48. Compounding Generally.

A. In addition to the definitions and requirements of South Carolina Code Ann. Title 40 Section 43, these regulations are applicable to all persons and entities engaged in the compounding, administration, sale, distribution, or dispensing of compounded preparations for use by humans or animals.

B. The provisions of this section apply to any person or entity authorized to engage in the practice of non-sterile compounding, sterile compounding, and sterile repackaging of drug products in or into South Carolina but shall not apply to:

(1) acts not considered to be compounding pursuant to Section 40-43-30(8);

(2) The addition of a flavoring agent or coloring agent to a drug product, as long as the agent is therapeutically inert;

(3) simple compounding that involves mixing with little to no additional manipulation;

(4) other routine minimal risk preparation, manipulation, or dispensing activities customarily performed in a retail pharmacy or at the patient bedside, including but not limited to:

a. splitting or crushing of tablet(s) per provider's instructions when appropriate

b. simple admixture or dilution of commercially available non-sterile products for immediate patient administration

C. To evaluate whether a specific act is permitted within the practice of compounding in or into South Carolina, or whether an act can be delegated to other qualified individuals under his/her supervision, a person or entity engaged in compounding shall independently determine whether:

(1) The act is prohibited by:

a. the South Carolina Pharmacy Practice Act and Pharmacy Regulations,

b. South Carolina Controlled Substances Act,

c. Any other applicable state or federal laws or regulations;

(2) Performance of the act is within the accepted standard of care that would be provided in a similar setting by a reasonable and prudent individual with similar education, training, and experience; and

(3) The act is consistent with the individual's education, training, and experience;

D. Compounding any preparations for human use that contain bulk drug substances that are ineligible under the FD&C Act for compounding is prohibited.

E. In addition to the requirements of S.C. Code Ann. Section 40-43-86(CC)(2)(b), a drug product that is commercially available may only be compounded if the commercial product is not reasonably available in the market in time to meet a patient's needs, and is not compounded regularly or in inordinate amounts.

(1) Compounding of a commercially available product or an essential copy of a commercially available product must include documentation from the prescriber justifying the specific medical need or clinically significant difference for a specific patient. Patient specific justification must be maintained and readily available for inspection by the Board.

F. Policies and procedures for the compounding or sterile repackaging of drug products shall ensure the safety, identity, strength, quality, and purity of the finished product. To meet this standard, licensees and registrants shall take into consideration the applicable standards recognized in the current edition of an official compendium or supplement to a compendium including, but not limited to, appropriate provisions of applicable USP Chapters and FDA guidance. These referenced standards are intended to inform accepted professional practice and the Board's evaluation of compliance with this regulation, but are not incorporated by reference as independent enforceable requirements.

(1) The justification for significant deviations from existing standards that directly impact patient safety shall be documented and readily available for inspection by the Board.
(2). Individuals and entities engaged in compounding shall maintain readily accessible and current reference materials that are both adequate and applicable to the specific compounding being conducted.

G. In applying standard of care, pharmacists shall utilize professional judgement to develop and implement policies and procedures designed to protect patient safety and in accordance with applicable state and federal laws. Policies and procedures shall be developed and implemented by the pharmacist responsible for compounding and shall govern sterile and nonsterile compounded preparations. These policies and procedures shall mitigate potential for harm through implementation of operational controls and practices appropriate to the nature, scope and complexity of the compounding being performed. These policies and procedures shall, at a minimum:
(1) Provide for the compounding, packaging, dispensing, delivery, administration, and storage of sterile and nonsterile compounded preparations
(2) Include a continuous quality management system accounting for adverse events, quality related events, customer and patient complaints, out of specification results, certification failures, recalls, and any related corrective actions;
(3) Include a system for handling and disposal of hazardous or infectious waste;
(4) Include training requirements for all personnel engaged in compounding;
(5) Include environmental monitoring and cleaning;
(6) include engineering control performance verification procedures performed no less than every 6 months
(7) Be reviewed at least annually; and
(8) Be readily available for inspection by the Board.

H. In addition to the requirements of S.C. Code Ann. §40-43-86, facility design must be appropriate for the type of the facility's compounded preparations. If a permitted facility intends to initiate compounding services, the pharmacist-in-charge must submit notification to the Board within or no less than 10 working days prior to the intended start date on a form prescribed by the Board. Upon receipt of such notification, the Board may conduct an inspection of the facility based on a risk assessment or other factors deemed appropriate by the Board.

J. The pharmacist-in-charge must establish and maintain a training program that ensures personnel are qualified for their assigned duties. Individuals involved in compounding or direct oversight of compounding activities must complete initial training and successfully demonstrate competency before working independently. Individuals must receive ongoing training and have competencies reassessed at least annually. Personnel with limited responsibilities, such as stocking or cleaning, must be trained in accordance with facility policies and procedures.
K. Pharmacy technicians who are appropriately registered, certified, or otherwise authorized pursuant to the laws of the jurisdiction in which the compounding activity occurs, and who have obtained the appropriate training and demonstrated competency, may compound under the direct supervision of a licensed pharmacist at a facility permitted by the South Carolina Board of Pharmacy.
(1) A final check of a compounded preparation must be conducted by a licensed pharmacist who meets the requirements in section J to confirm identity, accuracy, packaging, and labeling prior to dispensing.

L. In addition to requirements in S.C. Code Ann. Section 40-43,
(1) labels on the immediate container for products intended for patient use must clearly identify:

a. Active ingredient(s) and the quantity, amount(s), activity(ies), or concentration(s)

b. Beyond-use date (BUD)

c. Facility name and contact information

d. Any required warnings or handling instructions

e. Compounding facility name and contact information if the preparation is to be sent outside of the facility or healthcare system in which it was compounded

f. The labeling should indicate that the preparation is compounded.

(2) Beyond-Use Dates (BUDs) shall be assigned conservatively, supported by compendia literature, medical or scientific literature, and/or practical experience in the art of compounding, whichever is lesser for the product's stability and sterility, a record of which must be maintained and readily available upon inspection of the Board.

M. In addition to record-keeping and reporting requirements in SC Code Ann. 40-43, et. al., all records related to compounded preparations should be specific to the type of compounding performed and shall be maintained for no less than two years and readily available, including:
(1) Batch and/or compounding records and master formulations, including all verifications;
(2) Equipment, maintenance, and certification records;
(3) Training and ongoing competency assessment records;
(4) Testing and release records;
(5) Dispensing and distribution records;
(6) cleaning and environmental monitoring records;
(7) corrective actions and other quality assurance documentation; and
(8) Any other records required to conform to and demonstrate compliance with federal law.

N. Personal protective equipment (PPE) means a gown, glove, mask, hair cover, shoe cover, eye shield, and similar items intended to protect the compounder from hazards and minimize particle shedding. Personnel engaged in compounding shall use PPE that is appropriate for the type of compounding being performed and as necessary to protect personnel from chemical exposure and contamination.

49. STERILE PREPARATION.

A. (1) In addition to the requirements of SC Code Ann. Section 40-43-86(CC)(2) and 40-43-88, this section applies to any compounded drug preparation that must be sterile when administered to a patient, including, but not limited to, the dosage forms listed under CSP as defined in Section 40-43-30(9).
(2) Compounders and sterile repackagers shall ensure that sterile products are accurately and appropriately prepared, sterilized, packaged, sealed, labeled, stored, dispensed, and distributed in a manner that maintains sterility and minimizes the introduction of particulate matter.
(3) Compounded sterile preparations with a low probability of contamination prepared in a PEC and that cannot be located within an ISO Class 7 or better buffer area requires a 12 hour or less BUD and may be prepared in a segregated compounding area that:
(a)is confined to a room or a demarcated area
(b)contains a device that provides unidirectional air flow of ISO 5 air quality
(c)is free of materials extraneous to sterile Compounding and
(d)is not used for other activities or purposes
(4)The environment for sterile Compounding must contain an ante area that is ISO Class 8 quality air or better

(5)The buffer area must maintain at least ISO Class 7 conditions under dynamic operating conditions
(6)The PEC must maintain ISO Class 5 or better conditions while compounding.
(7) A pressure gauge or velocity meter must be installed to monitor the pressure differential or airflow between the buffer area and the ante area and between the ante area and the general environment outside the compounding area.
(a) The pressure between the positive ISO Class 7 or better buffer area, the ante area, and the general pharmacy area may not be less than a 0.02 inch water column.
(b) The pressure between the negative ISO Class 7 or better buffer area, the ante area, and the general pharmacy area may not be less than a -0.01inch water column. For negative pressure buffer areas, the ante area must be ISO Class 7 or better.
(8) In addition to section 48, PPE used in sterile compounding must be low-linting, snuggly fitted, and appropriate to the type of compounding being performed. Skin must not be exposed within the ISO Class 5 PEC, and gloves must be sterile and powder free. ,
(9) BUDs shall be assigned conservatively for sterile preparations, supported by compendia literature, medical or scientific literature, and/or practical experience in the art of compounding, whichever is lesser for the product's stability and sterility in lieu of testing, a record of which must be maintained and readily available upon inspection of the Board.
(10) The following record(s) shall be maintained and readily available upon inspection by the Board for any facility that engages in compounding sterile preparations:

a. Justification of BUDs assigned pursuant to direct testing or extrapolation from reliable literature sources using defined components and/or container systems;

b. Training records evidencing personnel are trained on a routine basis and are adequately skilled, educated, and instructed;

c. Assessments appropriate for the risk of contamination for the particular sterile preparation, including visual inspection, periodic hand hygiene and garbing competency, gloved fingertip sampling testing, sterility testing, media-fill test procedures, competency evaluation at least annually for each compounder and for personnel overseeing compounding;

d. Environmental sampling testing at least upon registration of a new drug outlet, upon the servicing or re-certification of facilities and equipment, in response to identified problems, or every six (6) months;

e. Temperature, humidity, and differential pressure monitoring of the compounding area logged daily, if applicable;

f. BUD and assay testing, when appropriate; and

g. Measuring, mixing, sterilizing, and purification equipment inspection, monitoring, cleaning, and maintenance to ensure accuracy and effectiveness for their intended use.

50. HAZARDOUS DRUG PREPARATION.

A. This section shall apply to all persons and facilities engaged in the practice of compounding or repackaging of hazardous drugs. Such persons shall:
(1) Maintain a list of hazardous drugs, as defined in 40-43-30(25), and risk assessment based on dosage form(s) handled by the facility; the list shall be reviewed at least annually
(2) Ensure the compounding areas have engineering controls to provide adequate ventilation to dilute and remove airborne contaminants as evidenced in required documentation pursuant to 48.M;
(3) Utilize a ventilated cabinet designed to reduce worker exposures while preparing hazardous drugs. in accordance with standards recognized in the current edition of an official compendium or supplement to a compendium including, but not limited to USP <800>. Sterile hazardous drugs shall be prepared in a dedicated class II biological safety cabinet or a barrier isolator of appropriate design to meet the personnel exposure limits described in product material safety data sheets. When asepsis is not

required, a class I biological safety cabinet, powder containment hood or an isolator intended for containment applications may be sufficient. A ventilated cabinet that re-circulates air inside the cabinet or exhausts air back into the room environment is prohibited unless:

a. The hazardous drugs in use will not volatilize while they are being handled; or

b. Written documentation from the manufacturer is provided attesting to the safety of such ventilation.

(4) hazardous drugs to be used in compounding, including ingredients and final dosage forms, shall be clearly identified and associated handling precautions shall be communicated throughout every stage of handling within the facility's control until packaged for dispensing,

(5) In addition to the requirements for PPE included in sections 48 and 49,

Provide, maintain, and use appropriate personal protective equipment and supplies necessary for handling hazardous drugs, spills, and disposal;

(6) A pharmacy shall establish and implement work practices and written policies and procedures for the safe handling of hazardous drugs that are designed to prevent contamination and minimize personnel exposure; and

(7) Ensure that personnel working with hazardous drugs are trained in hygiene, garbing, receipt, storage, handling, transporting, compounding, spill control, clean up, disposal, dispensing, medical surveillance, and environmental quality and control.