



GUIDANCE DOCUMENT

Non-Sterile Compounding Inspection Standards

This guidance document is issued by the South Carolina Board of Pharmacy pursuant to the authority delegated to the Board in the South Carolina Pharmacy Practice Act, including S.C. Code Ann. §§ 40-43-10 and 40-43-60(D).

NOTE: Simple compounding that does not trigger a non-sterile compounding inspection include:

1. Reconstituting or manipulating commercial products that may require the addition of one (1) or more ingredients as directed by the manufacturer
2. Making 20 or less compounds of an oral liquid or topical dosage from utilizing five (5) or less non-hazardous APIs over any 30-day period (does not exempt facility from maintaining all required formulas and logs related to such compounding)

Relevant Citation(s)	Inspection Standard
40-43-86(CC)(2)(c) Drugs meet CP, AR, ACS chemical grade or meet the accepted standard of the practice of pharmacy	<ul style="list-style-type: none">• APIs: Certificates of analysis (COAs) obtained for all bulk APIs used for compounding• All substances and components have a complete label, including a batch control or lot number and an expiration date• Where water is an ingredient, purified or distilled water is used• There are not preparations made or ingredients used that appear on the FDA list of drug products withdrawn or removed from the market for safety reasons (facility has a copy of the list or other way to determine)
40-43-86(CC)(2)(b) Preparations are based on the existence of valid prescriptions issued pursuant to an existing pharmacist/patient/practitioner relationship and/or in anticipation of prescription medication orders based on routine, regularly observed prescribing patterns	<ul style="list-style-type: none">• On-hand inventory of compounded product may not exceed three (3) months of dispensed prescriptions
40-43-86(CC)(3)(b) Pharmacist responsible for monitoring and training pharmacy technicians	<ul style="list-style-type: none">• If technicians are compounding medications, pharmacist must be able to observe

<p>40-43-86(CC)(3)(a)</p> <p>Employees achieve competence and maintain proficiency through current awareness training and annual competency assessment in the art and science of compounding and the rules and regulations of compounding</p>	<ul style="list-style-type: none"> • There is documentation that all personnel who perform compounding are appropriately trained, including in policies and procedures, documentation, hazardous drug handling, and compounding technique and are not allowed to compound or supervise compounding until training is successfully completed; Minimum of six (6) hours initial; four (4) hours annually thereafter (Note: Training does not have to be ACPE or otherwise accredited continuing education) • If the pharmacy uses relief personnel from outside agencies to perform non-sterile compounding, there is documentation that training is verified for relief personnel • For animal compounding: <ul style="list-style-type: none"> ○ The pharmacist is familiar with, or has a reference regarding, drug residues in the food chain and withdrawal times if compounding for food-producing animals ○ The facility has a list of drugs and components not permitted when compounding for food-producing animals
<p>40-43-86(A)(16)(j)(CC)(3)(c)</p> <p>Personnel are wearing clean clothing appropriate to the operation(s) being performed</p>	<ul style="list-style-type: none"> • Compounding personnel maintain good hand hygiene and wear clean and appropriate clothing for the compounding being performed • Personnel don protective garb (e.g. gowns, gloves, masks, hair covers, etc.) as appropriate when performing compounding • Appropriate protective attire (e.g. gowns, gloves, masks, etc.) is available, including appropriate PPE for hazardous drug compounding, if hazardous drugs are used
<p>40-43-86(CC)(3)(d)</p> <p>Only personnel authorized by pharmacist(s) in immediate vicinity of the drug compounding operation</p>	<ul style="list-style-type: none"> • Only personnel authorized by pharmacist(s) in immediate vicinity of the drug compounding operation
<p>40-43-86(CC)(4)(a)</p> <p>Pharmacists engaging in compounding have an adequate area for the complexity level of compounding that is maintained for the placement of material and equipment</p>	<ul style="list-style-type: none"> • The non-sterile area is a controlled environment • The area must be: <ul style="list-style-type: none"> ○ A room that is separated from the pharmacy area by a wall or curtain and allows for pharmacist observation; or ○ A low traffic area, within the pharmacy area, that has a powder containment hood • There is sufficient space available for the type and amount of compounding performed • The space is orderly to prevent mix-ups between ingredients, containers, labels, in-process materials, and finished preparations

<p>40-43-86(A)(10),(16)(d) 40-43-86(CC)(2)(e),(4)(b),(6)(a)</p> <p>Bulk medications and other chemicals or materials used in the compounding of medication must be stored in adequately labeled containers in a clean, dry, and temperature-controlled area or, if required, under proper refrigeration</p>	<ul style="list-style-type: none"> • For APIs without an expiration date assigned by the manufacturer or supplier, the pharmacy assigns a conservative expiration date that does not exceed three (3) years for ingredients used for non-sterile compounding (Note: Purity and quality testing may be performed to extend) • Temperature in the compounding area is maintained to provide controlled room temperature storage of 20°C to 25°C (68°F to 77°F), or more restrictive if warranted by specific drug product storage requirements; refrigerator temperature range is 36°F to 46°F • Humidity inside refrigerator must be logged if a refrigerator is maintained in an area that does not maintain the environment as defined by USP room temperature • Must have logs that include, at a minimum, the following: <ul style="list-style-type: none"> ○ Time ○ Date ○ Initials ○ Refrigerator Temperature (Humidity inside refrigerator must be logged if it is located outside a controlled pharmacy environment) ○ Room Temperature ○ Room Humidity
<p>40-43-86(A)(16)(a),(CC)(4)(c)</p> <p>The compounding area has adequate lighting, ventilation, and washing facilities</p>	<ul style="list-style-type: none"> • The compounding area is well lit • There is adequate space to wash equipment and utensils, including access to water for rinsing
<p>40-43-86(CC)(4)(c)</p> <p>The facility has adequate washing facilities with potable water supplied under continuous positive pressure in a plumbing system free of defects that could contribute to contamination of a compounded drug preparation, easily accessible to the compounding areas of the pharmacy, that include hot and cold water, soap or detergent, and air-dryers or single-use towels</p>	<ul style="list-style-type: none"> • There is a sink in the compounding area with: <ul style="list-style-type: none"> ○ Hot and cold potable water ○ Soap or detergent ○ Air-dryers or single-use towels

<p>40-43-86(A)(16),(CC)(4)(d)</p> <p>Compounding area is clean and sanitary and free from infestation by insects, rodents, or other vermin</p>	<ul style="list-style-type: none"> • Floor of compounding area must be constructed of a material that can be easily cleaned (carpeting is not permitted) • Cleaning must be documented and performed, at a minimum, according to the following schedule: <ul style="list-style-type: none"> ○ Daily – Countertops cleaned; floors swept; hoods cleaned; equipment wiped down; utensils cleaned; trash discarded ○ Weekly – Floors mopped ○ Monthly – Shelves cleaned/sanitized; drug product refrigerator cleaned/sanitized; drug product freezer cleaned/sanitized; cabinet exteriors cleaned sanitized • Must have policies and procedures for cleaning that are present, updated, and in use
<p>40-43-86(A)(16),(CC)(4)(d)</p> <p>Trash disposed of in a timely and sanitary manner</p>	<ul style="list-style-type: none"> • Trash disposed of in a timely and sanitary manner
<p>40-43-86(CC)(4)(g)</p> <p>Appropriate precautions used to prevent cross-contamination when drugs with special precautions are involved in a compounding procedure</p>	<ul style="list-style-type: none"> • Appropriate precautions used to prevent cross-contamination when drugs with special precautions are involved in a compounding procedure
<p>40-43-86(CC)(5)(a)</p> <p>Equipment and utensils used for compounding are of the appropriate design and capacity and are stored in a manner to protect from contamination</p>	<ul style="list-style-type: none"> • When stored or not in use, equipment and utensils must be covered or in cabinets
<p>40-43-86(CC)(5)(a),(b)</p> <p>Equipment is routinely inspected and calibrated</p>	<ul style="list-style-type: none"> • Powder hoods used for non-sterile compounding are certified or tested periodically to ensure proper function; hood filters are checked regularly and replaced when necessary • Must document calibration of equipment, if required • Must have a policy and procedure for routine cleaning of equipment

<p>40-43-86(CC)(6),(8)</p> <p>Compounding formulas and logs are appropriately maintained</p>	<ul style="list-style-type: none"> • The compounding record includes: <ul style="list-style-type: none"> ○ Official or assigned name, strength, and dosage of the preparation ○ Master Formulation Record reference, if available ○ Sources, lot numbers, and expiration dates of all components ○ Total quantity or number of dosage units compounded ○ Mixing instructions (order of mixing, temperatures, duration of mixing, and other pertinent factors) ○ Person compounding the preparation ○ Pharmacist who approved of completed procedures prior to dispensing ○ Date of compounding ○ Assigned internal identification number or prescription number ○ Storage requirements ○ Assigned Beyond Use Date (BUD) is assigned from the day of preparation <ul style="list-style-type: none"> ▪ BUDs for nonaqueous formulations are not later than the remaining time until the earliest expiration date of any API and not later than six (6) months ▪ BUDs for water-containing oral formulations are not later than 14 days when stored at controlled cold temperatures (refrigerated) ▪ BUDs for water-containing topical/dermal and mucosal liquid and semisolid formulations not later than 30 days ▪ BUDs are assigned based on dispensing in tight, light-resistant containers/overpacks ▪ Extended BUDs are supported by testing data and professional judgment • If performed, results of quality control procedures (weight range of filled capsules, pH of aqueous liquids, etc.) • Documentation of any quality control issues and any adverse reactions or preparation problems reported by the patient or caregiver including investigation and recall, if appropriate <p>See also S.C. Code Ann. § 40-43-86(I)(4) – Labeling (see Retail Inspection Form)</p> <ul style="list-style-type: none"> • BUD must be on patient-specific label • All active ingredients in compound must be on label or affixed to the container
<p>40-43-86(CC)(6)(b),(c)</p> <p>Components used in compounding are accurately weighed, measured, and/or subdivided as appropriate at each stage of the compounding procedure to conform to the formula prepared</p>	<ul style="list-style-type: none"> • As appropriate, the final completed preparation assessed for weight, mixing, clarity, odor, color, consistency, pH, and strength and is documented

<p>40-43-86(CC)(6)(b)</p> <p>Any chemical transferred to a container from the original container is labeled with the same information as the original container, and the date of transfer is placed on the label</p>	<ul style="list-style-type: none"> Any chemical transferred to a container from the original container is labeled with the same information as the original container, and the date of transfer is placed on the label
<p>40-43-86(CC)(6)(c)</p> <p>Procedures to monitor the output of compounded prescriptions are present, updated, and in use</p>	<ul style="list-style-type: none"> Products that are made often should have a final analysis done to validate process Documentation maintained of adverse drug reactions in accordance with S.C. Code Ann. § 40-43-86(M)
<p>40-43-86(CC)(7)(a)</p> <p>Excess compounded preparation is labeled in a manner sufficient to identify the formula used, assigned control number, and BUD</p>	<ul style="list-style-type: none"> Excess compounded preparation is labeled in a manner sufficient to identify the formula used, assigned control number, and BUD
<p>40-43-86(CC)(7)(b)</p> <p>Excess compounded preparation is properly stored</p>	<ul style="list-style-type: none"> Excess compounded preparation is properly stored
<p>40-43-86(CC)(8)</p> <p>Compounding records are kept for a period of two (2) years</p>	<ul style="list-style-type: none"> Compounding records are kept for a period of two years
<p>40-43-10, <i>et seq.</i></p> <p>Standard operating procedures are present, updated, and in use</p>	<ul style="list-style-type: none"> General compounding procedures Procedures for types of products compounded Maintenance and cleaning of area and equipment Quality control procedures, including analytical testing procedures

This guidance document includes interpretive statements adopted by the South Carolina Board of Pharmacy by formal motion that attempt to explain the meaning of laws, rules, or standards that govern the practice of pharmacy and pharmacy permitting in South Carolina. This document is not intended to be comprehensive or to address every applicable scenario. Therefore, the absence of a guidance document or a guidance document's silence on certain matters should not be construed as the lack of an enforceable standard. Should a matter involving non-sterile compounding standards come before the Board, the Board remains free to decide each matter before it on all the facts and circumstances presented to it at that time.