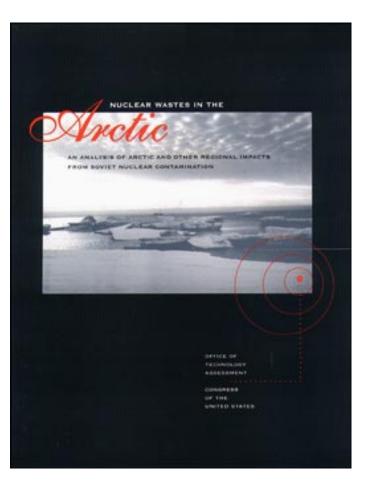
Nuclear Wastes in the Arctic: An Analysis of Arctic and Other Regional Impacts From Soviet Nuclear Contamination

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### Foreword

ne of the lasting legacies of the Cold War, and the buildup in nuclear weaponry and military over the past 50 years, is nuclear waste and its threat to human health and the environment. Notable examples of waste dumped into the open environment have caused people and nations to demand information about what was done and what health risks may result. In 1993, disclosures about Russian dumping of submarine reactors, nuclear fuel, and other wastes into the Arctic and North Pacific Oceans brought this region and its problems into the world spotlight. People in the United States want to know about this dumping and other discharges of radionuclides into the oceans. They want to understand the risks from Russian nuclear activities, both past and future, and the potential threat to their health and that of the Arctic ecosystem.

Because of these concerns, Senator Ted Stevens, Chairman of the Defense Subcommittee of the Senate Appropriations Committee, and Senators William V. Roth and John Glenn, Chairman and Ranking Minority Member of the Senate Committee on Governmental Affairs, asked the Office of Technology Assessment (OTA) to prepare this assessment of Nuclear Waste in the Arctic.

This report examines the environmental and human health impacts from wastes dumped into the Arctic and North Pacific regions, from nuclear contaminants discharged into these environments, and from radioactive releases from both past and future nuclear activities in the region. The report presents what is known and unknown about this waste and contamination and how it may affect public health. Because so many factors are involved and science cannot provide absolute answers to many questions, this study emphasizes the need for care, caution, awareness, and prudence. It also stresses the need for a stable and enduring institutional framework and international cooperation for long-term observation and monitoring.

OTA received considerable assistance during this study from many organizations and individuals. We sincerely appreciate the guidance received from our Advisory Panel, workshop participants, numerous reviewers, contributors, consultants, and contractors. We also received help from several U.S. federal agencies, research institutions, international organizations, the Russian Government and private institutions, the Norwegian Government and private organizations, and others. Without this cooperation and expert advice, OTA would not have been able to accomplish this study.

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