# Chapter 872: EXEMPTIONS FROM THE BAN ON SALE OF MERCURY SWITCHES, RELAYS AND MEASURING DEVICES

SUMMARY: This rule establishes the procedure by which the manufacturer or user of a mercury relay, switch, instrument or measuring device may apply for an exemption from the sales prohibition under the Maine Revised Statutes, Title 38, section 1661-C, subsections 6 and 7.

**1. Definitions.** The following terms, as used in this rule, have the following meanings:

**A. Advanced technology product.** "Advanced technology product" means a product of extraordinary function or design intended for use in unique or customized industrial or military applications and not intended for general distribution.

**B. Button battery.** “Button battery” means a battery resembling a button or coin in size and shape.

**C. Capture rate.** "Capture rate" means the number of units of a mercury-added product that are properly collected at end of life as compared to the total number of product units estimated to be available for collection.

**D. Commissioner.** "Commissioner" means the Commissioner of Environmental Protection.

**E. Department.** "Department" or "DEP" means Department of Environmental Protection.

**F. IMERC.** “IMERC” means the “Interstate Mercury Education and Reduction Clearinghouse” as established under the auspices of the Northeast Waste Management Officials Association to serve as a single point of contact for manufacturers seeking to comply with state laws regulating the sale, distribution and disposal of mercury-added products.

**G. Mercury relay.** “Mercury relay” means a device containing mercury added during its manufacture that opens or closes electrical contacts to effect the operation of other devices in the same or another electrical circuit. “Mercury relay” includes mercury displacement relays, mercury wetted reed relays and mercury contact relays.

**H. Mercury switch.** “Mercury switch” means a device containing mercury added during its manufacture that opens or closes an electrical circuit or gas valve. “Mercury switch” includes mercury float switches actuated by rising or falling liquid levels, mercury tilt switches actuated by a change in the switch position, mercury pressure switches actuated by a change in pressure, mercury temperature switches actuated by a change in temperature and mercury flame sensors. "Mercury switch" does not include switches used in mercury-added thermostats as defined under 38 MRSA § 1661-C, sub-§ 5.

**I. MRSA.** "MRSA" means the Maine Revised Statutes Annotated.

**2. Prohibitions**

**A. Instruments and measuring devices.** Effective July 1, 2006, a person may not sell, offer to sell or distribute the following mercury added instruments and devices:

(1) A barometer;

(2) An esophageal dilator, bougie tube or gastrointestinal tube;

(3) A flow meter;

(4) A hydrometer;

(5) A hygrometer or psychrometer;

(6) A manometer;

(7) A pyrometer;

(8) A sphygmomanometer; or

(9) A thermometer.

This prohibition does not apply if the only mercury-added component in the instrument or device is a button battery or a lamp, if the use of mercury is required by federal law or if the use of mercury is specified in a contract issued by a federal agency.

**B. Switches and relays.** Effective July 1, 2006, a person may not sell, offer to sell or distribute a mercury switch or a mercury relay individually or as a product component. This prohibition does not apply if the switch or relay will be used to replace a mercury switch or mercury relay in a product sold prior to July 1, 2006 provided the replacement switch or relay is labeled in accordance with Chapter 870 of department rules and one of the following applies:

(1) The larger product is used in manufacturing; or

(2) The switch or relay is integrated and not physically separate from other components of the larger product.

A product is considered to be "used in manufacturing" if it is equipment or machinery at a fixed location that is used in making a product from raw materials, e.g., a papermaking machine. A switch or relay is considered to be "integrated and not physically separate from other components of the larger product" if the switch or relay is embedded in the larger product such that the larger product would have to be replaced to accommodate a non-mercury replacement switch or relay.

**3. Petitions for exemption.** The manufacturer, importer, distributor or user of a mercury switch, relay, instrument or device subject to the sales prohibitions under section 2 may apply for an exemption from the prohibition for one or more specific uses of the product by filing a written application with the department or IMERC.

4. Criteria for exemption; burden of proof. The commissioner may grant an exemption, with or without conditions, upon finding that:

A. Technical infeasibility. Technically feasible nonmercury alternatives to the mercury-added product are not available;

B. Cost. Nonmercury alternatives are available but are too costly compared to the cost of the mercury-added product;

C. Environmental benefit. Use of the mercury-added product provides a net benefit to the environment, public health or public safety when compared to available nonmercury alternatives; or

D. Advanced technology use. Use of the mercury-added product is required to meet specifications identified by the customer or end user of an advanced technology product as defined under subsection 1(A) of this rule.

The burden of proof rests with the applicant. This means that the applicant must affirmatively demonstrate, to the satisfaction of the commissioner, that one of the above criteria for exemption is met.

**5. Scope of review; submissions.** This section describes the scope of the commissioner's review in determining whether an applicant has met one of the criteria for exemption under section 4. This section also lists, for each exemption criterion, the submissions required of applicants seeking an exemption on the basis of that criterion.

**A. Technical infeasibility**

(1) Scope of review.In determining if an exemption should be granted on the basis that technically feasible nonmercury alternatives to a mercury-added product are not available, the commissioner shall consider all relevant evidence to that effect, such as:

(a) The extent to which nonmercury alternatives are offered for sale in the U.S. marketplace; and

(b) The extent to which nonmercury alternatives are used in the particular application or applications for which exemption is requested.

(2) Submissions. An applicant seeking exemption on the basis that technically feasible nonmercury alternatives are not available must submit the following information:

(a) A description of the mercury-added product, including identification of the manufacturer and an explanation of the need for and purpose of the mercury in the product;

(b) The specific uses of the product for which exemption is requested;

(c) A description of past, current and planned future efforts to identify or develop nonmercury alternatives;

(d) A list of the individuals, companies and resources consulted during the search for alternatives;

(e) A description of all potential nonmercury alternatives that have been identified and considered; and

(f) The specific basis (e.g. electrical performance, size, power consumption; product life) for concluding that each potential alternative was not technically feasible for the intended use.

**B. Cost**

(1) Scope of review.In determining whether to grant an exemption on the basis that technically feasible nonmercury alternatives, although available, are too costly, the commissioner shall consider all relevant evidence to that effect, such as:

(a) The purchase price differential between the mercury-added product and available nonmercury alternatives;

(b) Costs other than purchase price associated with the substitution of a nonmercury alternative;

(c) The affordability of the nonmercury alternatives as demonstrated by their availability in the marketplace and sales volumes; and

(d) Any costs savings, such as avoided mercury spill cleanup and hazardous waste disposal costs, that the applicant or user of the product will realize by switching to a nonmercury alternative.

The focus of the commissioner 's review is on the cost of nonmercury alternatives to users of the product for which exemption is requested and not on redesign, retooling or other costs incurred by the product manufacturer to discontinue the use of mercury. If nonmercury alternatives are available in the marketplace and widely used, the commissioner may presume that the alternatives are available at comparable cost. The applicant may overcome this presumption by persuasive evidence demonstrating that the cost of the nonmercury alternatives will pose a financial hardship to users of the product for which exemption is requested.

(2) Submissions. An applicant seeking exemption on the basis that the available nonmercury alternatives are too costly must, at a minimum, submit the following information:

(a) A description of the mercury-added product, including identification of the manufacturer and an explanation of the purpose of and need for the mercury in the product;

(b) The specific uses of the product for which exemption is requested and the price, or range of prices, at which the product is sold to users;

(c) For each use for which an exemption is requested, a list of the available nonmercury alternatives and their price range;

(d) An estimate of the additional cost that will be incurred by users of the mercury-added product to replace it with a nonmercury alternative and an explanation of how the additional costs were calculated;

(e) The actual or estimated mercury spill cleanup and disposal costs incurred by the applicant or users of the mercury-added product during the 5 years immediately preceding the filing of the exemption application.

**C. Environmental benefit**

(1) Scope of review.In determining whether to grant an exemption on the basis that use of the mercury-added product provides a net benefit to the environment, public health or public safety when compared to available nonmercury alternatives, the commissioner shall consider all relevant evidence to that effect, such as:

(a) The nature of the claimed benefit, and whether it differs in kind or degree from the environment, public health and public safety benefits afforded by available nonmercury alternatives;

(b) The amount of mercury expected to be placed in commerce annually if the exemption is granted;

(c) The likelihood that the mercury in the product will be released to the environment or that users of the product will be exposed to the mercury; and

(d) The steps that will be taken through product design or otherwise to ensure that mercury is not released during use and disposal of the product.

The commissioner may not grant an exemption for the reason that a mercury-added product provides a net benefit to the environment, public health or public safety if the claimed benefit does not differ from the benefits available from nonmercury alternatives.

(2) Submissions. An applicant seeking exemption on the basis that the mercury-added product provides a net benefit to the environment, public health or public safety when compared to available nonmercury alternatives must submit the following information:

(a) A description of the mercury-added product, including identification of the manufacturer and an explanation of the purpose of and need for the mercury in the product;

(b) The specific uses of the product for which exemption is requested;

 (c) A narrative identifying the specific benefit claimed and explaining how the claimed benefit differs from the benefits afforded by available nonmercury alternatives; and

(d) The rationale for the applicant's position that the claimed benefit exceeds the potential adverse environment and public health consequences associated with the use of mercury in the product, including:

(i) Identification of the risks to human health associated with the use of mercury in the product and the pathways by which humans could be exposed to the mercury;

(ii) An estimate of the amount of mercury that will be released to the environment if the exemption is granted; and

(iii) The steps, if any, that will be taken through product design or otherwise to minimize the release of mercury during use and disposal of the product.

**D. Advanced technology product**

(1) Scope of review.In determining whether the use of a mercury-added product is required to meet specifications identified by the customer or end user of an advanced technology product, the commissioner shall consider all relevant evidence to that effect, such as:

(a) The written product specification that requires the use of the mercury-added component for which exemption is requested; and

(b) Evidence that the advanced technology product has been or can be manufactured using nonmercury alternatives to the product for which exemption is requested.

(2) Submissions. An applicant seeking exemption on the basis that the mercury-added product is needed for an advanced technology product must submit the following information:

(a) A description of the advanced technology product, the applications in which it is used and the number of units expected to be sold if the exemption is granted;

(b) A copy of the product specifications that require the use of the mercury-added product.

**6. Collection of exempted products.** Except in the case of an advanced technology product, the commissioner may not grant an exemption unless the applicant also demonstrates that a system exists for the proper collection, transportation and processing of the mercury-added product at the end of its life, i.e., when the user is done with it. This section describes the scope of the commissioner's review in determining whether an applicant has satisfied this additional prerequisite for exemption and lists the submissions required of applicants.

**A. Scope of review.** In determining whether a system exists for the proper collection, transportation and processing of the device at the end of its life, the commissioner shall consider:

(1) The convenience of the system to users of the device;

(2) The manner in which the system is financed;

(3) The effectiveness of the system in capturing the targeted devices; and

(4) Any other information bearing on the steps that have been or will be taken to ensure that the mercury in the device is properly handled when the device is taken out service.

**B. Submissions.** An applicant seeking exemption for the reasons stated in subsections 4(A). 4(B) and 4(C) must submit information affirmatively demonstrating that a system exists to properly handle the mercury-added product at its end of life. The submissions must include:

(1) A description of the system, including who operates it, how it is funded and the amount of any user fee if applicable;

(2) The steps that that will be taken to make users of the mercury-added product aware of the collection system and how to use it;

(3) The number of product units captured by the system if it currently is in operation;

(4) The estimated number of product units expected to be available for collection each year if the exemption is granted and the estimated number of these reasonably expected to be captured by the collection system; and

(5) A description of how the applicant plans to monitor whether the expected capture rate is being achieved and the steps that will be taken to improve the collection system if the expected capture rate is not achieved.

**7. Submission of application; forms**. An application for exemption must be submitted on forms provided by the department or IMERC. If the department form is used, it must be completed and mailed to the Mercury Products Program, DEP-BRWM, 17 SHS, Augusta ME 04333. If the IMERC form is used, it must be completed and mailed to IMERC c/o NEWMOA, 129 Portland St, Suite 602, Boston MA 02114-2014. IMERC staff will mail a copy of the application to the department.

**8. Completeness of application.** Within 15 days after receipt of an application for exemption, department staff shall determine whether the application is complete for processing. If the application is determined to be incomplete, staff shall notify the applicant in writing, either directly or through IMERC, and specify the information that needs to be supplied. In reviewing applications determined to be complete, department staff may require additional information from the applicant on any aspect of the exemption request.

**9. Application fee.** The commissioner shall assess a fee of $500, for deposit in the Maine Environmental Protection Fund, to cover costs incurred by the department in reviewing exemption applications. The commissioner shall bill the applicant for the fee upon determining that the application is complete for processing. Department staff may suspend further review of the application until the fee is remitted.

**10. Public notice.** Upon determining that an application for exemption is complete, department staff shall arrange for notice of the application to be published in the *Kennebec Journal* newspaper and shall mail notice to any trade group, professional association, interest group or other person who either has notified the department of their interest in mercury issues or, in the opinion of the department, is likely to be interested in the exemption request. The notice must include the following information:

**A.** The name of the applicant;

**B.** The citation to the applicable statute and rules;

**C.** A description of the product and uses for which the exemption is requested;

**D.** A statement that the application is available for inspection at the department’s Augusta office during normal business hours and the location of the office;

**E.** A statement that written comment on the application may be provided to the department and the deadline for receipt of written comments; and

**F.** The department contact person, phone number, email address and mailing address.

The deadline for receipt of written comments on the application may be no sooner than 30 days after the date notice is published pursuant to this section.

**11. Consultation with other states.** To promote consistency in how mercury-added products are regulated, department staff may consult with other U.S. states that regulate mercury switches, relays, instruments or measuring devices before rendering a decision on an exemption application under this rule. An applicant for exemption shall provide the department with a copy of all written responses to similar exemption applications, if any, submitted by the applicant to another state.

**12. Draft decision.** The commissioner shall issue a draft decision granting or denying the exemption within 180 days after receiving the exemption application and all information requested by the department to determine if the exemption criteria are met. The draft decision must be mailed to: the applicant; to any person who submitted written comments on the application prior to the comment deadline set by the department; to any person who made a written request to receive the draft; and to the appropriate person in other states that regulate the sale of the product for which exemption is requested. The mailing of the draft decision must include notice of the date on which the commissioner is expected to issue a final decision on the exemption request and must provide a reasonable opportunity for submitting written comments on the draft decision.

If, in reviewing an application determined to be complete, the department requires additional information from the applicant and the applicant fails to respond within 120 days after the request is mailed by the department, such inaction constitutes grounds on which the commissioner may issue a draft decision denying the application.

**13. Final decision; appeal.** As expeditiously as possible following the receipt and consideration of any written comments on a draft decision, the commissioner shall:

**A.** Grant the exemption request, with or without conditions, and set forth written findings with sufficient explanation to make interested persons aware of the basis for the commissioner's determination that the applicant has met one of the criteria for exemption and, if applicable, that a system exists for the proper collection, transportation and processing of the mercury-added product at the end of its life; or

**B.** Deny the exemption request and set forth written findings that explain the basis for denial.

The decision may be appealed to the Board of Environmental Protection as provided under Chapter 2 of the department rules. See *Rules Concerning the Processing of Applications and Other Administrative Matters,* 06-096 CMR, chapter 2. The department shall mail a copy of the commissioner’s final decision to the applicant and to any person who commented in writing on the draft decision. The applicant's copy must be sent by certified mail, return receipt requested. Each copy of the decision must be accompanied by a plain statement of the manner in which the decision may be appealed.

**14. Conditional exemptions.**The commissioner may grant an exemption request subject to conditions, including but not limited to conditions that:

**A.** Limit the scope of the exemption to particular product uses;

**B.** Require the person receiving the exemption to maintain records and provide reports on mercury usage;

**C.** Require the person receiving the exemption to take steps to inform users of the exempted product about the system for collecting the product at its end of life, and to provide the department with an annual estimate of the capture rate for the exempted product; and

**D.** Limit the term of the exemption.

**15. Exemption term; renewal.** The commissioner may not grant an exemption for a term exceeding 5 years but may renew an exemption for one or more additional terms of 5 years or less upon re-application in accordance with this rule. In seeking renewal, the burden is on the applicant to demonstrate that the product continues to qualify for exemption under the criteria of this rule and that all conditions of the original exemption approval have been met.

 STATUTORY AUTHORITY: 38 MRSA §1661(C)

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