FRUITS AND VEGETABLES; CONTROLLED ATMOSPHERE STORAGE
Act 228 of 1959

AN ACT to promote the development of the Michigan fruit and vegetable industry; to define certain types
and methods of fruit and vegetable storage; to prohibit the sale of fruits and vegetables misbranded as to type
of storage; to provide for records; to provide for licensing of certain fruit and vegetable storage facilities; to
provide for registration and permits for packers or repackers; to provide for revocation of licenses; to provide
for the enforcement of this act; and to provide penalties for violation of this act.


The People of the State of Michigan enact:

286.371 Definitions.
Sec. 1. As used in this act:
(a) "Apples" means all varieties of apples.
(b) "Controlled atmosphere storage" means the storage of fruits or vegetables in an approved sealed
storage room or in an approved sealed storage building, or in a sealed storage space within the room or
building, under controlled conditions of time in days, oxygen content, carbon dioxide content, and
temperature as established by this act or rules adopted under this act. The term controlled atmosphere may be
referred to by the initials "CA" or similar terms or abbreviations.
(c) "Director" means the director of the Michigan department of agriculture or his or her designated agents.
(d) "Sealed storage room", "sealed storage space", or "sealed storage building" means sealed storage spaces
in which controlled atmosphere is maintained, inferred, advertised, or represented as having a controlled
atmosphere.


286.372 Controlled atmosphere storage for fruits and vegetables; prohibited representations.
Sec. 2. A person or other legal entity shall not sell, label, describe, advertise, offer, expose, exchange, or
transport fruits or vegetables for sale represented as having been held under controlled atmosphere storage
conditions as specified in this act, alone or with other words, or use any such terms or form or words or
symbols of similar import on any container or lot of fruits or vegetables advertised, sold, offered for sale, or
transported for sale within this state unless the fruits or vegetables have been stored in compliance with the
provisions of this act and rules promulgated by the director.


286.372a Construction of storage room, space, or building; installation and maintenance of
thermometer; accessibility of gas analyzer.
Sec. 2a. (1) Each sealed storage room, sealed storage space, or sealed storage building used as a controlled
atmosphere storage facility for fruits or vegetables shall be constructed of materials that will allow for the
establishment and maintenance of the required levels of carbon dioxide, oxygen, and temperature that are
acceptable to the director.
(2) Each sealed storage room, sealed storage space, or sealed storage building shall have a Fahrenheit
thermometer properly installed and maintained. An approved gas analyzer for the measurement of carbon
dioxide and oxygen gases shall be readily accessible to all sealed rooms or units.


286.373 Record; location; contents; review.
Sec. 3. (1) A person or other legal entity storing fruits or vegetables in a sealed storage room shall keep a
daily record at a convenient location adjacent to the storage room, storage space, or storage building from the
day of sealing the room, space, or building to the day of opening of the storage room, space, or building.
(2) The daily records kept under subsection (1) shall indicate the atmospheric conditions in each sealed
storage space from the date of sealing until the date the space is opened. The daily records shall indicate the
date and time of recording, the temperatures in degrees Fahrenheit, the percentages of carbon dioxide, and the
percentage of oxygen.
(3) The daily record shall be subject to review by the director at any time for a period of at least 1 year
from date of sealing.

286.374 Rules and regulations.
Sec. 4. The director may promulgate rules and regulations regarding the controlled atmosphere storage of fruit or vegetables pursuant to the administrative procedures act of 1969, 1969 PA 306, MCL 24.201 to 24.328.


286.374a Sealed storage room; conditions.
Sec. 4a. (1) A person or other legal entity desiring to maintain a licensed sealed storage room shall notify the director within 5 days after the date of sealing. The oxygen within the sealed storage room maintained for apples shall be 5% or lower within 14 days after the storage room is sealed by the operator. An operator shall make available for inspection, upon request of the director, the daily record for the sealed storage rooms.

(2) Except as otherwise provided in subsection (3), the apples shall be stored in a continuously sealed storage room that does not have more than 5% oxygen for a minimum period of 60 days, except that gala and jonagold varieties may be removed from storage in not less than 45 days.

(3) The oxygen level in any sealed storage room maintained for apples may be more than 5% for an accumulated time not to exceed 10 days (240 hours) during the storage period. If the atmospheric conditions have been interrupted, the minimum storage period shall be increased to 70 days for all fruit except for gala and jonagold, which shall have a minimum storage period of 55 days.

(4) All sealed storage rooms maintained for apples shall be sealed by the operator. To qualify for "CA" storage, the room must be sealed on or before November 15 of the storage year. At the time of inspection by a department representative, the representative must place an official seal on the door. An operator shall not break the seal and shall not enter the storage room during the days required for the sealed storage period, except as provided in subsection (3). If interruptions in atmospheric conditions occur, the operator shall notify the department within 48 hours after the atmospheric conditions in the sealed storage room are interrupted. Sealed storage rooms whose atmospheric conditions were interrupted may be resealed by an authorized representative of the department.

(5) The air temperature of any sealed storage room maintained for apples shall not exceed 35 degrees Fahrenheit for jonathan, rome beauty, delicious (all), and stayman varieties and the temperature shall not exceed 41 degrees Fahrenheit for all other varieties during the interruption period.


286.375 Controlled atmosphere storage for fruits and vegetables; license, application, fee, inspection, expiration, renewal, exemption.
Sec. 5. (1) A person or other legal entity shall not operate any sealed type storage room for fruits or vegetables where controlled atmosphere is used without first obtaining a license from the director for each sealed storage room. An application for license shall be made on forms furnished by the director.

(2) A fee of $35.00 per room shall accompany each application. The director shall not issue a license under this act unless the director or his or her authorized agent has inspected the storage facilities and found those facilities to be in compliance with this act and rules promulgated under this act.

(3) All licenses expire on November 15 of the year after issue and may be renewed annually unless the license is revoked or suspended.

(4) Fruits or vegetables not represented as controlled atmosphere storage are not required to be in compliance with the requirements of this act.


286.376 License; denial, suspension, or revocation; notice and opportunity for hearing; administrative fine; warning; action by attorney general to recover fine; injunction; disposition of payments.
Sec. 6. (1) In addition to any other penalties or sanctions provided for by law, the director after notice and opportunity for a hearing under the administrative procedures act of 1969, 1969 PA 306, MCL 24.201 to 24.328, may deny, suspend, or revoke a license for any sealed storage room, space, or building that had not been operated, or is not prepared to be operated, in compliance with this act or any rules promulgated under this act.

(2) The director, upon finding after notice and opportunity for a hearing that a person has violated any provision of this act, may impose an administrative fine of not more than $1,000.00 for each violation.

(3) If the director finds that a person or firm has violated provisions of the act despite the exercise of due care, the director may issue a warning instead of imposing an administrative fine.

(4) The director shall advise the attorney general of the failure of a person to pay an administrative fine.
imposed under this section. The attorney general shall bring an action in a court of competent jurisdiction to recover the fine.

(5) The director may bring an action to enjoin the violation or threatened violation of this act or a rule promulgated pursuant to this act in a court of competent jurisdiction of the county in which the violation occurs or is about to occur.

(6) Any civil penalties or recovery of any economic benefits associated with a violation of this act and collected under this section shall be paid to the state treasury and credited to the department for the enforcement of this act.


Compiler's note: The repealed sections pertained to labeling requirements, registration numbers, and permits.

286.379 Violation of act as misdemeanor; penalty.

Sec. 9. Any person or other legal entity who violates any of the provisions of this act is guilty of a misdemeanor punishable by a fine of not less than $200.00 or more than $5,000.00 or by imprisonment for not more than 90 days.