide, and formic acid.
- Designated extremely hazardous waste because of toxicity.
- Groundwater is contaminated with unsafe levels of nitrate, chromium, uranium, and technetium-99.
- No waste added since 1985, and workers have removed waste and debris.

Where does the waste come from?

The mixed wastes were acid-etch solutions, metal constituents, unused chemicals, and spent solutions from other processes involved in making uranium fuel for N Reactor.

What happened to the site?

As a temporary step, workers installed a liner and filled the basins with clean soil, to slow the movement of nitrate and fluoride to groundwater. A pump and treat system was installed and will operate for years. The site cannot be clean closed because of the contamination. The permit has a schedule for submittal of a design for a cap or justification for why a cap is not needed.

What's the risk?

The groundwater contamination could enter the Columbia River. Monitoring will continue.

DEPARTMENT OF ECOLOGY
State of Washington