

# NPL Site Narrative for Ottawa Radiation Areas

## OTTAWA RADIATION AREAS

### Ottawa, Illinois

**Conditions at Proposal (July 29, 1991):** The Ottawa Radiation Areas site consists of 14 radioactively contaminated areas in or near Ottawa, LaSalle County, in north central Illinois. The 14 areas, many in residential neighborhoods, are within 3 miles of each other and cover approximately 25-35 acres. They are being proposed as one site because they involve the same wastes, potentially responsible parties, and media.

The contamination probably originated from processing wastes and demolition debris from two companies that once operated within four blocks of each other near the center of Ottawa -- Radium Dial Co. during 1918-36 and Luminous Processes, Inc. (LPI), during 1937-78. Both companies used radium-based paint to produce luminous dials for clocks and watches. In 1969, the building that housed Radium Dial was demolished and removed to an unknown location. During 1985, the Illinois Department of Nuclear Safety (IDNS) dismantled the LPI building and shipped the radioactive materials to a U.S. Department of Energy (USDOE) facility in Hanford, Washington. In 1986, contaminated soil surrounding the building was sent to Hanford. This area is not included in the site.

During cleanup of the LPI building, which cost \$4 million, IDNS learned that radioactive wastes from the two companies had been used as fill materials in the Ottawa area. Subsequent radiation surveys by IDNS, USDOE, and EPA identified the 14 areas that comprise the Ottawa Radiation Areas site. EPA tests found that radium-contaminated soils were present at both the surface and at depths of up to 8 feet in some areas and that access to many of the areas was unrestricted. EPA also screened 62 buildings for radon, identifying 4 that required immediate action.

Both the State and EPA have taken action at the site. In 1986, the State removed contaminated soil near homes in one of the areas and purchased a home in another area. Using CERCLA emergency funds, EPA installed radon reduction systems in two contaminated homes and one business in 1988; in 1990, EPA moved a third home to an uncontaminated property owned by the resident.

One of the 14 contaminated areas is the old Ottawa City Landfill, portions of which are now occupied by two businesses. Soil and sediment samples collected from the landfill in November 1989 by EPA contain elevated levels of three radioactive metals (radium-226, lead-214, and bismuth-214). Homes of approximately 50 people are built on radioactively contaminated soil; an additional 84 people are potentially exposed during recreational activities.

**Status (October 1992):** EPA is considering various alternatives for the site.

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be

found on the Internet at [ATSDR - ToxFAQs](http://www.atsdr.cdc.gov/toxfaqs/index.asp) (<http://www.atsdr.cdc.gov/toxfaqs/index.asp>) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.