

## SUPPLEMENTAL ORDER TO CEASE and DESIST

Date: 9/10/2013 Permit No. LSC-99109

Name as shown on permit: Grandpa's Compounding Pharmacy

Address: 7563 Green Valley Rd City: Placerville, CA 95667

During inspections of Grandpa's Compounding Pharmacy, the board identified noncompliance issues relating to the compounding of sterile injectable products. Grandpa's compounded sterile products lack assurances of sterility and lack of pyrogens and pose an immediate threat to the public health or safety. Therefore, pursuant to Business and Professions Code section 4127.3, subdivision (a), the executive officer of the board hereby issues an ORDER to the pharmacy to immediately CEASE AND DESIST from compounding injectable sterile drug products.

This cease and desist order is based on the following violations of pharmacy laws and regulations, and/or safe compounding practices, observed during board inspections:

California Code of Regulations, title 16, section 1751.7, subdivision (c) requires, in pertinent part, that batch-produced sterile injectable drug products compounded from one or more non-sterile ingredients be subjected to documented end product testing for sterility and pyrogens and be quarantined until end product testing confirms sterility and acceptable levels of pyrogens. Grandpa's Compounding Pharmacy is non-compliant, in that the test methods and documentation used by Grandpa's Compounding Pharmacy are inadequate to ensure sterility and lack of pyrogens.

(1) Since on or about July 1, 2013, Grandpa's Compounding Pharmacy has been using a sterility test (TuffTest) designed for testing compounded sterile suspensions and emulsions for all in-house sterility tests, including the testing of sterile solutions. Additionally, Grandpa's Compounding Pharmacy staff failed to follow manufacturer directions for the proper use of the Tuff Test: for example, they did not properly incubate the TuffTest container, did not follow temperature directions or document ambient temperatures, and did not invert the sample every other day. Grandpa's Compounding Pharmacy's improper use of the TuffTest and the failure to document basic parameters related to the Tuff Test invalidates all Tuff Test results. None of Grandpa's Tuff Test results adequately confirm that their compounded products were sterile.

(2) Similarly, Grandpa's Compounding Pharmacy has been testing sterile compounded products for pyrogens by using a test named PyroTest. The presence of an unacceptable level of pyrogen in the test sample results in a clot in the test tube. However, the clotting process is stopped if the test sample is not kept still. Vibration or movement of the sample stops the clotting process, thus resulting in a false test (no clotting) indicating an acceptable level of pyrogens. One of the manufacturer's instructions is to conduct a control test for each medication sample. The control test sample contains a known bacterium. The control sample is expected to clot. If the control sample does not clot, that indicates the sample was vibrated and the clotting process stopped prematurely. Grandpa's failed to conduct any control testing to validate that the compounded product was not vibrated and produced a false test result. None of Grandpa's pyrogen test results are valid without the accompanying control sample test.

California Code of Regulations, title 16, section 1751.4, subdivision (a) provides that no sterile injectable product shall be compounded if it is known, or reasonably should be known, that the compounding environment fails to meet criteria specified in the pharmacy's written policies and procedures for the safe compounding of sterile injectable drug products. Grandpa's Compounding Pharmacy was not in compliance, in that its compounding environment failed to meet its written policies and procedures. Specifically, Pharmacy Technician Barr (TCH Barr) failed to follow Grandpa's Compounding Pharmacy's procedures for sterile garbing. Grandpa's Standard Operating Procedure (SOP) 3.3.52 states the order in which garb is to be donned. TCH Barr applied compounding garb in the incorrect order. TCH Barr also exhibited several non-sterile techniques while being observed during the inspection, including that she:

- Took off her shoes and donned shoe covers over her bare feet.
- Splashed non-sterile water on her gown.
- Backed into the clean room, while wearing a hospital-type gown where the user ties the gown in back, with her upper back exposed. When backing into the clean room her bare back touched the plastic curtains.
- TCH Barr pushed up her sleeves possibly touching bare skin.
- TCH Barr placed her exposed arms and hands inside the laminar flow hood and began putting on non-sterile gloves. During this process, open wounds were observed on TCH Barr's arm and hands.
- TCH Barr used her gloved hands to pull down the sleeves of the gown, possibly touching her bare arms with her gloves.
- TCH Barr, with gloved hands, removed the tacky mat on the floor and placed it in the trash can located in the cleanroom. Tacky mats are intended to remove dirt from bottoms of shoes, thereby preventing tracking dirt into the cleanroom. After pulling up the mat, TCH Barr continued to wear the same gloves and compound.

The foregoing actions by TCH Barr did not comply with Grandpa's Compounding Pharmacy's SOPs. These actions demonstrate a lack of training and understanding of aseptic technique by TCH Barr and Grandpa's Compounding Pharmacy management.

California Code of Regulations, title 16, section1751.5, subdivision (b)(1) states that when compounding sterile products from one or more non-sterile ingredients, cleanroom garb consisting of a low-shedding coverall, head cover, face mask, and shoe covers must be worn inside the designated area at all times. Grandpa's Compounding Pharmacy was not in compliance. Specifically, Grandpa's Compounding Pharmacy was not using low-shedding gowns, head covers, shoe covers, or face masks.

California Code of Regulations, title 16, section 1751.7, subdivision (a)(1) states that a pharmacy engaged in compounding sterile injectable drugs shall have written policies and procedures including a quality assurance plan that includes procedures for cleaning and sanitation of the parenteral medication preparation area. In addition, California Code of Regulations, title 16, section 1751.3, subdivision (d)(3)(G) states that written policies and procedures must address regular cleaning schedules for the controlled area and any equipment in the controlled area and the alternation of disinfectants. Grandpa's Compounding Pharmacy's was not in compliance with these code sections, in that it failed to comply with its own written policies and procedures regarding cleaning and sanitation. Specifically, the pharmacy's SOP 3.2.20 states, in pertinent part, that "disinfectants from different classes should be rotated according to their general chemical classification on a quarterly basis." Yet Grandpa's cleaning records obtained for dates 1/1/2013 through 9/5/13 showed the same two cleaning agents (Purinse and alcohol) were used each time the anteroom, cleanroom and laminar flow hood were cleaned. Further, the Purinse concentrate gallon bottle requires adding "6ml Purinse & QS to 960ml (fill ring) with water." As stated by TCH Barr, this Purinse solution is placed in spray bottles and used for cleaning. There was no documentation on the mixing and use of Purinse in the SOPs. There was no documentation of dilution and there is no expiration date on either the gallon jug or the spray bottle.

Business and Professions Code section 4127.7, subdivision (a) requires, as applicable here, that a pharmacy shall compound sterile injectable products from one or more nonsterile ingredients in an ISO class 5 laminar airflow hood within an ISO class 7 cleanroom, with a positive air pressure differential relative to adjacent areas. Grandpa's Compounding Pharmacy could not demonstrate compliance with these requirements, in that the pharmacy does not have a gauge or gauges to measure positive air pressure in the cleanroom or anteroom. Instead Grandpa's Compounding Pharmacy's SOP 3.3.10 states that "positive pressure will be checked and logged with each use of the sterile room on the Positive Pressure Monitoring Log. Positive Pressure is obtained when the plastic cover is pushed out at floor level." Grandpa's Compounding Pharmacy was unable to provide a copy of this log when requested by the board. Further, although the plastic cover moved slightly when the hood was turned on, all movement of the plastic stopped when staff entered the cleanroom. This demonstrates a lack of positive air pressure differential. There was no other testing or documentation to show that the ISO 7 cleanroom had positive air pressure differential relative to adjacent areas.

California Code of Regulations, title 16, section 1751.3, subdivision (a), as it relates to 1735.5(c)(3), provides, in pertinent part, that the policy and procedure manual shall include procedures for maintaining, storing, calibrating, cleaning, and disinfecting equipment used in compounding. Grandpa's Compounding Pharmacy's procedures in several areas are inadequate, thus endangering the health and safety of the public. For example, Grandpa's depyrogenation procedure states that "depyrogenation is usually conducted at temperatures above 250 degrees Celsius. Higher temperatures permit shorter exposure times for a given item; conversely, lower temperatures require longer exposure times." Yet Grandpa's Compounding Pharmacy used a toaster oven intended for home use for depyrogenation and dry heat sterilization. Grandpa's Compounding Pharmacy should have been using an oven specifically designed for depyrogenation and dry heat sterilization. The toaster oven was modified by making a hole in the top and inserting a thermometer. Grandpa's Compounding Pharmacy's toaster oven's maximum temperature range was 300 degrees Fahrenheit (148.9 degrees Celsius), substantially below the 250 degrees Celsius temperature in its SOP. In addition, Grandpa's did not document depyrogenation or dry heat sterilization times and temperatures. Grandpa's Compounding Pharmacy did not have records to substantiate the oven thermometer calibration. Grandpa's Compounding Pharmacy did not have records to document successful depyrogenation or dry heat sterilization.

Similarly, Grandpa's Compounding Pharmacy SOP 3.3.34 details incubator use and the requirements for cleaning the incubator. The SOP requires cleaning the incubator at least monthly and rotating the cleaning disinfectant used. But the pharmacy failed to document cleaning of the incubator and the rotation of disinfectants. Grandpa's Compounding Pharmacy also failed to maintain records demonstrating that the incubator had been calibrated. Likewise, Grandpa's Compounding Pharmacy's SOP relating to Sterilization by Autoclave (5.6.30) explains the uses of an autoclave and that its effectiveness is affected by the load placed into the autoclave chamber. The SOP includes recommended autoclave time settings depending on load nature and size, and requires that staff keep track of the temperature and pressure on a temperature log. Yet Grandpa's Compounding Pharmacy staff reported that they typically just autoclaved for 20 minutes, and if staff felt more time was needed they would double the time. When asked what the temperature and pressure was to be depending on what the load was in the autoclave, the staff reported they didn't know. There was no documentation to show calibration of the autoclave. Calibration would demonstrate the autoclave was in working condition as described by manufacturer specifications. The staff could cite no references to describe what pressure, temperature, and time are to be used depending on what materials or what load is placed in the autoclave. The staff was not aware of the requirement for change in temperature and pressure depending on the load or the description of the materials. The staff reported they place materials in the autoclave. turn it on for 20 minutes and remove the materials and then the product or item is sterile. Grandpa's Compounding Pharmacy is not calibrating or documenting the use of the autoclave used in non-sterile to sterile compounding.

On the basis of the foregoing, the board has a reasonable belief that Grandpa's Compounding Pharmacy's sterile injectable compounding practices pose an immediate threat to the public health or safety, and therefore ORDERS:

Grandpa's Compounding Pharmacy shall immediately CEASE AND DESIST from compounding sterile injectable drug products. This cease and desist order shall remain in effect for 30 days or until the date of a hearing seeking an interim suspension order, whichever is earlier. Pursuant to Business and Professions Code section 4127.3, subdivision (c), within 15 days of the receipt of this notice you may request a hearing before the president of the board to contest the cease and desist order.

Grandpa's Compounding Pharmacy shall contact each prescriber and patient for whom Grandpa's Compounding Pharmacy has prepared injectable medications from non-sterile ingredients to determine if the patient or prescriber has any such preparations in his/her possession. Any such preparation in the possession of prescribers/patients shall be recalled. The product is to be returned to Grandpa's Compounding Pharmacy.

California State Board of Pharmacy

By: Signed:
Date:9/11/2013 Title:
Any additional information (for example – corrective plan of action, Quality Assurance outcomes, factors in mitigation, etc.) you want to submit for consideration may be sen to the board's attention at the above address no later than 14 calendar days from date above. Please include a copy of this form with your information submitted.
hereby acknowledge receipt of the above cease and desist order and notice.
Date: