

ANNOTATED HISTORY of the WASHINGTON STATE RADIATION CONTROL PROGRAM

May 19, 1995

Updated April 2012

- 1943 The history of radiation control in the state of Washington must begin with the Hanford project in eastern Washington. In 1943 the first of nine plutonium production reactors began operation at Hanford under conditions of extreme war-time security. Enormous quantities of radioactivity began being released to the air, the Columbia River, and the land. Information on the quantities of radioactivity released would not become public information until the mid 1980's. Classification of Hanford's operations continued well into the 1990's.
- 1949 In July of 1949 the Columbia River Advisory Group (CRAG) was formed at the request of the Atomic Energy Commission (AEC). CRAG was to advise on matters of reactor waste disposal and water used in the Columbia River. Its members were the AEC, the U. S. Public Health Service (PHS), Washington and Oregon. State Department of Health (DOH) membership on CRAG marks the first effort by state government to address the public's exposure to radiation.
- 1954 The Atomic Energy Act was passed by Congress, transferring regulation of nuclear activities from the Defense Department to the Atomic Energy Commission.
- 1956 An Interim Advisory Committee on Radiation Protection and Control was formed to advise the DOH on initiating control of hazards from ionizing radiation. Initial staff in the DOH began development of a comprehensive radiation control program.
- 1957 Robert Stockman was appointed Head of the Air Sanitation and Radiation Control section with a staff of three people. Fallout monitoring began because of the large amount of atmospheric nuclear testing being conducted by the U.S. and Russia. RCW 43.39 was passed by the legislature, calling for review of legislative and regulatory needs, and formalizing the Advisory Council on Atomic Energy.
- 1957 Dawn Mining Company license issued by the AEC, authorizing uranium mill operations and yellowcake production.
- 1961 The first state laws specific to radiation were passed as RCW 70.98. This repealed RCW 43.39, named DOH as the sole state radiation control agency. It created the Technical Advisory Board on Radiation Control, continued the Advisory Council on Nuclear Energy and Radiation, and assigned responsibility for the promotion and development of nuclear energy to the Department Commerce and Economic Development.

- 1961 The first federal funds were obtained in the form of a grant from the U.S. Public Health Service to monitor the Columbia River.
- 1962 The N.S. Savannah visits Seattle as part of the World's Fair. An extensive environmental monitoring program was conducted by the RCP and a special report published.
- 1964 The first Rules and Regulations were adopted and dealt with the registration of radiation sources.
- 1965 A canal between Puget Sound and Grays Harbor was proposed by Battelle Pacific Northwest Laboratory. It was to be excavated using nuclear explosives!
- 1965 California Nuclear licensed by the Atomic Energy Commission (AEC) to begin accepting Low Level Radioactive Waste for disposal at the commercial facility located on the Hanford Nuclear Reservation.
- 1966 Regulations for licensing, registration, and standards for protection from the use of ionizing radiation were adopted. Washington becomes an agreement state on December 31. Total staff of 7.
- 1968 Nuclear Engineering Company acquires California Nuclear and takes over as LLRW disposal site operator.
- 1970 Department of Social and Health Services and Department of Ecology are created. Air pollution control program transferred to DOE and radiation control program transferred to DSHS. Total radiation control staff consists of 8. Program headquarters moved to Olympia. Six staff in Olympia and 2 in Seattle, including the radiation laboratory, which was still part of the RCP.
- 1971 Radiation laboratory transferred from the RCP to the public health lab.
- 1972 June 13th: minor accident at the University of Washington's research reactor results in plutonium contamination. Cliff Lewis (WA), Jerry Yesberger and Ray Fish (AEC), involved in review of the clean-up.
- 1975 EFSEC created as the state's "one-stop" siting authority for major thermal power plants. At the time there were nine different sites being considered for nuclear power plants.
- 1975 Dec. 15: Trojan reactor achieves initial criticality.

- 1978 The federal Uranium Mill Tailings Radiation Control Act (UMTRCA) became effective on November 8th. Incorporated into RCW 70.121 on January 1, 1980.
- 1978 Western Nuclear, Inc. license issued by DSHS, authorizing uranium mill operations and yellowcake production.
- 1979 NUCLEAR emergency line established by DSHS.
- 1979 March 28; Three Mile Island Accident. May; \$250,000 worth of equipment ordered by DSHS to upgrade its' field and laboratory resources.
- 1979 October 8 & 9; First simulated radiological accident (using actual, radioactive materials) conducted at Camp Murray, using the Boeing Co. resources.
- 1979 Dixie Lee Ray shuts down radioactive low level waste site on Oct. 4, 1979. Reopens Nov. 19, 1979, Executive Order EO79-09.
- 1980 Major decontamination event at Allied Technology in Yakima. Major cleanup occurred.
- 1980 LLRW Policy Act passed by U.S. Congress to establish state responsibility for the disposal of LLRW generated within its borders.
- 1981 March 27; Governor Spellman issues executive order directing DSHS to "ensure a prompt response to and timely recovery from fixed nuclear facility emergencies."
- 1981 July 20; Governor Spellman writes letters to USDOE and USDOD to fund state emergency planning efforts needed for their facilities. Funding would not occur until 1989, and then only partial funding from USDOE.
- 1981 Nuclear Engineering Company who operates the low level radioactive waste site changes its name to US Ecology, Inc.
- 1981 Washington state receives 49 percent of the nation's LLRW for disposal- 1.44 million cubic feet.
- 1982 January; FEMA approves state's emergency plan for Trojan.
- 1982 Inspection at Allied Nuclear (ATG) in Yakima uncovers backyard burial of radioactive material.
- 1982 Agreement state status amended to include uranium mills. Total staff at 46.

- 1982 Richland office opens with one full time person performing inspections of low level radioactive waste.
- 1983 Joy Mining Co. license issued by DSHS for experimental uranium production from "radium-free" bog material.
- 1983 Cloisonné jewelry from China is found to be radioactive due to uranium used to make orange glaze. Many requests from the public to survey jewelry.
- 1983 Washington state disposes of 53 percent of the nation's LLRW- 1.43 million cubic feet.
- 1983 10 CFR 61 enacted which establishes waste classes for LLRW
- 1984 WNP-2 begins commercial operation.
- 1984 International Titanium, Inc begins cleanup
- 1985 First PET scanner licensed
- 1985 Contaminated steel from Mexico first discovered in rebar at Los Alamos. Table legs had been made from the rebar and distributed nationwide. Many surveys done in restaurants and bars.
- 1985 Joy Mining Co. license suspended due to non-performance.
- 1985 LLRW Amendments Act of 1985 passed by the US Congress. This amended the 1980 Act to allow additional time for construction of new disposal sites as foreseen in the 1980 Act.
- 1985 New public health lab opens in north Seattle. All labs finally move out of the Smith Tower. The environmental radiation program moves to Olympia. The remainder of the Seattle staff moves from the Smith Tower to the Olympic Tower.
- 1985 Nuclear Waste Board created to evaluate Hanford as a repository for permanent disposal of high level waste.
- 1986 April, Chernobyl Accident. RCP participates in a phone bank for 14 days.
- 1987 James Acord, the nuclear artist, grinds up fiesta ware to get uranium.
- 1987 DSHS initiate decommissioning activities at Joy Mining.
- 1987 Train wreck in Stevenson with smoke detectors on board.

- 1988 3M static eliminators found leaking polonium-210 nationwide. Many surveys conducted.
- 1989 Department of Health is reestablished as an independent agency. All of the RCP is transferred from DSHS to DOH.
- 1989 Draft EIS issued for Dawn Mining Co. A Technical Advisory Committee is formed.
- 1989 Initial proposal to use contaminated fill dirt as a funding source to close Dawn Mining using NORM material
- 1989 Air Emissions Section created when we became responsible for NESHAPS
- 1989 A Spokane office is created with one full time person performing x-ray inspections.
- 1990 The Seattle office moves from the Olympic Tower to the Melbourne Tower (14 staff). Also, 12 staff in the radiation lab in north Seattle, 3 staff in Richland, 1 in Spokane, and 43 in Olympia. Total staff of 73.
- 1990 Allied Technical Group obtains license in Richland
- 1991 Final EIS issued for Dawn Mining Co, rejecting their proposal to import NORM material as a funding source for closure
- 1991 August – Hot chain link fence parts from India
- 1992 First Field Team Olympics at Millersylvania. Green Team (admin staff) won because they read their procedures unlike the technical staff!
- 1992 Began EIS for closure of Western Nuclear
- 1992 Dawn Mining Company is issued a radioactive materials license for the sludge resulting from operation of the Midnite Mine Water Treatment Plant.
- 1993 Trojan officially announced it was shutting down in January 1993. It permanently closed because of a steam generator tube leak requiring resources to repair. NRC scientists believed that Trojan might be unsafe to operate.
- 1993 Nuclear Laundry in Bremerton decommissioned and new one built near Richland
- 1993 Northwest Compact restricts disposal of LLRW to member states and the Rocky Mountain compacts

- 1994 Draft supplemental EIS issued for Dawn Mining Co allowing importation of out-of-state 11(e)2 byproduct material as funding source for closure of mill site and Midnite Mine
- 1994 December 12, final supplemental EIS issued for Dawn Mining Company and a license amendment issued accepting their 11(e)2 byproduct importation proposal,
- 1995 First ORP homepage on web.
- 1999 In August, the 1,000 ton 1,130 megawatt Trojan reactor was encased in concrete foam, coated in blue shrink-wrapped plastic, and then shipped up the Columbia River on a barge to the Hanford Nuclear Site to be put in the US Ecology Low Level Waste Disposal Site. It was the first commercial reactor to be moved and buried whole.
- 1999 Gamma Knife licensed at Northwest Hospital.
- 2000 Dawn Mining Company modifies their Closure Plan for the mill site to only use clean fill in their tailings impoundment (TDA4),
- 2000 ORP issues an Addendum to Dawn Mining Company SEPA documents and amends DMC's license so that they can no longer import out of state 11(e)2 byproduct material and must use clean fill in TDA4.
- 2001 Western Nuclear's mill license is terminated and the site turned over to the US Department of Energy for perpetual care and maintenance. It is the first Title II uranium mill in the country that is closed and turned over to the federal government.
- 2002 RHF 3 – Notice to Employees published in Spanish
- 2003 Office space for 8 is obtained in downtown Richland. Soon the staff from the offices on the Hanford Site join them.
- 2003 Dawn Mining Company mill building and process tanks demolished and buried in TDA-4.
- 2004 Final Environmental Impact Statement (EIS) issued for Ecology Low-Level Radioactive Waste (LLRW) disposal facility.
- 2005 ORP moves out of Building 5 at the Airdustrial/Newmarket site into Town Center 2 the new DOH headquarters. It was a difficult move because ORP had been in Bldg 5 for 20+ years. We went from one level and parking in front of building to being on the 4th floor and parking in the parking garage.
- 2005 Total volume of radioactive waste disposed at USE—38,937 cubic feet

- 2006 On May 21, the Trojan cooling tower was imploded. The spent fuel is all that is left on site stored in the Spent Fuel Storage Facility.
- 2007 ORP issues an Addendum to Dawn Mining Company's SEPA documents and renews DMC's license that allows the mill site to close under the existing Closure Plan.
- 2009 Midnite Mine license for sludge, terminated and transferred to the Environmental Protection Agency.