

FOREWORD

This booklet contains the Michigan Administrative Rules that pertain to the control and use of radiation machines and of machine-produced ionizing radiation for any purpose. The following narrative briefly describes the events leading to the promulgation of and current authority for these rules.

The former Michigan Department of Health began radiation health and safety activities in the mid-1940s as a natural extension of its industrial hygiene program. Beginning with routine response to requests from industry, staff personnel developed a self-initiated system of studies of usage of x-ray machines, accelerators, and radionuclides. Through the mid-1950s, activities included radon concentration studies in Michigan's Upper Peninsula mines, x-ray safety education through Michigan State College, and a radioactive fallout sampling survey in cooperation with the U.S. Public Health Service and the U.S. Atomic Energy Commission.

In February 1958, Michigan became one of the first states with administrative rules regulating all sources of ionizing radiation by means of registration and compliance investigations. Under those early rules, which were titled *Regulations Governing the Use of Radioactive Isotopes, X-Radiation, and All Other Forms of Ionizing Radiation*, the former Department of Health conducted a comprehensive radiological health program that included periodic investigations of facilities using any type of x-ray machine or electronic device that produced x rays. These facilities included hospitals, offices and clinics of the healing arts, educational institutions, and industries. General, limited health physics oversight of radioactive materials, including specific regulation of radium sources, was also performed.

In 1972, the Legislature passed a comprehensive radiation control law, Act 305, P.A. 1972. This law specifically provided a statutory basis and authority for administrative rules pertaining to ionizing radiation. In 1978, the authority for the rules was superseded by the enactment of Part 135 (Radiation Control) of the *Public Health Code*, Act 368, P.A. 1978; and Act 305, P.A. 1972 was rescinded. Amendments to Part 135 of Act 368, P.A. 1978, have occurred in 1980, 1981, 1983, 1989, 1992, and 1994.

The *Ionizing Radiation Rules*, in what was then named the Michigan Department of Public Health, became effective on December 2, 1975, superseding rules that had been in effect since 1958. Since then, the following revisions have been made to the rules:

- On March 8, 1979, Part 4 addressing the registration of radiation machines was revised to its present form.
- On November 12, 1993, Part 14 was added to the rules, establishing comprehensive administrative rules pertaining to mammography.
- On December 5, 2007, rule 396 addressing hand-held portable dental x-ray machines was added to Part 9 - Dental X-Ray Installations.
- On June 8, 2011, Part 15 governing the use of computed tomography (CT) was added to the rules.

The *Ionizing Radiation Rules* were developed by adopting appropriate standards from several documents, including reports of the National Council on Radiation Protection and Measurements, Suggested State Regulations for Control of Radiation, and Performance Standards for Ionizing Radiation Emitting Products of the U.S. Department of Health and Human Services. Standards for which no precedent was found were developed with a background of many years of regulatory experience in radiological health and with the advice of the former Michigan Department of Public Health's Radiation Advisory Board.

Executive Order 1996-1 transferred the radiation program from the Michigan Department of Public Health into two other departments. Pursuant to that Executive Order and Executive Order 1996-2, radiation machine registration and compliance regulatory activities became the responsibility of the Radiation Safety Section in the Michigan Department of Consumer & Industry Services. Radioactive material regulatory activities became the responsibility of the Michigan Department of Environmental Quality.

Executive Order 2003-18 transferred the Radiation Safety Section and its radiation machine registration and compliance regulatory activities from the former Michigan Department of Consumer & Industry Services to the Michigan Department of Community Health.

Executive Order 2011-4 transferred the Radiation Safety Section and its radiation machine registration and compliance regulatory activities from the Michigan Department of Community Health to the Michigan Department of Licensing and Regulatory Affairs.

This booklet contains the current individual rules in the *Ionizing Radiation Rules* that pertain to the use of x-ray equipment or other ionizing radiation-producing machines in the healing arts, educational facilities, industries, and other facilities. In a few instances, a rule that pertains to the use of radiation machines also pertains to radioactive materials or contains a subrule that pertains to radioactive materials. In these instances, the rule is printed in its entirety, and a special note is provided to designate that, as published in this booklet, the requirements of the rule that apply to radiation machine registration or compliance are under the purview of the Michigan Department of Licensing and Regulatory Affairs.