

DEPARTMENT OF AGRICULTURE

PESTICIDE AND PESTICIDE MANAGEMENT DIVISION

REGULATION NO. 530. CONTROLLED ATMOSPHERE STORAGE FOR APPLES

(By authority conferred on the director of agriculture by Act No. 228 of the Public Acts of 1959, being S286.411 et seq. of the Michigan Compiled Laws)

R 285.530.1 Definitions.

Rule 1. (1) The term "apples" as used in these rules shall mean all varieties of the fruit commonly known as apple.

(2) The term "sealed storage room," "sealed storage space," or "sealed storage building," as used in these rules, shall apply to all sealed storages in which controlled atmosphere is maintained, inferred, advertised, or represented as such.

History: 1954 ACS 23, Eff. Aug. 12, 1960; 1979 AC.

R 285.530.2 Construction.

Rule 2. (1) Each sealed storage room, space, or building used as a controlled atmosphere storage facility for apples shall be constructed of materials that will permit adequate tightness for establishing and maintaining the necessary levels of carbon dioxide and oxygen gases.

(2) Each sealed storage room, space, or 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 storage rooms or units.

History: 1954 ACS 23, Eff. Aug. 12, 1960; 1979 AC.

R 285.530.3 Atmospheric controls and records.

Rule 3. (1) The director of agriculture shall be notified of the date of sealing of a controlled-atmosphere room within 5 days of the sealing operation.

(2) The oxygen content within the sealed storage shall be 5% or lower within 30 days after the storage is sealed by the operator. A record of the temperature of the rooms to be loaded shall be kept and be available for inspection.

(3) The fruit shall be stored in continuously sealed storage that does not have more than 5% oxygen for a minimum period of 60 days, except for Gala and Jonagold varieties, which may be removed from storage in not less than 45 days, and except as follows:

(a) The oxygen level in any sealed controlled storage may be more than 5% for an accumulated time not to exceed 10 days (240 hours) during the storage period. The storage period shall be increased to 100 days for all fruit, except for Jonathons, which shall have a storage period of 70 days when the atmospheric conditions have been interrupted.

(b) All controlled-atmosphere storage rooms shall be sealed by a department of agriculture seal that is affixed by an authorized representative of the department. To qualify for C.1A. storage, a controlled-atmosphere storage room shall have been sealed by a department representative on or before November 15 of the storage year. A seal shall not be broken and a room shall not be entered during the 45 or 60-day required period, except as provided in subdivision (a) of this subrule. When interruptions occur, the food division of the department of agriculture shall be notified within 48 hours after the rooms are opened. Entered rooms shall thereafter be resealed by an authorized representative of the department of agriculture.

(c) The air temperature of any storage room shall not be more than 37 degrees Fahrenheit for Jonathon, Rome Beauty, Delicious (all), and Stayman varieties and the temperature shall not be more than 43 degrees Fahrenheit for all other varieties during the interruption period.

(4) Daily records shall be maintained on the atmospheric conditions in each sealed storage room from the date of sealing to the date the room is opened. The records shall indicate all of the following information:

- (a) The time of the recording.
- (b) The temperatures in degrees Fahrenheit.
- (c) The percentage of carbon dioxide.
- (d) The percentage of oxygen.

History: 1954 ACS 23, Eff. Aug. 12, 1960; 1954 ACS 41, Eff. Feb. 14, 1965; 1979 AC; 1994 MR 12, Eff. Jan. 3, 1995.