BEFORE THE
BOARD OF PHARMACY
DEPARTMENT OF CONSUMER AFFAIRS
STATE OF CALIFORNIA

In the Matter of the Second Amended Accusation Against:

KOSHLAND PHARMACY, INC. dba KOSHLAND PHARM:

CUSTOM COMPOUNDING PHARMACY;

PETER HALE KOSHLAND, OWNER,

Sterile Compounding Permit No. LSC 99955

Original Pharmacy Permit No. PHY 50041

and

PETER HALE KOSHLAND,

Registered Pharmacist License No. RPH 51804

Respondents.

Case No. 7147

OAH No. 2022070191

DECISION AFTER REJECTION

Administrative Law Judge (ALJ) Michael C. Starkey, State of California, Office of Administrative Hearings, heard this matter on June 5–9 and 12–15, 2023, via videoconference.

Deputy Attorney General Aspasia A. Papavassiliou represented complainant Anne Sodergren, Executive Officer of the California State Board of Pharmacy (Board).

Attorney Derek S. Davis represented respondents Koshland Pharmacy, Inc., and Peter Koshland, Pharm.D., who was present.

The record was held open for briefing. Complainant submitted an initial closing brief and a reply closing brief which were marked for identification as Exhibits 38 and 39, respectively. Respondents submitted a closing argument brief which was marked for identification as Exhibit LL.

The record closed and the matter was submitted on September 29, 2023.

On November 1, 2023, the ALJ issued a Proposed Decision (Proposed Decision). On December 20, 2023, pursuant to section 11517 of the Government Code, the Board issued an Order Rejecting the Proposed Decision. The Board ordered and subsequently received the transcripts and administrative record of the hearing, and thereafter issued an Order setting March 1, 2024, as the date for submission of written argument.[1] No new evidence was permitted. Written argument was timely received

[1] The Board acknowledges that in its written argument after rejection of the Proposed Decision, respondents requested that the Board order oral argument. The Board notes that under Government Code section 11517(c)(2)(E)(ii), the Board has discretion as to whether to permit oral or written argument, and observes that, in the exercise of that discretion and consistent with its customary practice, it determined that written argument was sufficient to inform the Board members about the salient issues in this matter and assist them in their obligation to achieve a substantial understanding of the record.

from both parties.

The Board, having reviewed and considered the entire record, including the transcript, exhibits, and written argument from both parties, now issues this Decision After Rejection.

FACTUAL FINDINGS

Jurisdictional Matters

1. On September 6, 2000, the Board issued Registered Pharmacist License Number RPH 51804 to respondent Peter Hale Koshland (Koshland). This license was in full force and effect at all relevant times and is scheduled to expire on June 30, 2024, unless renewed.

2. On September 1, 2009, the Board issued Original Pharmacy Permit Number PHY 50041 to respondent Koshland Pharmacy, Inc. doing business as Koshland Pharm: Custom Compounding Pharmacy (Pharmacy).

3. On June 20, 2014, the Board issued Sterile Compounding Permit Number LSC 99955 to Pharmacy. Both permits were in full force and effect at all relevant times and are currently scheduled to expire on September 1, 2024, unless renewed.

4. Koshland has been the president, 100 percent shareholder, and pharmacist-in-charge (PIC) of Pharmacy at all relevant times.

5. On October 20, 2021, complainant Anne Sodergren issued the original accusation, solely in her capacity as Executive Officer of the Board.

6. Respondents timely filed notices of defense and the June 2023

proceeding followed.

7. Complainant issued the first amended accusation in this matter on February 23, 2022. On January 19, 2023, complainant issued the second amended accusation in this matter. At hearing, complainant submitted amendments to the second amended accusation. As amended, the second amended accusation is the operative pleading in this matter.

8. Complainant alleges that respondents violated pharmacy law and regulations regarding compounded preparations by (1) failing to perform container closure integrity tests to support extended beyond use dates; (2) failing to conduct stability studies to support extended beyond use dates; (3) using nonidentical ingredients and packaging when referencing a study to support extended beyond use dates; (4) compounding and selling adulterated preparations of methylcobalamin by using an ungraded ingredient; (5) using incorrect specific and essential compounding steps on their master formula/compounding record hybrid document; (6) failing to include the identity and signature of the pharmacist reviewing the final drug preparation on the compounding record under quantitative checks; (7) compounding a drug without listing the manufacturer, lot number, and/or expiration date of each component in the compounding record; (8) failing to assign a beyond use date for five lots of compounded preparations; (9) using incorrect beyond use dates for sterile compounded drug preparations; (10) failing to support assigned beyond use dates; (11) failing to maintain quality of assigned sterile preparations of glutathione by using a raw material which was of undetermined grade; and (12) compounding and selling adulterated preparations of sterile glutathione by using a raw material which was of undetermined grade; and that these alleged facts constitute cause to discipline respondents' pharmacist license and pharmacy and

sterile compounding permits. Complainant also seeks costs.

Bulk Drug Substances Primarily at Issue

METHYLCOBALAMIN

9. Methylcobalamin is a synthetic form of Vitamin B-12 taken as a dietary supplement to treat Vitamin B-12 deficiency and anemia. It is also frequently prescribed as an injectable drug preparation for various claimed benefits. Also, the FDA has approved B-12 drugs for injection for certain medical conditions, such as severe anemia. Prescribed methylcobalamin for injection is deemed a dangerous drug under Business and Professions Code section 4022.

GLUTATHIONE

10. Glutathione is a substance made from amino acids and produced by the liver. It is involved in many bodily processes including tissue building and repair, making chemicals and proteins needed in the body, and in the functioning of the immune system. A manufactured version is sold as a dietary supplement and also frequently prescribed as an inhalable or ophthalmic drug preparation by integrative medical practitioners for a range of claimed benefits. Prescribed inhalable or ophthalmic glutathione is deemed a dangerous drug under Business and Professions Code section 4022.

Background and Statutory Framework

COMPOUNDING

11. Compounding is the pharmacy practice of mixing, combining, or altering ingredients. Compounding may involve altering an existing drug product or creating

an entirely new drug product. Compounded drugs can serve patients whose clinical needs cannot be met by a drug approved by the federal Food and Drug Administration (FDA). For example, compounding may be used when a patient is allergic to an ingredient in an FDA-approved drug or for children who need a lower strength drug than is commercially available. However, compounded drugs may pose a higher risk to patients because they are not FDA approved and because compounding pharmacies may be exempt from certain manufacturing requirements.

12. Compounded drugs can be made for topical use (including topical creams and eye drops); oral use (such as capsules or tablets intended for oral ingestion); or injectable or inhalable preparations. Drugs administered orally present less danger to patients from residual contaminants than drugs injected or inhaled into the human body. Drugs that are ingested orally go through the body's digestive tract which enables the human body to filter out and excrete some impurities. In contrast, drugs injected or inhaled into a patient's body bypass the human body's main defense mechanisms to filter out residual impurities. For example, most vitamins and supplements are intended for oral use and are regulated as a food, and not a drug, for this reason. The acceptable levels of contaminants in sterile injectable and inhalable drug preparations are lower than for topical or oral drugs. All injectable and inhalable preparations must be sterile for this reason. A sterile injectable or inhalable drug preparation compounded from nonsterile ingredients is considered a high-risk preparation due to its route of administration.

GENERAL REGULATION OF PHARMACY COMPOUNDING

13. Compounded drugs are not approved by the FDA, and the FDA does not review such drugs to evaluate their safety, effectiveness, and quality before they are administered to patients. However, the FDA has a role in approving the ingredients that may be used in compounding human drugs. States are the primary regulators of

pharmacists and pharmacies engaged in compounding human drugs. Thus, pharmacists engaged in compounding (sterile or nonsterile) are subject to both federal and state law.

Federal Law

14. In 2012, fungal-contaminated compounded drug products from a compounding pharmacy in New England caused a fungal meningitis outbreak that resulted in numerous deaths and many cases of infection in patients across the United States.

15. This incident was a major impetus for the passage of the Drug Quality and Security Act (DQSA) that was enacted on November 27, 2013. Part I of the DQSA is called the Compounding Quality Act and made many changes to the Federal Food, Drug, and Cosmetic Act (FDCA) (21 U.S. Code, §§ 301 et seq.) in the areas of compounding, drug tracing, and requirements for wholesalers and third-party logistic providers.

16. Under the laws of the United States, the FDA has the sole authority to approve drugs for use in the United States. It is violation of federal law for anyone to introduce or deliver for introduction into interstate commerce any new drug unless the FDA has approved an application filed or an exception applies. (See FDCA section 505 (21 U.S.C. § 355).) Generally, each time a drug is compounded, it would be a new drug requiring compliance with all FDCA requirements, including required approval of an application by the FDA, which is not practical and would effectively prohibit all compounding of human drugs without an exemption from the new drug approval and certain other requirements in the FDCA.

Section 503A Exemption

17. To ensure that compounding by state-licensed pharmacies is not effectively prohibited by the new drug approval process and other restrictions in the FDCA, Congress passed section 503A (21 U.S.C. § 353a) of the FDCA, that provides an exemption for products compounded by a licensed pharmacist in a state-licensed pharmacy from FDCA requirements related solely to the new drug approval process (section 505), the labeling of drugs with adequate directions for use (section 502(f)(1)), and concerning compliance with current good manufacturing practice (section 501(a)(2)(B)). This section, by its express terms, does not provide an exemption from other unenumerated provisions of the FDCA, including, but not limited to, the prohibition against distribution of adulterated drugs. (See FDCA section 301 (21 U.S.C. § 331(a)) (prohibiting the introduction of adulterated drugs into interstate commerce) and section 501 (21 U.S.C. § 351(a)) (defining adulterated).)

18. The section 503A exemption provides that a drug product may be compounded if the licensed pharmacist or licensed physician compounds the drug using bulk substances that: 1) comply with the standards of an applicable United States Pharmacopoeia (USP) or National Formulary (NF) monograph; 2) if such a monograph does not exist, are drug substances that are components of drugs approved by the FDA; or 3) if such a monograph does not exist and the drug substance is not a component of a drug approved by the FDA, the substance appears on a list developed by the FDA. (21 U.S.C. § 353a(b)(1)(A)(i).)

19. In addition to satisfying the requirements of section 503A(b)(1)(A)(i) pertaining to eligible drug ingredients for compounding use, the compounding must also comply with the other conditions in section 503A(b)(1). The most important additional conditions at issue in this case are that the compounding must use

ingredients that comply with the standards of an applicable (i.e., pharmaceutical grade) USP or NF monograph, if one exists, *and* comply with the USP chapter on pharmacy compounding.[2] (Section 503A(b)(1)(B) (codified at 21 U.S.C. § 353a(b)(1)(B).) Thus, under federal law, compounding by pharmacists must be done in compliance with the USP chapter on pharmacy compounding.

Monographs

20. Monographs provide standards for identity, quality, purity, strength, packaging, and labeling for bulk substances and other ingredients that may be used in compounded preparations. A substance may have multiple monographs with different standards depending on the intended use, such as a dietary monograph and a drug or pharmaceutical grade monograph.

21. No pharmaceutical grade USP or NF monograph exists for methylcobalamin or glutathione. The only USP or NF monographs for these substances are USP dietary grade monographs.

FDA Interim Policy on Compounding Using Bulk Drug Substances Under Section 503A

22. Because there is no drug monograph for either of the substances at issue in this matter, compounding drug products using those substances could only be done in reliance on FDCA section 503A(b)(1)(A)(i)(III) (codified at 21 U.S.C. § 353a(b)(1)(A)(i)(III)). This prong requires that the substance be included on a list of Bulk Drug Substances permissible for compounding (503A Bulks List). The FDA is in the

[2] The FDA has interpreted the phrase "an applicable USP or NF monograph" for purposes of section 503A to mean "an official USP or NF drug substance monograph and does not include dietary supplement monographs." (See Exhibit 23 at p. 7, para. 12.)

process of creating the 503A Bulks List.[3] Both methylcobalamin and glutathione have been nominated for inclusion on the 503A Bulks List.

23. In a Briefing Document prepared by the FDA for the June 9, 2021 meeting of the Pharmacy Compounding Advisory Committee (PCAC), the FDA recommended against including methylcobalamin on the 503A Bulks List, stating:

> Methylcobalamin is found in food and is a dietary ingredient in dietary supplements, so exposure from oral ingestion appears to be safe. However, the safety of methylcobalamin administration by intramuscular, subcutaneous or intravenous injections or infusions for a wide variety of uses, as currently promoted online by clinics and compounding pharmacies, is not supported by adequate data.
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> …
>
> Methylcobalamin is a vitamer of vitamin B12 and based upon the use of other cobalamins would be expected to be effective in treating vitamin B12 deficiency. However, it is not clear that treatment of vitamin B12 deficiency is currently the primary use of compounded methylcobalamin in the U.S. or that methylcobalamin provides a unique benefit over other vitamers of vitamin B12 that are available in FDA approved drug products. It appears that the primary

[3] The rule establishing the 503A Bulks List is codified at 21 C.F.R. Section 216.23. (See Exhibit 19.) To date, the FDA has not approved any bulk substance for administration via injection (all approved substances have been approved for topical use or as a dye for eye surgery).

> use of compounded methylcobalamin is to treat patients with conditions, in some cases serious, for which there is little evidence to support the effectiveness. We do not have information on the range of doses or the frequency of administration and cannot make a judgement on the safety of the current use of injectable products in patients.
>
> Based on the information the Agency has considered in balancing the four evaluation factors, the lack of effectiveness data and safety data for use of injectable products in patients ***weighs against*** methylcobalamin being added to the 503A Bulks List.[4]

24. Similarly, in a Briefing Document prepared by the FDA for the June 8, 2022 meeting of the PCAC, the FDA recommended against including glutathione on the 503A Bulks List, stating:

> The safety profile of glutathione includes serious safety issues (e.g., anaphylaxis/hypersensitivity, hepatoxicity, severe wheezing, and breathlessness). Thus, glutathione injections (IV, IM) and glutathione inhalation preparations, which provide rapid, irreversible exposure, are not recommended for addition to the 503A list due to safety concerns.
>
> …
>
> Based on the information the Agency has considered in

[4] See Exhibit 20, pp. A946-A947.

> balancing the four evaluation factors, the lack of effectiveness data and safety data for use of products in patients ***weighs against*** glutathione being added to the 503A Bulks List.[5]

25. Ultimately, the PCAC voted to recommend the inclusion of both methylcobalamin and glutathione on the 503A Bulks List, although the votes were not unanimous. The FDA is not bound by these recommendations and the FDA's decision is pending.

26. In January 2017, the FDA issued an Interim Policy on Compounding Using Bulk Drug Substances Under Section 503A of the Federal Food, Drug, and Cosmetic Act, Guidance for Industry (Interim Policy).[6] Pursuant to this Interim Policy, the FDA is listing substances nominated for inclusion on the 503A Bulks List in one of three categories. The FDA describes bulk drug substances listed in Category 1 as substances that:

> may be eligible for inclusion on the 503A bulks list, were nominated with sufficient supporting information for FDA to evaluate them, and do not appear to present a significant safety risk.[7]

27. Conversely, the FDA describes substances listed in Category 2 as "presenting a significant safety risk pending further evaluation." The FDA describes substances listed in Category 3 as potentially eligible, but nominated with insufficient supporting information.

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[5] See Exhibit 21, p. A3333.
[6] See Exhibit 10.74.
[7] *Id.* at p. A2605.

28. In the Interim Policy, the FDA has stated that it generally does not intend to take enforcement action for compounding using a bulk drug substance that is listed in Category 1 provided that the bulk drug substance was manufactured by an establishment registered with FDA under section 510 of the FDCA and is accompanied by a valid COA (i.e., certificate of analysis) from the entity that originally produced the bulk drug substance, and provided that the drug product compounded using the bulk drug substance is compounded in compliance with all other conditions of section 503A of the FDCA.[8]

29. If a bulk substance does not qualify as an eligible ingredient under section 503A or is not on the Category 1 list, then a drug compounded using such an ingredient is considered a new drug that is not exempt from the new drug approval process or other requirements of the FDCA.

30. Both methylcobalamin and glutathione are listed as Category 1 substances and are thus eligible for compounding in compliance with the Interim Policy and other provisions of the FDCA.

California Law

31. California also has an extensive statutory and regulatory scheme governing compounding by pharmacies. Similar to federal law, Health and Safety Code section 111550, subdivision (a), prohibits the sale, delivery, or giving away of a new drug that has not had a new drug application approved under section 505 of the FDCA. Thus, the delivery of a new drug that does not comply with the exemption from section 505 provided in section 503A of the FDCA would violate both federal and state law. Moreover, unlike the FDA, the Board has not issued similar enforcement discretion

[8] *Ibid.*

guidance expanding the list of statutorily eligible drug ingredients.

32. Business and Professions Code section 4126.8 became operative on January 1, 2020. It provides that the compounding of drug preparations by a pharmacy for furnishing in this state shall be consistent with "standards established in the pharmacy compounding chapters of the current version of the United States Pharmacopeia-National Formulary." This section also expressly authorizes the Board to adopt "regulations to impose additional standards for compounding drug preparations." Thus, both state and federal law require compounding pharmacies to comply with the USP chapters on compounding.

Relevant USP Standards

33. Drug manufacturers and outsourcing facilities must comply with current good manufacturing practices. Both federal and state law specifically require compounding pharmacists and pharmacies to comply with the applicable USP chapter governing compounding practices in lieu of compliance with current good manufacturing practices. USP has general standards and specific chapters dedicated to sterile compounding (intended for injection or inhalation) and nonsterile compounding (intended for oral or topical use). USP's division of compounding practices by sterile or nonsterile compounding is due to the different risks to patients inherent in the mode of administration of a drug.

34. USP chapter 797 governs the compounding of sterile drug products and provides that compounding personnel are responsible for ensuring that "[i]ngredients have their correct identity, quality, and purity."[9] Compounding personnel also are required to "ascertain that the ingredients for CSPs [i.e., compounded sterile preparations] are of the correct identity and appropriate quality

[9] See Exhibit 10.74, p. A2636.

using the following information: vendor labels, labeling, certificates of analysis, direct chemical analysis, and knowledge of compounding facility storage conditions."[10]

35. Further, USP Chapter 797 states that:

> CSPs compounded under any of the following conditions are either contaminated or at a high risk to become contaminated.
>
> 1. Nonsterile ingredients, including manufactured products not intended for sterile routes of administration (e.g., oral), are incorporated…
>
> 5. It is assumed, and not verified by examination of labeling and documentation from suppliers or by direct determination, that the chemical purity and content strength of ingredients meet their original or compendial specifications in unopened or in opened packages of bulk ingredients…[11]

36. In addition, USP Chapter 797 provides:

> If any nonsterile components, including containers and ingredients, are used to make a CSP, such CSPs must be high risk. Nonsterile active ingredients and added substances or excipients for CSPs should preferably be official USP or NF articles. When nonofficial ingredients are used, they shall be accompanied by certificates of analysis

[10] *Id.* at p. A2655.
[11] *Id.* at pp. A2638-2639.

from their suppliers to aid compounding personnel in judging the identity, quality, and purity in relation to the intended use in a particular CSP…

Careful consideration and evaluation of nonsterile ingredient sources is especially warranted when the CSP will be administered into the vascular system, central nervous system, or eyes.[12]

PROHIBITION AGAINST DISTRIBUTION OF ADULTERATED DRUGS

37. In addition to the general overlay of the USP compounding standards and compliance with the section 503A exemption, both federal and state law have additional specific prohibitions against the distribution of adulterated drugs that apply to all drugs, including compounded drugs prepared by pharmacies operating under the section 503A exemption.

Federal Law

38. Section 301(a) of the FDCA prohibits, among other things, "[t]he introduction or delivery for introduction into interstate commerce of any food, drug, device, or cosmetic that is adulterated or misbranded." (21 U.S.C. § 331(a).) Section 501(a)(1) and (2) (21 U.S.C. § 351(a)(1) & (2)) of the FDCA define "adulterated" and state, in pertinent part, that:

A drug or device shall be deemed to be adulterated –

(a) Poisonous, insanitary, etc., ingredients; adequate

[12] *Id.* at p. A2655.

controls in manufacture

(1) If it consists in whole or in part of any filthy, putrid, or decomposed substance; or

(2) (A) if it has been prepared, packed or held under insanitary conditions whereby it may have been contaminated with filth, or whereby it may have been rendered injurious to health; or (B) if it is a drug and the methods used in, or the facilities or controls used for, its manufacture, processing, packing, or holding do not conform to or are not operated or administered in conformity with current good manufacturing practice to assure that such drug meets the requirements of this chapter as to safety and has the identity and strength, and meets the quality and purity characteristics, which it purports or is represented to possess . . .

39. The section 503A exemption, by its own terms, does not exempt compounders from compliance with the prohibition against distributing adulterated drugs. Drugs held or produced under insanitary conditions are deemed to be adulterated under federal law even if the drugs qualify for the exemptions set forth in section 503A under the statutory definitions in the FDCA. (Section 301(a)(2) of the FDCA, codified at 21 U.S.C. § 331(a).) One potential insanitary condition is using ingredients that have or may have higher levels of impurities compared to compendial or pharmaceutical grade equivalents (e.g., ingredients with potentially harmful impurities, ingredients labeled with "not for pharmaceutical use" or an

equivalent statement).[13] The quality of the starting ingredient must be appropriate for the mode of administration of the final compounded product.

California Law

40. Similar to federal law, California law makes it unlawful for any person to manufacture, sell, deliver, hold, or offer for sale any drug that is adulterated. (Health & Saf. Code, §111295.) California law also provides that "[a]ny drug . . . is adulterated if it consists, in whole or part, of any filthy, putrid, or decomposed substance." (Health & Saf. Code, § 111250.) California law also provides that "[a]ny drug or device is adulterated if it has been produced, prepared, packed, or held under conditions where it may have been contaminated with filth, or where it may have been rendered injurious to health." (Health & Saf. Code, § 111255.) Finally, Health & Safety Code section 111260 also provides that:

> Any drug or device is adulterated if the methods, facilities, or controls used for its manufacture, processing, packing or holding do not conform to, or are not operated or administered in conformity with current good manufacturing practice to assure that the drug or device meets the requirements of this part as to safety and has the identity and strength, and meets the quality and purity characteristics that it purports or is represented to possess.

The Board has not further defined the term adulterated.

41. Board regulations also address issues such as quality, beyond use dates, recordkeeping, training and validation processes, end product testing for sterility and

[13] See the FDA's Insanitary Conditions at Compounding Facilities Guidance for Industry (November 2020), included in Exhibit 10.74, p. A2560.

pyrogens, quarantine, and furnishing of compounded drugs.

42. Under California law, the designated PIC "shall be responsible for a pharmacy's compliance with all state and federal laws and regulations pertaining to the practice of pharmacy," including compounding. (Bus. & Prof. Code, § 4113, subd. (c).) The Board's sterile compounding regulations define "quality" as "the absence of harmful levels of contaminants, including filth, putrid or decomposed substances, the absence of inactive ingredients other than those listed on the label, and the absence of inactive ingredients other than those listed on the master formula label." (Cal. Code Regs., tit. 16, § 1735.1, subdivision (ae).)

COMPOUNDING SAFETY ALERTS

43. On January 11, 2019, the Board sent licensees via email a "Compounding Safety Alert."[14] The email alert stated, in relevant part:

> It has come to the attention of the California State Board of Pharmacy that sterile compounded drug preparations have recently been prepared with a dietary supplement grade ingredient which is NOT intended for use in such preparations. In addition, a sterile compounded preparation that included a currently available dietary supplement of L-Glutathione Reduced, when tested, revealed an endotoxin level 2.5 times higher than the acceptable limit. (California Code of Regulations, title 16 (CCR), section 1751.7.) This resulted in at least six cases of consumer harm.
>
> In accordance with its consumer protection mandate, the board strongly encourages pharmacies to immediately

[14] See Exhibit 14 at p. A643.

review their quality assurance and recall policies and procedures to determine if any corrective action is required. (CCR section 1735.8.)

Please note that the label may say that the ingredient may be used for "pharmaceutical compounding," but the caution, indicating "dietary supplement" reflects that the ingredient is only appropriate for compounding OTC products.

Dietary supplements, food grade chemicals, and cosmetic grade ingredients may have as much as 10 times more impurities when compared to pharmaceutical grade standards appropriate for compounding. These impurities can cause patient harm. The pharmacist performing or supervising the compounding has the responsibility to ensure all chemicals, bulk drug substances, drug products, and other components used to make compounding drug preparations are of the appropriate integrity, potency, quality. (CCR section 1735.2.)

44. On January 23, 2019, the California Pharmacists Association (CPhA) sent a "Compounding SIG Alert" email[15] providing a hyperlink to the Board's January 11, 2019 email alert, and opined that:

• Glutathione, and other dietary supplements like methylcobalamin, have been used widely in compounded

[15] *Id.* at p. A644.

medications. The Board's statement that dietary supplements are not intended for use in compounded medications is false.

• The Board's statement regarding dietary supplements being only appropriate for compounding OTC products is also false. OTC compounding is not allowed by the FDA.

• The recall email that was sent out January 14, 2019 involved one single compounding pharmacy facility and should not have implicated Glutathione generally. CPhA has since requested the Board of Pharmacy to clarify, correct, and/or retract this proclamation.

• There is no state statute or regulation that prohibits compounding of dietary supplements. Furthermore, the FDA has specifically stated in their interim guidance that they do not intend to take regulatory action on pharmacists who compound bulk drug products, if they meet certain conditions. The FDA has decided that compounding dietary supplements is allowable until such a time that it is expressly prohibited by the publishing of a Final Rule on the matter.

While CPhA supports the Board of Pharmacy enforcing existing compounding statutes and regulations for proper compounded sterile products (CSP), CPhA believes that as long as compounding pharmacists are performing proper endotoxin and pyrogen testing, as reflected in current

> regulation, and with the current FDA guidance, there is nothing that prohibits sterile compounding of dietary supplements approved on the FDA's Category 1 list of bulk drug substances, including glutathione and methylcobalamin.
>
> CPhA does not believe that the Board's Compounding Safety Alerts were intended to be a de-facto ban on compounding glutathione. Rather, compounding pharmacists should check their quality assurance procedures to ensure operational compliance with all existing laws insofar as proper testing of CSPs. CPhA has asked the Board of Pharmacy to clarify and/or correct its previously-issued Compounding Safety Alerts.

45. On June 7, 2019, the FDA issued an alert entitled "FDA highlights concerns with using dietary ingredient glutathione to compound sterile injectables."[16] The alert, which the Board forwarded to licensees on June 10, 2019, stated, in pertinent part:

> It is critical that compounders understand that quality should be built into the drug production, and that testing alone should not be relied on to ensure drug quality. Therefore, compounders should ensure that all ingredients they use to produce sterile injectable drugs are manufactured under conditions and specifications appropriate for the intended route of administration.

[16] *Id.* at pp. A646-A649.

> FDA also urges manufacturers and repackagers to clearly label ingredients intended for use in dietary supplements. Additionally, repackagers should ask the manufacturer about the intended use of the ingredient. Clarifying information on ingredient labels and in the COA could help prevent compounders from using ingredients not appropriate for sterile injectable drugs.[17]

46. On January 28, 2021, the FDA issued an alert entitled "FDA to compounders: Know Your Bulks Supplier," which stated:

> FDA has identified several issues over the past few years related to repackers of bulk drug substances, also called active pharmaceutical ingredients (APIs), used to compound drugs. The agency urges compounders to know your bulks supplier and know if they are testing the drugs before you purchase bulks for patient use.
>
> …
>
> For patient safety and supply chain transparency, repackers must follow all quality standards pertaining to them, including clearly identifying the original API manufacturer to their customers who use them to make the finished drugs patients take every day.[18]

OTHER CONSIDERATION OF COMPOUNDING RELATED MATTERS BY THE

[17] *Id.* at p. A648.
[18] See Exhibit 10.74 at p. A2629.

BOARD

47. In 2019, the Board proposed promulgating a new regulation regarding compounding sterile drug preparations. Specifically, proposed California Code of Regulations, title 16, section 1751.9, subdivision (e), would have provided that:

> No component shall be used to compound a [sterile drug preparation] that meets only the European Pharmacopoeia standards, Japanese Pharmacopoeia standards, dietary supplement standards (such as USP-NF dietary monographs), food ingredient standards (such as Food- Chemical Codex (FCC)), food additive standards (such as General Standard for Food Additive (GSFA)), reagent standard (such as American Chemical Society (ACS)) or is of unspecified quality.

This proposed rulemaking was initiated in response to proposed changes to the USP chapters on compounding in 2019. The 2019 USP amendments were withdrawn in response to extensive public comments and the Board did not finalize its rulemaking due to the fact that the proposed USP changes that prompted them were withdrawn.[19] However, at the time, the proposed rulemaking put the regulated public on notice that the Board was concerned about these ingredients being used in sterile compounding.

48. The Board has also discussed and considered proposals to bar Category 1 compounding or otherwise formally preclude the sterile compounding of

[19] USP subsequently adopted significant changes to its chapters governing sterile and nonsterile compounding. These changes became effective as of November 1, 2023. In April 2024, the Board formally initiated a rulemaking to update its compounding regulations in response to the changes.

methylcobalamin and/or glutathione. Although to date the Board has taken no such action, by virtue of these matters being discussed, it was evident that the Board had concerns about these issues.

49. In its Decision After Rejection in a disciplinary matter dated March 30, 2023, and styled *In the Matter of the Second Amended Accusation Against: LA VITA COMPOUNDING PHARMACY LLC dba LA VITA COMPOUNDING PHARMACY, and CHRISTINE ANN GIVANT, Case No. 6851* (*La Vita*), the Board revoked the sterile compounding permit of a pharmacy and placed its pharmacy permit and the pharmacist license of its PIC on probation for four years, primarily based on its sterile compounding of methylcobalamin and/or glutathione, including from the same lot of methylcobalamin ingredient at issue in this matter. The Proposed Decision noted that the Board was scheduled to discuss whether to designate *La Vita* as a precedential decision, but postponed that discussion. Accordingly, *La Vita* does not constitute binding precedent in this matter. Given that *La Vita* is in evidence in this matter (see Exhibit 23), however, while recognizing that *La Vita* does not constitute binding precedent, and with full awareness and in the exercise of the Board's mandate to analyze and evaluate every case that comes before it on the specific facts and merits of that case, the Board notes that in its consideration of this matter, it finds the extensive discussion and legal analysis in *La Vita* on the issues of adulteration and lack of quality to be instructive and relevant – especially given that this matter involves sterile compounding of methylcobalamin from the same lot (Medisca lot number 155828) as was involved in *La Vita*.

Brief Background of Koshland and Pharmacy

50. Koshland holds a doctoral degree in pharmacy. He has been licensed as a pharmacist in California since 2000. He has completed multiple sterile compounding training programs and more than 250 hours of continuing education on compounding.

For the first five years of his career, Koshland worked at a community retail pharmacy. From 2005 through 2009, he worked as a pharmacist and director of a compounding pharmacy. That pharmacy ceased operations due to the 2008 financial crisis and Koshland decided to start his own compounding pharmacy. He has operated Pharmacy since that time. Since 2009, Koshland has also taught as an adjunct professor of clinical pharmacy as the University of California, San Francisco School of Pharmacy.

51. Pharmacy is a compounding pharmacy in San Francisco. Pharmacy has approximately 35 employees, including 5 pharmacists in addition to Koshland, its PIC. Pharmacy has been performing sterile compounding for approximately nine years.

The Expert Witnesses

BOARD INSPECTOR DENISE DUKATZ

52. Denise Dukatz, Pharm.D., has been licensed as a pharmacist in California since 1994. Dukatz worked for four years as a consultant pharmacist, then for approximately 15 years as an inpatient staff pharmacist. During this time Dukatz performed some sterile-to-sterile compounding. Since December 2014, she has worked as an inspector for the Board. In 2017 Dukatz spent four weeks training alongside FDA inspectors. This training included instruction regarding nonsterile to sterile compounding. Since then, Dukatz has also completed several additional trainings related to compounding. As a Board inspector, she conducts investigations and inspections of many types of pharmacies, including those that perform sterile compounding. Dukatz conducted one of the two inspections at issue in this matter and opined that respondents' actions did not comply with various laws and regulations.

BOARD INSPECTOR ALYCE PETRUTIU

53. Alyce Petrutiu holds a bachelor's degree in pharmacy. She has been licensed as a pharmacist in California since 1986. She is also licensed in several other jurisdictions. Since January 2021, Petrutiu has been an inspector for the Board, assigned to the sterile compounding team. For the prior seven years, she was the PIC of a pharmacy that focused on nonsterile compounding. She has training in sterile compounding, but does "not hold herself out as a sterile compounding pharmacist." Petrutiu conducted one of the two inspections at issue in this matter and opined that respondents' actions did not comply with various laws and regulations.

BOARD INSPECTOR CHRISTINE ACOSTA

54. Christine Acosta, Pharm.D., has been licensed as a pharmacist in California since 2006. Since 2014, she has been the supervising inspector of the Board's sterile compounding team. For three years prior she served as an inspector for the Board. For the three years before that, Acosta worked as a pharmacist for a hospital, and for the five years before that as a pharmacist for a large retail pharmacy. Acosta describes her sterile compounding training as "consistent and ongoing." She attends USP and FDA trainings, and FDA meetings whenever possible. She reviews and helps to draft the Board's implementation of new USP standards that relate to compounding. She oversees the inspection of pharmacies licensed to perform sterile compounding in California. Acosta testified as an expert for complainant, primarily regarding the allegations that respondents' compounding of methylcobalamin and glutathione violated state and federal law and that these preparations were adulterated because respondents used ungraded ingredients.

AMY SUMMERS

55. Amy Summers, Pharm.D., has been licensed as a pharmacist in California since 2007. Summers worked as a community pharmacist for more than three years, including some compounding, mostly nonsterile. From mid-2011 through mid-2012 she worked as compounding pharmacist at a compounding pharmacy. The following year she served as the director of pharmacy operations for another compounding pharmacy, including creating sterile and nonsterile compounding procedures. The following year, Summers was the PIC for a larger pharmacy and overhauled its nonsterile compounding procedures, oversaw the creation of a new compounding laboratory, and shepherded the pharmacy through accreditation by the Pharmacy Compounding Accreditation Board. From 2016 through 2019, she was the managing director of a section 503B human drug compounding outsourcing facility (which, unlike a 503A pharmacy, was required to follow good manufacturing practices). During this time, Summers also began providing pharmacy consulting services, some related to compounding. In September 2020, she began working full-time for a pharmacy regulatory compliance consulting firm. Summers testified as an expert for respondents regarding their compliance with various California laws and regulations.

GUS BASSANI

56. Gus Bassani, Pharm.D. has been licensed as a pharmacist in Iowa since 1996. He is also licensed in Kansas and Texas, but not in California. From 1996 through 2002, Bassani primarily worked in retail pharmacies, including a year and one-half as a compounding pharmacist. Since 2002 he has worked for PCCA, Inc. (PCCA), a large supplier of compounding pharmacy chemicals, equipment, and educational materials. Bassani became director of PCCA's research and development in 2004, and its chief scientific officer in 2019. Since 2010, he has been a member of the USP Compounding Expert Committee. He has participated in the USP's recent revisions to sections related

to compounding. Since 2019, he has been a nonvoting industry member of the FDA Pharmacy Compounding Advisory Committee. PCCA was one of the companies that nominated both glutathione and methylcobalamin for the FDA's 503A Bulks List. PCCA offers a subscription service to pharmacies, including Pharmacy. Bassani testified on behalf of respondents, primarily regarding USP standards and the status of compounding methylcobalamin and glutathione under federal law and FDA regulation.

ARJUN J. DAY

57. Arjun J. Day, Pharm.D. has been licensed as a pharmacist in Texas since 2007. Day has worked for PCCA in pharmacy compounding throughout his career, first as a consultant pharmacist for two years, then as director of clinical services, and since 2019 as vice president of clinical services. Day regularly makes presentations before regulatory bodies regarding various aspects of pharmacy compounding. Day testified as an expert witness on behalf of respondents, primarily regarding the FDA's Interim Policy on compounding, and consideration for placement on the Bulks List, of methylcobalamin and glutathione.

The August 13, 2020 Inspection

58. On August 13, 2020, Dukatz conducted a renewal inspection for Pharmacy's sterile compounding permit. The inspection subsequently turned into an investigation and Dukatz requested Pharmacy's compounding logs for January 2020 through August 2020. Pharmacy provided the logs on or about September 12, 2020. Dukatz issued an investigation report dated March 10, 2021. She reported several alleged violations, which correspond to the first through ninth causes for discipline (CFD) alleged by complainant in the second amended accusation.

59. Dukatz testified at hearing. In the Proposed Decision, the ALJ

expressly found that her testimony appeared sincere and forthright, and further stated that her percipient testimony was credible in all respects. The Board agrees with these determinations.

The July 21, 2021 Inspection

60. On July 21, 2021, Petrutiu conducted a renewal inspection for Pharmacy's sterile compounding permit. The inspection subsequently turned into an investigation and Petrutiu requested Pharmacy's compounding logs for inhaled or ophthalmic glutathione for the previous 12 months. Pharmacy provided the logs. Petrutiu issued an investigation report dated October 19, 2021. She reported alleged violations, which correspond to the 10th through 12th CFD alleged by complainant.

61. Petrutiu testified at hearing. In the Proposed Decision, the ALJ expressly found, and the Board agrees, that her percipient testimony was credible in all respects.

CFD 1 - No Container Closure Integrity Tests for the 5 ml Vials Used, to Support Extended Beyond Use Dates

62. A beyond use date (BUD) is the date or time after which a compounded preparation may not be used, stored, or transported. Essentially it is an expiration date. It is calculated from the date or time of compounding. Compounded sterile preparations must be given and labelled with a BUD.

63. For the types of compounded sterile preparations at issue in this proceeding, "in the absence of passing a sterility test in accordance with standards for sterility testing found in Chapter 797" of the USP, the baseline BUD "shall specify that storage and exposure periods cannot exceed 24 hours at controlled room

temperature, 3 days at controlled cold temperature, and 45 days in solid frozen state." (Cal. Code Regs., tit. 16, § 1751.8, subd. (c).)

64. A pharmacy may extend the BUD of such a preparation if the extended BUD is supported by a Chapter 797 sterility test and (A) a method suitability test, (B) a container closure integrity test, and (C) stability studies. (Cal. Code Regs., tit. 16, § 1735.2, subd. (i)(3).) The term "stability studies" is not further defined in the regulation. (*Ibid.*)

65. The extended BUD shall not exceed any of the following:

(A) The shortest expiration date or beyond use date of any ingredient in the sterile compounded drug product preparation,

(B) The chemical stability of any one ingredient in the sterile compounded drug preparation,

(C) The chemical stability of the combination of all ingredients in the sterile compounded drug preparation, and

(D) The beyond use date assigned for sterility in section 1751.8.

(Cal. Code Regs., tit. 16, § 1735.2, subd. (i)(2).)

66. Pharmacy dispensed a total of approximately 44 lots of sterile compounded: methylcobalamin, Bi-Mix (a combination of papaverine and phentolamine, primarily used to treat erectile dysfunction), and Tri-Mix (a combination of papaverine, phentolamine, and alprostadil, primarily used to treat erectile

dysfunction) from January 1 through September 1, 2020. For each of these lots of compounded preparations, Pharmacy assigned an extended BUD based upon container closure integrity tests that did not include the size of container closure device actually used to dispense the preparations (a 5 ml amber serum vial). Instead, the container closure devices tested included testing of 2 ml and 30 ml vials.

67. In her report and direct testimony, Dukatz opined that such testing was insufficient to extend the BUD of these preparations under California Code of Regulations, title 16, section 1735.2, subdivision (i)(3)(B). Rather, a test of the size vial actually used was required.

68. However, on cross examination, Dukatz was shown an FDA document titled "GUIDANCE FOR INDUSTRY, Q1A(R2) Stability Testing of New Drugs Substances and Products" which includes the following statement:

> **Bracketing**: The design of a stability schedule such that only samples on the extremes of certain design factors (e.g., strength, package size) are tested at all time points as in a full design. The design assumes that the stability of any intermediate levels is represented by the stability of the extremes tested. Where a range of strengths is to be tested, bracketing is applicable if the strengths are identical or very closely related in composition (e.g., for a tablet range made with different compression weights of a similar basic granulation, or a capsule range made by filling different plug fill weights of the same basic composition into different size capsule shells). Bracketing can be applied to different container sizes or different fills in the same container closure system.

(At p. 17, [emphasis in original].)[20] After reviewing this statement, Dukatz conceded that "it appears" that Pharmacy's bracketed testing of the 2 ml and 30 ml vials was sufficient to satisfy the requirements of the regulation as to use of the 5 ml vials.

CFD 2 - No Appropriate Stability Study to Support Extended Beyond Use Dates

69. From January 1 through September 1, 2020, Pharmacy dispensed eight lots of methylcobalamin 1000mcg/ml preservative free (PF); eight lots of methylcobalamin 1000mcg/ml injection preserved; eight lots of Bi-Mix 30mg/0.5mg injection; nine lots of Bi-Mix 30mg/2ml injection; 11 lots of Tri-Mix 10mcg/30mg/1mg/ml injection; eight lots of Tri-Mix 40mcg/30mg/2mg/ml injection; 11 lots of alprostadil 500 mcg/ml stock solution; and eight lots of alprostadil 1000 mcg/ml stock solution. For each of these lots of compounded preparations, Pharmacy assigned an extended BUD. Dukatz reviewed stability studies provided by Koshland and determined that they were insufficient to support the extended BUD's, as follows:

70. Pharmacy assigned 90-day BUD's to Bi-Mix and Tri-Mix, on the basis of a PCCA study, even though the PCCA study had concluded that Tri-Mix had a BUD of only 60 days and Pharmacy was not using PCCA ingredients (this latter issue is discussed in Factual Findings 78-81).

71. Koshland reports that the alprostadil solution was merely used as an ingredient in other compounds, but Pharmacy's computer software required it to have its own expiration date. Pharmacy assigned a 180-day BUD to alprostadil so that it would not show up as expired on the compounding record for Tri-Mix. Koshland reports that this alprostadil solution was discarded within six hours if not used as part of a compounded Tri-Mix preparation. This testimony appears credible

[20] See Exhibit 10.74 at p. A2586.

but was not corroborated by other evidence. Dukatz opined that any compounded preparation must have a BUD, regardless of whether it was intended for use in another compound. Summers opined that this subpart of a compounded preparation is not required to have its own BUD and therefore no stability study was required but cited no authority for such an exception.

72. Pharmacy assigned a 90-day BUD for methylcobalamin allegedly on the basis of a PCCA Method Validation Report (A1154-A1189), which is not a stability study. Moreover, Pharmacy used methylcobalamin supplied by Medisca, not PCCA.

73. Further, Dukatz reported that Koshland also told her that he was not using the same compounding method as used in certain stability studies. Summers opined that some "tweaks" to a compounding formula might be acceptable.

74. Both Koshland and Summers testified that it is appropriate to rely upon outside studies and scientific literature utilizing the same ingredients. They opined that the law does not require funding a $25,000 study where a reliable stability study exists, just because the pharmacy uses an ingredient from a different manufacturer. They also opined that potency-over-time studies supported the stability study requirement and met the standard of care. However, respondents apparently do not dispute Dukatz's observation that at least one BUD was greater than the supporting study indicated. The ALJ found that Dukatz's opinions on these issues are more persuasive and, accordingly, found that respondents failed to support their extended BUD's for these preparations with an appropriate stability study. The Board agrees.

75. In aggravation, Pharmacy had previously received a correction order in 2017 regarding the lack of stability studies to justify BUD's assigned to compounded, nonsterile to sterile injectables.

76. In mitigation, Dukatz acknowledges that the practice of compounding has changed "so much" over the last two decades and that many practices previously accepted are no longer considered appropriate. She further opines that respondents have, for the most part, "kept up" with these changes.

77. Relevant to rehabilitation, respondents later funded independent stability studies to support BUD's of compounded products, and the most recent Board inspection of Pharmacy did not include findings of any deficiencies related to stability studies.

CFD 3 - Inappropriate Reliance on Stability Studies Based on Nonidentical Ingredients

78. For each of the lots of compounded preparations referenced in Factual Finding 69, Dukatz reviewed stability studies provided by Koshland and opines that the stability studies used by respondents to justify the extended BUD's were insufficient solely because the studies referenced ingredients from a different manufacturer than the manufacturer of the ingredients actually used (PCCA vs. Medisca).

79. A PCCA "Formula Plus Report" which is a key part of the stability report relied upon by respondents, contains a "blue box warning" on the first page that states that only PCCA chemicals and proprietary bases were used in testing and that:

> Any variations to this formulation, including substitution with a non-PCCA chemical or non-PCCA base, may affect physical integrity, solubility, organoleptic properties or result in potency or content uniformity issues. This type of substitution will cause the assigned BUD to be invalid.

Respondents used non-PCCA ingredients. Dukatz opines that, to extend the BUD for a

compounded drug, a pharmacy must use the same ingredients, containers, container closure system, and compounding formula that were used in the stability study relied upon.

80. Koshland acknowledges that the PCCA studies respondents relied upon have such a blue box warning. He opines that PCCA wants pharmacies to buy their products, but a "USP drug is a USP drug" if it complies with the monograph. He regarded PCCA as a gold standard study. He reports that he felt the "data was reliable" because he used the same drugs, in the same quantities in the finished products. However, he now understands that the Board inspectors disagree. Nevertheless, several years before Dukatz's August 2020 inspection, respondents had already commissioned their own studies, which were completed in 2021 (Bi-Mix) and 2022 (Tri-Mix). He reports that respondents' own studies supported the same extended BUD's as the PCCA studies.

81. The ALJ found, and the Board agrees, that Dukatz's opinion on this issue was more persuasive. The PCCA stability studies used by respondents were insufficient to support the extended BUD's.

CFD 4 AND 12 - ADULTERATED PREPARATIONS

82. From January 1, 2020, to September 12, 2020, respondents compounded for sale 16 lots of methylcobalamin by using methylcobalamin from Medisca lot number 155828 as a raw material. Medisca was not the original manufacturer, but rather a repackager. The Board, after significant investigative efforts, was able to determine that this ingredient was graded as "JP" (Japanese Pharmacopoeia) by the original manufacturer, Supriya. The Supriya certificate of analysis (COA) for this

ingredient[21] indicates that the applicable specifications for heavy metals were less than one part per million (ppm) of lead, arsenic, and cadmium, and less than 0.1 ppm of mercury. The Supriya COA states that none of those metals were detected, except 0.03 ppm arsenic (3 percent of the specified allowable amount). However, significantly, Koshland did not have the Supriya COA at the time he was compounding using the methylcobalamin from Medisca lot number 155828; rather, he had and was relying on a Medisca COA, which did not indicate the grade or original manufacturer of the methylcobalamin.[22]

83. From August 14, 2020, through July 15, 2021, Pharmacy compounded at least 25,780 ml of nonsterile to sterile glutathione PF 200 mg/ml inhalation solution, in 83 lots, and 20 ml of nonsterile to sterile glutathione 1-percent ophthalmic solution, in one lot, using a raw material which was graded "EP" (European Pharmacopoeia). A photograph taken of the container of this ingredient showed a statement on the label that "further processing and testing required for use in parenteral applications." The Board defines "parenteral" as administered in a manner other than through the digestive tract, but does not include topical, sublingual, rectal, or buccal (held against the inside of cheek) routes of administration. (16 Cal. Code Regs., § 1735.1, subd. (w).) The COA for this ingredient[23] shows that it contains less than 200 ppm of chloride and ammonium, and less than 300 ppm of sulfates. It states that it "complies with standard" and "passes test" regarding "elemental impurities" and "related substances," respectively. The COA was provided by a repacker.

84. Respondents received the Board's January 11, 2019 Compounding Safety Alert, advising pharmacies not to compound sterile drug preparations using dietary

[21] See Exhibit DD.
[22] See Exhibit 10.12 at p. A1287.
[23] See Exhibit 14 at p. A651.

grade ingredients, and also warning that dietary supplements, food grade chemicals, and cosmetic grade chemicals may contain as much as 10 times the impurities of pharmaceutical grade ingredients.

85. Koshland reports that in response to this email, he checked all of Pharmacy's sterile compounding ingredients and verified that none were labelled as dietary grade or otherwise indicated it might not be an appropriate grade of chemical. Koshland further notes that Pharmacy had been compounding methylcobalamin for many years, Board inspectors were aware of that and discussed it with him at multiple inspections, yet none ever suggested that he was not permitted to compound sterile preparations of methylcobalamin based on the lack of a pharmaceutical grade USP monograph for that ingredient. Nonetheless, as complainant's expert witnesses confirmed, the onus is on the compounder to know what they are compounding with, and the responsibility is on the PIC to ensure that their pharmacy compounds in compliance with state and federal law. Moreover, the Board's mandate is to protect consumers, not provide step-by-step instructions to licensees on how to comply with applicable laws and regulations.

86. In the Proposed Decision, the ALJ stated that the evidence shows that during the relevant time frame, information from the Board regarding the legality of nonsterile to sterile compounding of methylcobalamin and glutathione or other Category 1 substances was unclear. The Board rejects this contention. As early as 2019, the Board clearly expressed its concerns about the practice of using dietary supplement grade ingredients (and ingredients that meet only EP or JP standards) to prepare sterile compounded preparations. It is undisputed that the only USP monographs for methylcobalamin and glutathione are USP dietary grade monographs; no pharmaceutical grade USP monograph exists for either substance. In addition, as complainants' experts confirmed, and as respondents' experts likewise

acknowledged, USP is the only applicable, official compendium in the United States. Accordingly, the fact that a substance meets standards set forth in a foreign compendium, such as JP or EP, has no legal relevance in the United States.

87. Koshland testified that on August 24, 2020, via email communications from Dukatz, he first received notice that Board inspectors believed his sterile compounding of methylcobalamin was impermissible, even if the ingredient was not labelled as a dietary grade. In response, respondents immediately stopped sterile compounding of methylcobalamin.

88. Koshland further testified that respondents' first notice that Board inspectors believed that their nonsterile to sterile compounding of glutathione was impermissible was during or after Petrutiu's July 21, 2021, inspection. Koshland reports that on the advice of legal counsel, and based upon his perception of patient need, he continued such compounding. However, prior to the hearing of this matter, he ceased such compounding.

89. As noted above, the evidence shows that California pharmacists were on notice by 2019 at the latest that using dietary supplement ingredients (which, based on U.S. standards, methylcobalamin and glutathione are, even if the COAs relied on by respondents did not indicate as such) to sterile compound for non-oral routes of administration was not allowed.

90. Complainant contends that the methylcobalamin and glutathione preparations were "adulterated" because: (1) there is no pharmaceutical grade USP monograph for either substance (only a dietary grade monograph); (2) a grade of JP or EP does not provide legal justification for pharmaceutical use of a drug in the United States; (3) respondents did not know the raw methylcobalamin material was JP grade until after they began using it; and (4) respondents did not obtain a valid COA from the

original manufacturer of the methylcobalamin prior to compounding, in violation of the FDA's Interim Policy.

91. Complainant further argues that:

> the regulation most on point is 21 C.F.R., section 216.23 (d), which says that "Based on evidence currently available, there are inadequate data to demonstrate the safety or efficacy of any drug product compounded using any of the drug substances listed in paragraph (a) of this section, or to establish general recognition of the safety or effectiveness of any such drug product. Any person who represents that a compounded drug made with a bulk drug substance that appears on this list is FDA approved, or otherwise endorsed by FDA generally or for a particular indication, will cause the drug to be misbranded under section 502(a) and/or 502(bb) of the Federal Food, Drug, and Cosmetic Act." If the six approved substances currently in regulation have not been found to be safe or effective, then certainly bulk drug substances in Category 1, which have NOT been approved by the FDA for compounding, cannot have a[n] FDA finding of safety or efficacy.

92. The Board did not perform any testing of the methylcobalamin or glutathione ingredients at issue in this proceeding. Respondents seem to find this significant, possibly arguing that complainant had to prove that harmful impurities were present in harmful levels in the final compounded products. However, under both state and federal law, a drug may be deemed

"adulterated" if it has been held under conditions whereby it ***may have been*** contaminated with filth, or whereby it ***may have been*** rendered injurious to health. (Factual Findings 38-40.) There is also no evidence that respondents' methylcobalamin and glutathione preparations resulted in any harm to patients. It is well settled, however, that administrative discipline does not need to wait for patient harm. (See *Griffiths v. Superior Court* (2002) 96 Cal.App.4th 757, 772-773.)

93. Acosta opined that respondents' compounding of methylcobalamin and glutathione did not satisfy any of the requirements of section 503 (set forth in Factual Finding 18) because neither ingredient is on the 503A Bulks List, and just because these substances are listed as Category 1 substances does not mean "I can do whatever I want with anything that's on that list." Acosta further opines that respondents also did not comply with the FDA's Interim Policy (described in Factual Findings 22 through 30) because the methylcobalamin and glutathione used did not meet even a USP dietary grade. She opined that the Board places no weight on a JP or EP grade.

94. Acosta also points to position papers considered by the PCAC that suggest that these substances should not be included on the 503A Bulks List (see Factual Findings 23 and 24), but acknowledges that the PCAC recommended inclusion and the FDA has not yet made a decision.

95. Acosta further testified that a drug may be deemed adulterated if it just has the *potential* of having higher levels of impurities compared to compendial or pharmaceutical grade equivalents, and that quality must be built in to the compounding process and this starts with the raw materials being used – i.e., the starting materials must be of appropriate grade. In addition, she drew a sharp

distinction between the standards and requirements that apply to compounding products for oral ingestion (which products have the benefit of going through the body's GI tract, which removes many contaminants), as opposed to those that apply to products intended for routes of administration that bypass the GI tract (such as injection, inhalation, or ophthalmic administration). In the latter case, the standards are much higher, as the products do not have the benefit of the GI tract to remove contaminants. The FDA has expressed the same view, including in its June 7, 2019 safety alert, which the Board forwarded to its licensees on June 10, 2019 (see Factual Finding 45), and which stated:

> It is critical that compounders understand that quality should be built into the drug production, and that testing alone should not be relied on to ensure drug quality. Therefore, compounders should ensure that all ingredients they use to produce sterile injectable drugs are manufactured under conditions and specifications appropriate for the intended route of administration.

96. Petrutiu reports that respondents did not perform endotoxin and pyrogen testing on the glutathione, despite the statement suggesting this was necessary in the January 23, 2019 California Pharmacists Association "Compounding SIG Alert" email (see Factual Finding 44). However, Petrutiu testified that she did not think that pyrogen testing was required. She did not opine that endotoxin testing was required. Koshland explained that endotoxin testing is only required to extend the BUD for injectable preparations (the glutathione preparations at issue were intended for inhalation and not intended for injection or ophthalmic administration) and respondents did such testing for all injectable preparations.

97. Petrutiu further testified that "if you're looking at a bulk drug substances [sic], and you don't have a USP or NF monograph, the concern is that the impurities in these compounds may be dangerous to patients when they're used in sterile preparations that are either inhaled, put in the eyes, injected; that type of thing."

98. Complainant further argues that:

> USP Chapter 797 clarifies that compounded sterile preparations are either contaminated or at a high risk to become contaminated if "nonsterile ingredients, including manufactured products not intended for sterile routes of administration (e.g. oral) are incorporated." Therefore, the placement of these two substances on the Category 1 list only allows for the compounding of a final product for the same route of administration as the bulk drug substance; i.e. if the bulk drug substance is dietary grade, then only drugs administered orally may be compounded if all other requirements are met.

All ingredients on the Category 1 list have no pharmaceutical grade USP monograph. Complainant contends no other monograph is valid.

99. Summers opined that a reasonable pharmacist would consider the guidance provided by the Board through 2020 and the FDA's Interim Policy to mean that compounding with Category 1 substances such as methylcobalamin and glutathione is permissible. Summers reports that she compared the USP dietary grade monograph for methylcobalamin to that of the JP monograph and observed that the

JP monograph had a "tighter range for assay," therefore she opines that it is a superior standard. Summers opines that respondents' preparations of methylcobalamin and glutathione were not adulterated.

100. Bassani explained that, for "repackers" (middlemen) of pharmaceutical products, the identity of the original manufacturer is valuable and confidential information, therefore repackers issue their own COA's, which is the type of COA respondents originally received for the methylcobalamin at issue. He further reports that after a dispute over this issue, the FDA acknowledged to PCCA that it is not required to provide that information, and a COA from the repacker is acceptable to the FDA. However, he conceded that the FDA's Interim Policy *does* expressly state that its enforcement discretion is conditioned on, among other things, the Category 1 bulk drug substance having been "accompanied by a valid COA from the entity that originally produced the bulk drug substance," and his observation that the FDA may in some cases be accepting COAs from repackers (in lieu of COAs from original manufacturers) appeared to be based simply on his own anecdotal experience.

101. Bassani reports that USP Chapter 232 describes the acceptable amounts of elemental impurities in drug substances and products, depending on factors such as the route of administration and daily exposure limits. Bassani reviewed the COA's for the methylcobalamin and glutathione ingredients at issue in this matter. He opines that based on the COA's, impurity levels, dosing levels, and route of administration, these ingredients were significantly below the permitted daily exposure levels set forth in USP Chapter 232.

102. Bassani noted that Category 1 ingredients "by definition" have no USP pharmaceutical grade monograph. He emphasizes that placement on the Category 1 list shows that the FDA regards the ingredient as having no serious safety concerns. He

disagrees with Acosta's opinion that JP and EP graded ingredients are "ungraded" for the purpose of use in California. He opines that USP, JP, and EP are the three standards considered reputable. He reports that there have been considerable efforts over the years to harmonize these three standards. Bassani points to language in USP Chapter 797 that states:

> NONSTERILE INGREDIENTS AND DEVICES
>
> If any nonsterile components, including containers and ingredients, are used to make a CSP, such CSPs must be high risk. Nonsterile active ingredients and added substances or excipients for CSPs should preferably be official USP or NF articles. When nonofficial ingredients are used, they shall be accompanied by certificates of analysis from their suppliers to aid compounding personnel in judging the identity, quality, and purity in relation to the intended use in a particular CSP. Physical inspection of a package of ingredients is necessary in order to detect breaks in the container, looseness in the cap or closure, and deviation from the expected appearance, aroma, and texture of the contents.

Bassani opines that this shows that the USP contemplates and permits the use of nonsterile ingredients that do not have a USP pharmaceutical monograph in sterile compounding, and the USP relies on the pharmacist's judgment.

103. Overall, Bassani opines that based upon the COA's, the methylcobalamin and glutathione at issue meet the purported pharmacopeia standards (JP and EP,

respectively), with "pretty good" testing, including testing for elemental impurities. He opines that these ingredients were of pharmaceutical grade, appropriate for respondents' purported use (injection, inhalation, and ophthalmic), with caveat that respondents had to test the final preparation and stability (which they did).

104. A detailed analysis of why methylcobalamin is an adulterated bulk drug substance when used in sterile compounding is found in *La Vita*, which involved sterile compounding from the same Medisca lot used by Koshland (lot number 155828). While not a Board precedential decision, *La Vita* is in evidence in this matter.[24] *La Vita* also articulates the reasons that sterile compounding of glutathione for pharmaceutical use results in an adulterated preparation that lacks quality.[25] *La Vita* arose from allegations of various compounding violations, most significantly that the glutathione and methylcobalamin bulk drug substances used by the respondents as ingredients to compound sterile injectable final drug products were dietary grade and/or ungraded and lacked the quality necessary for use in compounding nonsterile-to-sterile injectable drug preparations. The use of those inappropriate ingredients caused the final preparations to be adulterated. *La Vita* explains how under California law, federal law, federal guidance, and USP Chapter 797, the quality of the starting ingredient must be appropriate for the mode of administration of the end preparation. Nonsterile ingredients, including manufactured products not created or intended for sterile routes of administration (such as the glutathione and methylcobalamin which were manufactured, at best, for oral administration), can contain potentially harmful impurities. The use of ingredients that are not appropriate for the mode of administration means that the final product is either contaminated or

[24] See Exhibit 23.

[25] The glutathione in *La Vita* was for injection while Koshland's glutathione was for inhalation, but the evidence establishes that both modes of administration are higher risk than oral administration, in that the digestive system protects the body from impurities in a way that the bloodstream and lungs do not.

at a high risk of being contaminated, and is therefore adulterated under both federal and state law. The Board finds the analysis in *La Vita* on the issues of adulteration and lack of quality to be instructive, relevant, and persuasive on these issues.

105. When weighing the testimony of the expert witnesses on this issue in the Proposed Decision, the ALJ found Bassani's opinions to be most persuasive. The Board disagrees, and weighs the testimony of complainants' witnesses, Board inspectors Dukatz, Petrutiu, and Acosta, more heavily that the testimony of Bassani. Despite the fact that Bassani was not compensated for his testimony, as an executive of PCCA (which, as noted above, was one of the companies that has advocated for both glutathione and methylcobalamin to be included on the FDA's 503A Bulks List), the Board questions his objectivity in this matter and finds that he may not be entirely unbiased. Moreover, the Board objects to, and summarily rejects, respondents' insinuations that the Board inspectors who testified at hearing are not experts in their field.

106. Contrary to the ALJ's apparent perception, complainant does not argue that compounding with a Category 1 ingredient is per se creating an adulterated compound. Rather, complainant argues that, under the facts of this case, respondents' compounding of the two Category 1 ingredients at issue was not proper. The Board agrees with complainant's position, and finds that complainant proved that respondents' preparations of methylcobalamin and glutathione were adulterated. Accordingly, the ALJ's determinations on CFD 4 and 12 are reversed.

CFD 5 – INCORRECT COMPOUNDING STEPS

107. Dukatz observed that respondents' records showed that, between January 1 and September 12, 2020, respondents compounded eight lots of

methylcobalamin 1000mcg PF, which was supposed to be preservative-free, but they used a master formula/compounding record hybrid document that incorrectly directed the use of a preservative (benzalkonium chloride) in the preparation. Dukatz opined that this error could possibly lead to patient harm.

108. Koshland acknowledges this error in the formula and reports that it was promptly corrected. He further reports that respondents' logs show that this preservative was never actually added to the preservative-free preparation or dispensed. He explains that respondents' computer system would not allow a technician to add this substance to the preparation because all ingredients must be scanned before being added; and although mistakenly in the master formula, the preservative was not in the formula's list of ingredients. Therefore, there was never an actual danger of the preservative being added.

CFD 6 – No Pharmacist Signature

109. Dukatz observed that between January 1 and September 12, 2020, respondents compounded four lots of alprostadil where the line for the identification and signature of the pharmacist reviewing the final drug preparation on the compounding record under "quantitative checks" was left blank.

110. Koshland reports that these lots of alprostadil were compounded as part of sub formulas for Tri-Mix. He opines that only the final dispensed compound requires a validating signature.

111. Summers reviewed another copy of respondents' records for the four lots of alprostadil which contains pharmacists' signatures. Respondents contend this copy is the "electronic final copy of the compounding log" and blame restrictions related to the COVID-19 "lockdown" for the discrepancy. Complainant argues that a

pharmacy may only have "one official compounding log, per California Code of Regulations, title 16, section 1735.3, subdivision (a)(2)."

112. "Preparation" means a drug or nutrient compounded in a licensed pharmacy; the preparation may or may not be sterile." (Cal. Code Regs., tit. 16, § 1735.1, subd (z).) Respondents have not cited authority that the signature requirement only applies to dispensed preparations. Pharmacy software programs used to maintain electronic documents like compounding logs may present difficult challenges to the pharmacy using such software, but the ALJ determined, and the Board agrees, that the evidence in this matter shows that respondents' compounding logs, as they presented them to Dukatz for inspection, impermissibly lacked the pharmacist's name and signature.

113. In the Proposed Decision, the ALJ found that this error constituted "a minor, technical violation with no significant risk of patient harm," which should be considered in mitigation. As explained in the Legal Conclusions, the Board disagrees with the characterization of this and other violations as "merely technical."

CFD 7 – No Manufacturer, Expiration Date, and/or Lot Number Information

114. Based on records provided to her by respondents, Dukatz observed that between January 1 and September 12, 2020, respondents compounded eight lots of medication that did not list the manufacturer, lot number, or expiration date of the ingredient alprostadil in the compounding record. In the Proposed Decision, the ALJ noted that respondents later produced records that contain the required information, and that the violation appeared to be related to difficulties with respondents' computer software. Nonetheless, the evidence demonstrates that a violation of

California Code of Regulations, title 16, section 1735.3(a)(2)(F) occurred.

CFD 8 – No Documentation of Beyond Use Date

115. Based on records provided to her by respondents, Dukatz observed that between January 1 and September 12, 2020, respondents compounded the following five lots of medications for which the compounding record lacked documentation of an assigned BUD: methylcobalamin 1,000 mcg/ml with preservative and preservative-free; Bi-Mix (Papaverine HCl/Phentolamine 30mg/0.5mg/ml); alprostadil 1000 mcg/ml stock solution injectable; alprostadil 500 mcg/ml stock solution injectable; and Tri-Mix (PGE1/Papaverine HCl/Phentolamine 10mcg/30mg/1mg/ml).

116. In the Proposed Decision, the ALJ again noted that respondents later produced records that contain the required BUD information, and that the violation appeared to be related to difficulties with respondents' computer software. The Board again notes, however, that regardless, the evidence demonstrates that a violation of California Code of Regulations, title 16, section 1735.3(a)(2)(H) occurred.

CFD 9 – Incorrect Beyond Use Date

117. Based on records provided to her by respondents, Dukatz observed that between January 1 and September 12, 2020, respondents compounded 19 lots of alprostadil stock solutions using a master formula stating that the BUD was 180 days. This extended BUD was not supported by a stability study.

118. As discussed above, Koshland explained that these lots of alprostadil were compounded as part of sub formulas for Tri-Mix. Respondents do not keep alprostadil as a stock solution or independently dispense it. They only compound it as a one of the ingredients in Tri-Mix. Koshland reports that the computer software used

by respondents requires entry of an expiration date for the alprostadil, but the instructions for use on this sub formula compounded product clearly states "Note: This formula should be used within 6 hours for specific sterile formula(s). All remainder should be discarded after 6 hours." Again, Koshland opines that only the final dispensed product requires an expiration date. Complainant does not contend that the BUD assigned to the finished Tri-Mix preparation made with the alpostradil was erroneous.

119. In her report, Summers opined that since the alprostadil was used as a sub formula of the Tri-Mix preparation, it was appropriate to give the alprostadil a BUD to match the final Tri-Mix preparation.

120. Respondents provide no authority for the claim that only dispensed preparations require an extended BUD to be supported with a stability study. In the Proposed Decision, the ALJ again found, in mitigation, that this violation appeared "merely technical" and there was no evidence that respondents' procedure was unsafe. As explained in the Legal Conclusions, the Board disagrees with the characterization of this and other violations as "merely technical."

CFD 10 – Failure to Support Assigned BUD's

121. Based on respondents' records, Petrutiu found that they failed to support extended BUD's as follows:

> A. From May 4 to July 15, 2021, respondents compounded at least 4,580 ml of non-sterile to sterile Tri-Mix, in 27 lots, and assigned a BUD of 60 days without using identical packaging as the drug preparations tested and studied and without evidence of the compounded drug preparations being identical in specific and essential compounding steps

to the drug preparations tested and studied.

B. From May 20 to July 16, 2021, respondents compounded at least 1,520 ml of non-sterile to sterile Bi-Mix, in eight lots, and assigned a BUD of 90 days without first having a container closure integrity test and without evidence of the compounded drug preparations being identical in specific and essential compounding steps to the drug preparations tested and studied.

C. From August 14, 2020, to April 20, 2021, respondents compounded at least 21,420 ml of non-sterile to sterile glutathione 200 mg/ml inhalation solution, in 68 lots, and assigned a BUD of 90 days without first having method suitability test, container closure integrity test, and stability studies. Petrutiu reports that the study referenced by respondents was completed on April 28, 2021, and thus post-dated the compounding. She also reports that respondents used the study to justify a 90-day BUD, but the study only supported a 60-day BUD. She reports that after April 20, 2021, respondents reduced the BUD for this preparation to 60 days and she believes that is an appropriate BUD going forward.

122. Each of these three contentions are partially based upon the belief that respondents' container closure integrity studies were inadequate because they did not test the exact size vial used in compounding. However, as discussed in Factual Findings 68, the studies permissibly utilized a bracketing technique.

123. Regarding the first two of these three claims, Koshland reports that respondents were using the identical compounding steps as used in the referenced stability study, and he does not know why they failed to provide this information to

Petrutiu.

124. Regarding the second claim, Koshland reports that he later secured a copy of the container closure study from PCCA and provided a copy to Petrutiu to show that respondents followed the same steps used in the study.

125. The ALJ found, and the Board agrees, that neither Summers nor Koshland provided a coherent defense to the third contention regarding using the stability study to justify a 90-day BUD when it only supported a 60-day BUD. It appears that Summers opines that respondents were relying on PCCA studies prior to the completion of their own study, but there is no evidence that respondents were using PCCA ingredients; therefore these studies are not sufficient support for the extended BUD's, as discussed in Factual Findings 78 through 81.

126. Except as to the contention that respondents lacked sufficient container closure integrity tests, the ALJ found, and the Board agrees, that the violations alleged in CFD 10 were proven.

CFD 11 – Failure to Maintain Quality of Assigned Sterile Preparations

127. As to respondents' nonsterile to sterile compounded preparations of glutathione only, complainant alleges that respondents violated California Code of Regulations, title 16, sections 1735.1, subdivision (ae), and 1735.2, subdivision (g), in that they failed to maintain quality of sterile preparations because they used a non-FDA approved glutathione ingredient for sterile compounding. In the Proposed Decision, the ALJ found that this contention was not proven. For all the reasons set forth in Factual Findings 82 through 106, and as explained in the Legal Conclusions, the Board disagrees, and finds that the violations alleged in CFD 11 were proven.

Disciplinary Considerations

128. On October 2, 2019, the Board issued Citation No. CI 2108 81041 to Pharmacy for varying from a prescription in violation of California Code of Regulations, title 16, section 1716. Between January 11 and July 5, 2018, Pharmacy filled eight prescriptions with fludrocortisone instead of fluticasone. The citation, which did not assess a fine or order abatement, is final.

129. On October 2, 2019, the Board issued Citation No. CI 2019 95726 to Koshland for failing to follow compounding policies and procedures in violation of California Code of Regulations, title 16, section 1735.5. The citation assessed a $2,500.00 fine, which Koshland paid, and is final.

130. On September 6, 2022, the Board issued Pharmacy's sterile compounding permit a Written Notice that it was in violation of USC 353a(b)(1)(A), for compounding glutathione 200mg/ml inhalation solution . . . using an active ingredient, [the grade of which] was unable to be determine[d] beyond the classification 'EP'."

131. On July 20, 2022, Petrutiu conducted another inspection of Pharmacy. She observed only one minor issue that required an action item. This was the failure of Pharmacy to provide the results of surface sampling tests in the "buffer rooms." This oversight was promptly remedied. Petrutiu observed no problems related to the allegations in this proceeding, except that, at that time, respondents were still compounding glutathione for inhalation.

Respondent's Additional Evidence

132. A City of Berkeley Fire Department Captain testified regarding the need for nebulized glutathione to remove toxins absorbed by firefighters. He reports that such treatments have helped him and that glutathione gives firefighters like him

"hope" they may not die of cancer related to their duties.

ADDITIONAL EXPERT TESTIMONY

133. Jennifer Reigle, N.D., has been licensed as a naturopathic doctor in California for seven years. She has a clinical practice in Santa Rosa. She prescribes nebulized glutathione in the course of her practice via a licensed physician, who oversees her prescriptions. Dr. Reigle reports that this compounded drug is an important tool to remove toxins and repair damage from oxidated free radicals, especially from firefighters exposed to smoke. She also opines that it is helpful for other lung problems such as cystic fibrosis and post-COVID-19 asthma. Until recently she acquired nebulized glutathione from Pharmacy. She knows of no other source in California. She also prescribes injectable glutathione, which she acquires from another source. Her opinions regarding the effectiveness of glutathione are based on her clinical observations and a small clinical trial she is conducting (with no control group), which was still in progress at the time of hearing. Dr. Reigle appears to sincerely believe that glutathione is a critical treatment and preventative therapy. She acknowledges that these beliefs are not at this time supported by peer-reviewed studies and she admits that she has not tried FDA-approved alternative treatments such as acetylcysteine (brand name Mucomyst) which she describes as a precursor of glutathione.

134. Simon Barker, N.D., has been licensed as a naturopathic doctor in California for 20 years. He has a primary care practice in Pasadena. Dr. Barker reports that he has treated hundreds of patients with injectable methylcobalamin. He views methylcobalamin as an important alternative for patients who do not respond to other therapies for neurodegenerative diseases such as amyotrophic lateral sclerosis (also

known as ALS or Lou Gehrig's disease), but also for peripheral neuropathies. He reports no knowledge of side effects. He reports that since Pharmacy stopped compounding methylcobalamin, some of his patients have used other therapies, and some have gone out of state to acquire compounded methylcobalamin. Dr. Barker does not know of another source of injectable methylcobalamin in California.

135. Respondents' evidence shows that there are medical practitioners and patients in California who sincerely believe that methylcobalamin and glutathione are critical treatments and who believe that preventing the 503A compounding of these substances will likely result in the inability of patients to access these treatments in California. In the Proposed Decision, the ALJ found that these issues are not central to the allegations in this proceeding, and that neither the safety nor clinical effectiveness (or lack thereof) of these treatments were established. While it found the testimony of these three additional witnesses interesting and compelling, the Board agrees with the ALJ's determinations.

PETER KOSHLAND

136. The ALJ found that Koshland's testimony was credible in all respects, and that Koshland appeared knowledgeable and conscientious. The Board does not refute these findings. From its review of the record the Board also notes that Koshland appeared to express a genuine and credible dedication to the health and wellbeing of Pharmacy's patients. Further, the Board agrees with the ALJ's observations that respondents and the Board's enforcement team have a difference of opinion regarding the propriety of nonsterile to sterile compounding of methylcobalamin and glutathione, but that Koshland and Pharmacy are likely to accept the Board's decision on these issues and operate Pharmacy safely and in compliance with the law going forward. However, as explained in the Legal

Conclusions, the Board finds that public protection requires that Koshland's and Pharmacy's continued compounding be practiced under the increased scrutiny and accountability that a period of probation would entail.

Costs

137. In connection with the investigation and enforcement of this accusation, complainant requested an award of costs in the total amount of $75,547.25, comprised of $40,598.50 in investigative costs and $34,948.75 for attorney and paralegal services provided by the Department of Justice and billed to the Board. The ALJ found that complainant's request was supported by declarations that comply with the requirements of California Code of Regulations, title 1, section 1042. Accordingly, the ALJ determined that the costs claimed were found to be reasonable.

LEGAL CONCLUSIONS

Burden and Standard of Proof

1. The parties agree that complainant is required to prove cause for discipline of Koshland's registered pharmacist license by "clear and convincing proof to a reasonable certainty" (clear and convincing evidence). (See *Ettinger v. Board of Medical Quality Assurance* (1982) 135 Cal.App.3d 853, 856; Bus. & Prof. Code, § 23.7 [all subsequent statutory references are to the Business and Professions Code, unless otherwise stated].)

2. The parties disagree as to the applicable standard of proof regarding Pharmacy's original pharmacy and sterile compounding permits. Complainant contends it is only required to prove the allegations against Pharmacy by a preponderance of the evidence and respondents contend the standard of proof is

clear and convincing evidence. Generally, that determination depends on the amount of education, training, or work entailed in obtaining the license at issue. (See *San Benito Foods v. Veneman* (1996) 50 Cal.App.4th 1889, 1892-95.)

3. Respondents cite two Board decisions, one that was designated as precedential (*In the Matter of the Accusation Against Pacifica Pharmacy; Thang Tran.* (*Pacifica*), Case No. 3802, OAH No. 2011010644., p.35:22, p.36:23-26 (August, 2013). Respondents accurately observe that, in the *Pacifica* decision, the Board applied the clear and convincing evidence standard to allegations against the pharmacy's permit as well as to the pharmacist's license. However, it did so with no discussion of any potential distinction between the applicable standards, based on the type of license or permit.

4. Complainant argues that a pharmacy permit and sterile compounding permit do not require the requisite education, training, or work to qualify as a professional license and therefore the preponderance standard is appropriate. Complainant responds to respondents' reliance on *Pacifica* with a citation to the Board's decision styled *In the Matter of the Accusation Against IV Solutions, Inc.* (*IV Solutions*), Case No. 3606, OAH No. 2011050988, pp.39–40, also designated a precedential decision. In *IV Solutions*, the Board expressly contemplated the standard of proof applicable to a pharmacist license and pharmacy permit and concluded that a pharmacy permit does not require the education, training, or testing requirements to constitute a professional license and the preponderance standard applies. *IV Solutions* is more recent and more fully addressed this issue than *Pacifica*. The ALJ found, and the Board agrees, that as a precedential decision, *IV Solutions* constitutes binding authority, and, accordingly, that the clear and convincing evidence standard should be applied to the allegations against Koshland, and a preponderance standard should be applied to the allegations against Pharmacy's pharmacy and sterile compounding

permits.

5. The differing standards of proof did not impact the factual findings because all factual findings in this Decision After Rejection that support discipline of any of the licenses or permits at issue were established by clear and convincing evidence and the evidence for the allegations that were not proven constituted less than a preponderance of the evidence.

First Alleged Cause for Discipline (No Container Closure Integrity Tests)

6. The Board may discipline the license or permit of a licensee who commits unprofessional conduct, including violating any federal or California law or regulation governing pharmacy. (§ 4301, subds. (j) and (o).) Complainant alleges that respondents violated California Code of Regulations, title 16, section 1735.2, subdivision (i)(3)(B), by failing to perform container closure integrity tests with the container actually used in the final preparations (5 ml amber serum vial) to support extended BUD's for specified lots of Methylcobalamin, Bi-Mix, and Tri-Mix. At hearing, when shown an FDA guidance document stating that bracketing is an acceptable practice for container closure integrity testing, Dukatz conceded that respondents' bracketed testing of the 2 ml and 30 ml vials was sufficient to satisfy the requirements of the regulation as to use of the 5 ml vials. (Factual Finding 68.) Accordingly, the ALJ found, and the Board agrees, that cause does not exist to discipline respondents' registered pharmacist license or original pharmacy or sterile compounding permits under section 4301, subdivisions (j) or (o), for failure to perform container closure integrity tests with the size of container actually used for dispensing final preparations.

Second Cause for Discipline (No Stability Studies)

7. Complainant alleges that respondents violated section 4301, subdivisions (j) and (o), by failing to use appropriate stability studies to support extended BUD's, in violation of California Code of Regulations, title 16, section 1735.2, subdivision (i)(3)(C), when it dispensed eight lots of methylcobalamin 1000mcg/ml PF; eight lots of methylcobalamin 1000mcg/ml injection preserved; eight lots of Bi-Mix 30mg/0.5mg injection; nine lots of Bi- Mix 30mg/2ml injection; 11 lots of Tri-Mix 10mcg/30mg/lmg/ml injection; eight lots of Tri-Mix 40mcg/30mg/2mg/ml injection; 11 lots of alprostadil 500 mcg/ml stock solution; and eight lots of alprostadil 1000 mcg/ml stock solution. The ALJ determined, and the Board agrees, that this allegation was proven. (Factual Finding 74.) Accordingly, the ALJ found, and the Board agrees, that cause exists to discipline respondents' license and permits under section 4301, subdivisions (j) and (o), for failure to use appropriate stability studies to justify extended BUD's for these preparations.

Third Cause for Discipline (Inappropriate Reliance on Stability Studies Based on Nonidentical Ingredients)

8. Complainant alleges that respondents' extended BUD's for these same lots of compounded preparations also lacked the support of appropriate stability studies based solely on their use of nonidentical ingredients and packaging (those of a different manufacturer) than those used in the referenced stability studies, which contain a warning that such use would invalidate any extended BUD. The ALJ found, and the Board agrees, that cause exists to discipline respondents' license and permits under section 4301, subdivisions (j) and (o), for failure to use appropriate stability studies to justify extended BUD's for these preparations, based on Factual Finding 81.

Fourth and Twelfth Alleged Causes for Discipline (Adulterated

Preparations)

9. Complainant seeks to discipline respondents' license and permits for unprofessional conduct under section 4301, subdivisions (j) and/or (o), for compounding and selling adulterated preparations in violation of section 4169, subdivision (a)(2) (prohibition against selling adulterated drugs), and Health and Safety Code sections 111250 (definition of adulterated), 111255 (further definition of adulterated), and/or 111295 (prohibition against selling adulterated drugs), and/or 501(a)(2)(A) of the Federal Food Drug and Cosmetic Act (21 U.S.C. 351(a)(2)(A)) (federal definition of adulterated), based on the allegation that respondents compounded 16 lots of injectable methylcobalamin, 83 lots of nonsterile to sterile glutathione inhalation solution, and one lot of nonsterile to sterile glutathione 1-percent ophthalmic solution, using a raw material that was of an "undetermined grade."

10. Prior to hearing, respondents moved to strike the fourth and twelfth causes for discipline based on the contentions that no state law violation could be proven and enforcement of the applicable federal law was preempted. Respondents cite *Nexus Pharmaceuticals, Inc. v. Central Admixture Pharmacy Services, Inc.* (*Nexus*) (9th Cir. 2022) 48 F.4th 1040. In *Nexus*, the Ninth Circuit considered a drug manufacturer's claim against a network of compounding pharmacies that their sale of ephedrine sulfate pre-loaded into ready-to-use syringes violated state laws prohibiting sale of drugs not approved by FDA. The *Nexus* court held that the FDCA includes a prohibition on private enforcement: all proceedings to enforce or restrain violations of the FDCA must be "by and in the name of the United States," except for certain proceedings by state governments. (*Id.* at 1044; see 21 U.S.C.A. § 337.) The *Nexus* court further held that although the plaintiff had pled its claim under state laws (laws prohibiting the sale of drugs that are not FDA-approved), the claim was preempted by the FDCA bar against private actions and by implied preemption. Respondents argue

that complainant in this action is essentially attempting to enforce this federal law, and is similarly barred by the doctrine of preemption from imposing discipline on this basis.

11. In the Proposed Decision, the ALJ noted that under the California Constitution, article III, section 3.5, subdivision (c), an administrative agency (and by extension the ALJ) has no power to "declare a statute unenforceable, or to refuse to enforce a statute on the basis that federal law or federal regulations prohibit the enforcement of such statute unless an appellate court has made a determination that the enforcement of such statute is prohibited by federal law or federal regulations." The ALJ further found that in this matter, a state agency is attempting to discipline its licensees for violating a state statute that prohibits selling adulterated preparations; the causes for discipline additionally cite the federal definition of "adulterated," but they cannot fairly be considered solely an attempt to enforce the FDCA; the *Nexus* opinion is further inapposite as it only considered preemption in the context of an action by one private party versus another, not a state agency attempting to discipline its own licensees; *Nexus* does not constitute an appellate court determination that complainant's attempt to enforce the statutes cited in the fourth and twelfth causes for discipline is preempted; and whether it could be proven that respondents' preparations were adulterated under state law was an issue of fact, not appropriate for determination in a motion to dismiss. Accordingly, the ALJ denied the motion to dismiss the fourth and twelfth alleged causes for discipline.

12. Regarding the merits of these causes for discipline, the ALJ determined that complainant did not prove that these preparations of methylcobalamin and glutathione were adulterated. The Board disagrees with and hereby reverses the ALJ's determination. (Factual Findings 82-86, 89-98, 100, 104-106.)

13. The evidence shows that Koshland did not know the grade or the

manufacturer of the methylcobalamin at the time he was compounding it for injection. There were no records on file to show that the methylcobalamin was "JP" grade, or that the original manufacturer was Supriya, until Board staff undertook significant investigative efforts to ascertain this information. Therefore, as Koshland was compounding Category 1 substances without having first obtained a valid COA from the entity that originally produced the substance, Koshland and Pharmacy improperly relied on, and are not entitled to the benefit (i.e., FDA enforcement discretion) of, the Interim Policy. (Factual Finding 28.) As a result, their compounding, which fell outside the section 503A exemption, violated both federal and state law. (Factual Findings 29 and 31.)

14. The glutathione and methylcobalamin bulk drug substances at issue here, as in *La Vita*, were dietary grade and/or ungraded for purposes of U.S. law, and contained or may have contained harmful impurities. It is undisputed that in the United States, glutathione and methylcobalamin only have dietary grade monographs. (Factual Finding 21.) It follows that these substances are only appropriate for compounding for oral administration, not for sterile compounding for non-oral routes of administration such as inhalation or injection. The bulk drug substances lacked the requisite quality for use in sterile compounding for non-oral routes of administration, and the inappropriate use of those ingredients meant that they were either contaminated or at a high risk of being contaminated, and were therefore adulterated under federal and state law. Moreover, under both state and federal law, a drug may be deemed "adulterated" if it has been held under conditions whereby it ***may have been*** contaminated with filth, or whereby it ***may have been*** rendered injurious to health; the mere potential of having higher levels of impurities compared to compendial or pharmaceutical grade equivalents is enough.

15. In addition, as set forth in *La Vita*, the mere placement of glutathione and methylcobalamin on the Category 1 list does not equate to being "authorized

under federal law" without any restriction as to the appropriate grading of the bulk drug substances or the route of administration. Placement on the Category 1 list does not exempt compliance with all the other conditions under section 503A, compliance with other provisions of the FDCA, or the prohibition against the distribution of adulterated drugs. An important condition of the section 503A exemption is that compounding must comply with the applicable USP or NF drug monograph if one exists and with the USP chapters on pharmacy compounding. Thus, compliance with the USP chapters on compounding are incorporated into both federal and state law. (Factual Findings 18-19 and 32.) USP Chapter 797 clarifies that compounded sterile preparations are either contaminated or at a high risk to become contaminated if "nonsterile ingredients, including manufactured products not intended for sterile routes of administration (e.g. oral) are incorporated ..." (Factual Finding 35.) Therefore, while placement of these two bulk drug substances on the Category 1 list permits the FDA to exercise enforcement discretion as to their use in compounding (assuming all conditions set forth in the Interim Policy are met), it does not mean that the FDA has approved or authorized sterile compounding with these two substances for non-oral routes of administration, or has otherwise stated that such compounding is safe. On the contrary, the FDA's articulation of an enforcement discretion policy indicates that use of Category 1 substances for such compounding is explicitly NOT authorized – otherwise, enforcement discretion would be unnecessary. Moreover, given that the six substances that have, by regulation, been included on the 503A Bulks List have not been found by the FDA to be safe or effective, then it certainly cannot be said that bulk drug substances in Category 1, which have NOT been approved by the FDA for compounding, have an FDA finding of safety or efficacy. (Factual Finding 91.)

16. For the aforementioned reasons set forth in Legal Conclusions 12 through 15, cause exists to discipline respondents' license and permits under section

4301, subdivisions (j) or (o), for selling adulterated preparations.

Fifth Cause for Discipline (Incorrect Compounding Steps)

17. Complainant seeks to discipline respondents' license and permits under section 4301, subdivisions (j) and/or (o), for using a master formula/compounding record that incorrectly directed the use of a preservative in a compound that was supposed to be preservative-free. A drug preparation shall not be compounded until the pharmacy has first prepared a written master formula document that includes, among other things, the "[s]pecific and essential compounding steps used to prepare the drug." (Cal. Code Regs., tit. 16, § 1735.2, subd. (e)(5).) The ALJ found, and the Board agrees, that this allegation was proven. (Factual Finding 107-108.) Accordingly, the ALJ found, and the Board agrees, that cause exists to discipline respondents' license and permits under section 4301, subdivisions (j) and (o), for violation of California Code of Regulations., title 16, section 1735.2, subdivision (e)(5).

Sixth Cause for Discipline (No Pharmacist Signature)

18. Complainant seeks to discipline respondents' license and permits under section 4301, subdivisions (j) and/or (o), for failing to include the identity and signature of the pharmacist reviewing the final drug preparation on the compounding record under quantitative checks, in violation of California Code of Regulations, title 16, section 1735.3, subdivision (a)(2)(D). The ALJ found, and the Board agrees, that this allegation was proven. (Factual Finding 112.) Accordingly, the ALJ found, and the Board agrees, that cause exists to discipline respondents' license and permits under section 4301, subdivisions (j) and (o), for violation of California Code of Regulations, title 16, section 1735.3, subdivision (a)(2)(D).

Seventh Cause for Discipline (No Manufacturer, Expiration Date,

and/or Lot Number Information)

19. Complainant seeks to discipline respondents' license and permits under section 4301, subdivisions (j) and/or (o), for compounding a drug without listing the manufacturer, lot number, and expiration date of each component, in violation of California Code of Regulations, title 16, section 1735.3, subd. (a)(2)(F). The ALJ found, and the Board agrees, that this allegation was proven. (Factual Finding 114.) Accordingly, the ALJ found, and the Board agrees, that cause exists to discipline respondents' license and permits under section 4301, subdivisions (j) and (o), for violation of California Code of Regulations, title 16, section 1735.3, subdivision (a)(2)(D).

Eighth Cause for Discipline (No Documentation of Beyond Use Date)

20. Complainant seeks to discipline respondents' license and permits under section 4301, subdivisions (j) and/or (o), for failing to assign a BUD for all compounded preparations, in violation of California Code of Regulations, title 16, section 1735.3, subdivision (a)(2)(H). The ALJ found, and the Board agrees, that this allegation was proven. (Factual Findings 115-116.) Accordingly, the ALJ found, and the Board agrees, that cause exists to discipline respondents' license and permits under section 4301, subdivisions (j) and (o), for violation of California Code of Regulations, title 16, section 1735.3, subdivision (a)(2)(H).

Ninth Cause for Discipline (No Documentation of Beyond Use Date)

21. Complainant seeks to discipline respondents' license and permits under section 4301, subdivisions (j) and/or (o), for incorrect BUD's for sterile compounded drug preparations, in violation of California Code of Regulations, title 16, section

1751.8, subdivision (c). The ALJ found, and the Board agrees, that this allegation was proven. (Factual Findings 117-120.) Accordingly, the ALJ found, and the Board agrees, that cause exists to discipline respondents' license and permits under section 4301, subdivisions (j) and (o), for violation of California Code of Regulations, title 16, section 1751.8, subdivision (c).

Tenth Cause for Discipline (Failure to Support Assigned Beyond Use Date)

22. Complainant seeks to discipline respondents' license and permits under section 4301, subdivisions (j) and/or (o), for failing to support assigned BUD's, in violation of California Code of Regulations, title 16, section 1735.2, subdivision (i). Except as to the contention that respondents lacked sufficient container closure integrity tests, these alleged violations were proven. (Factual Findings 121 and 125-126.) Accordingly, the ALJ found, and the Board agrees, that cause exists to discipline respondents' license and permits under section 4301, subdivisions (j) and (o), for violation of California Code of Regulations, title 16, section 1735.2, subdivision (i).

Eleventh Alleged Cause for Discipline (Failure to Maintain Quality of Assigned Sterile Preparations)

23. Complaint seeks to discipline respondents' license and permits under section 4301, subdivisions (j) and/or (o), for failing to maintain quality of assigned sterile preparations, in violation of California Code of Regulations, title 16, section 1735.1, subdivision (ae), and 1735.2, subdivision (g), because they used a non-FDA approved glutathione ingredient for sterile compounding. In the Proposed Decision, the ALJ found that this allegation was not proven. The Board disagrees with and hereby reverses the ALJ's determination. (Factual Finding 127.) Cause exists to

discipline respondents' license and permits under section 4301, subdivisions (j) or (o), for violation of California Code of Regulations, title 16, section 1735.1, subdivision (ae), and 1735.2, subdivision (g).

Determination of Discipline

24. Cause for discipline having been established, the remaining issue is what level of discipline is required to protect the public. (§ 4001.1.) Factors to be considered include: 1. actual or potential harm to the public; 2. actual or potential harm to any consumer; 3. prior disciplinary record, including level of compliance with disciplinary order(s); 4. prior warning(s), including but not limited to citation(s) and fine(s), letter(s) of admonishment, and/or correction notice(s); 5. number and/or variety of current violations; 6. nature and severity of the act(s), offense(s) or crime(s) under consideration; 7. aggravating evidence; 8. mitigating evidence; 9. rehabilitation evidence; 10. compliance with terms of any criminal sentence, parole, or probation; 11. time passed since the act(s) or offense(s); 12. whether the conduct was intentional or negligent or demonstrated incompetence; and 13. financial benefit to the respondent from the misconduct. (Disciplinary Guidelines at p. 3.) Respondents argue for a dismissal of this proceeding or, at most, a public reproval. Complainant initially argued for outright revocation, but in its Argument After Rejection of Proposed Decision, argued that probation for the respondents might be a more appropriate penalty than revocation.

25. In the Proposed Decision, the ALJ found that CFD 1, 4, 11, and 12 were not proven. The ALJ further concluded that the eight allegations that were proven against respondents were "predominantly technical violations." Based on this conclusion and after weighing other factors to be considered in determining

penalties, the ALJ ultimately found that a public reproval of respondents' license and permits was sufficient to protect the public safety.

26. As noted above, for the reasons set forth herein, the Board has reversed the ALJ's decision as to CFD 4, 11, and 12, and finds that these causes for discipline were proven. Moreover, the Board disagrees with the contention that the causes for discipline upheld in the Proposed Decision were "merely technical" violations appropriate only for a public reproval. Taken as a whole, on their own, these upheld violations are numerous and serious enough to warrant respondents being placed on probation. The use of unsupported BUDs was particularly egregious, especially given that respondents received a correction order in 2017 regarding the lack of appropriate stability studies to justify BUDs assigned to compounded, nonsterile to sterile injectables. (Factual Finding 75.) Considering that the Board has now determined that the adulteration and lack of quality claims were also proven, the Board finds further justification for imposing a period of probation in lieu of a public reproval. Probation would provide an extra level of monitoring and accountability that would ensure that respondents comply with applicable laws and regulations in their pharmacy compounding practice going forward,. As the ALJ correctly observed in the Proposed Decision, the Board's Disciplinary Guidelines recommend a minimum of revocation, stayed, with a two-year period of probation for the least serious category of violations. Under the circumstances, the Board finds that public protection requires this minimum level of discipline.

Costs

27. A licensee who is found to have committed a violation of the licensing act may be ordered to pay a sum not to exceed the reasonable costs of investigation and enforcement. (§ 125.3.) The ALJ found that cause existed to order respondents to pay

the Board's costs in the amount of $75,547.25. (Factual Finding 137.)

28. Cost awards must not deter licensees with potentially meritorious claims from exercising their right to an administrative hearing. (*Zuckerman v. State Board of Chiropractic Examiners* (2002) 29 Cal.4th 32, 45.) Cost awards must be reduced where a licensee has been successful at hearing in getting the charges dismissed or reduced; a licensee is unable to pay; or where the scope of the investigation was disproportionate to the alleged misconduct. (*Ibid.*) The agency must also consider whether the licensee has raised a colorable challenge to the proposed discipline, and a licensee's good faith belief in the merits of his or her position. (*Ibid.*) In the Proposed Decision, the ALJ found that cost mitigation was appropriate given his determination that respondents successfully defended four of 12 alleged causes for discipline in their entirety and portions of others. Accordingly, pursuant to *Zuckerman*, the ALJ reduced the award of costs from $75,547.25 to $10,000. Under section 125.3, only an ALJ can order costs to be paid. Accordingly, the costs of $10,000 ordered by the ALJ are imposed.

ORDER

Registered Pharmacist License No. RPH 51804, issued to respondent Peter Hale Koshland (Koshland); Original Pharmacy Permit No. PHY 50041, issued to respondent Koshland Pharmacy, Inc. doing business as Koshland Pharm: Custom Compounding Pharmacy (Pharmacy); and Sterile Compounding Permit No. LSC 99955, issued to Pharmacy, are revoked; however, the revocation is stayed and Koshland's pharmacist license, and Pharmacy's pharmacy permit and sterile compounding permit, are placed on probation for two years upon the following terms and conditions:

REGISTERED PHARMACIST LICENSE (KOSHLAND)

1. Obey All Laws

Koshland shall obey all state and federal laws and regulations.

Koshland shall report any of the following occurrences to the Board, in writing, within seventy- two (72) hours of such occurrence:

- an arrest or issuance of a criminal complaint for violation of any provision of the Pharmacy Law, state and federal food and drug laws, or state and federal controlled substances laws
- a plea of guilty, or nolo contendere, no contest, or similar, in any state or federal criminal proceeding to any criminal complaint, information or indictment
- a conviction of any crime
- the filing of a disciplinary pleading, issuance of a citation, or initiation of another administrative action filed by any state or federal agency which involves Koshland's license or which is related to the practice of pharmacy or the manufacturing, obtaining, handling, distributing, billing, or charging for any drug, device or controlled substance.

Failure to timely report such occurrence shall be considered a violation of probation.

2. Report to the Board

Koshland shall report to the Board quarterly, on a schedule as directed by the Board or its designee. The report shall be made either in person or in writing, as directed. Among other requirements, Koshland shall state in each report under penalty of perjury whether there has been compliance with all the terms and conditions of probation.

Failure to submit timely reports in a form as directed shall be considered a violation of probation. Any period(s) of delinquency in submission of reports as directed may be added to the total period of probation. Moreover, if the final probation report is not made as directed, probation shall be automatically extended until such time as the final report is made and accepted by the Board.

3. Interview with the Board

Upon receipt of reasonable prior notice, Koshland shall appear in person for interviews with the Board or its designee, at such intervals and locations as are determined by the Board or its designee. Failure to appear for any scheduled interview without prior notification to Board staff, or failure to appear for two (2) or more scheduled interviews with the Board or its designee during the period of probation, shall be considered a

violation of probation.

4. Cooperate with Board Staff

Koshland shall timely cooperate with the Board's inspection program and with the Board's monitoring and investigation of Koshland's compliance with the terms and conditions of his probation, including but not limited to: timely responses to requests for information by Board staff; timely compliance with directives from Board staff regarding requirements of any term or condition of probation; and timely completion of documentation pertaining to a term or condition of probation. Failure to timely cooperate shall be considered a violation of probation.

5. Continuing Education

Koshland shall provide evidence of efforts to maintain skill and knowledge as a pharmacist as directed by the Board or its designee.

6. Reporting of Employment and Notice to Employers

During the period of probation, Koshland shall notify all present and prospective employers of the decision in case number 7147 and the terms, conditions and restrictions imposed on Koshland by the decision, as follows:

Within thirty (30) days of the effective date of this decision, and within ten (10) days of undertaking any new employment, Koshland shall report to the Board in writing the name, physical address, and mailing address of each of his employer(s), and the name(s) and telephone number(s) of all of his direct supervisor(s), as well as any pharmacist(s)-in-charge, designated representative(s)-in-charge, responsible manager, or other compliance supervisor(s) and the work schedule, if known. Koshland shall also include the reason(s) for leaving the prior employment. Koshland shall sign and return to the Board a written consent authorizing the Board or its designee to communicate with all of Koshland's employer(s) and supervisor(s), and authorizing those employer(s) or supervisor(s) to communicate with the Board or its designee, concerning Koshland's work status, performance, and monitoring. Failure to comply with the requirements or deadlines of this condition shall be considered a violation of probation.

Within thirty (30) days of the effective date of this decision, and within fifteen (15) days of Koshland undertaking any new employment, Koshland shall cause (a) his direct supervisor, (b) his pharmacist-in-charge, designated representative-in-charge, responsible manager, or other compliance supervisor, and (c) the owner or owner representative of his employer, to report to the Board in writing acknowledging that

the listed individual(s) has/have read the decision in case number 7147, and terms and conditions imposed thereby. If one person serves in more than one role described in (a), (b), or (c), the acknowledgment shall so state. It shall be Koshland's responsibility to ensure that these acknowledgment(s) are timely submitted to the Board. In the event of a change in the person(s) serving the role(s) described in (a), (b), or (c) during the term of probation, Koshland shall cause the person(s) taking over the role(s) to report to the Board in writing within fifteen (15) days of the change acknowledging that he or she has read the decision in case number 7147, and the terms and conditions imposed thereby.

If Koshland works for or is employed by or through an employment service, Koshland must notify the person(s) described in (a), (b), and (c) above at every entity licensed by the Board of the decision in case number 7147, and the terms and conditions imposed thereby in advance of Koshland commencing work at such licensed entity. A record of this notification must be provided to the Board upon request.

Furthermore, within thirty (30) days of the effective date of this decision, and within fifteen (15) days of Koshland undertaking any new employment by or through an employment service, Koshland shall cause the person(s) described in (a), (b), and (c) above at the employment service to report to the Board in writing acknowledging that he or she has read the decision in case number 7147, and the terms and conditions imposed thereby. It shall be Koshland's responsibility to ensure that these acknowledgment(s) are timely submitted to the Board.

Failure to timely notify present or prospective employer(s) or failure to cause the identified person(s) with that/those employer(s) to submit timely written acknowledgments to the Board shall be considered a violation of probation.

"Employment" within the meaning of this provision includes any full-time, part-time, temporary, relief, or employment/management service position as a registered pharmacist, or any position for which a registered pharmacist license is a requirement or criterion for employment, whether Koshland is an employee, independent contractor or volunteer.

7. Notification of Change(s) in Name, Address(es), or Phone Number(s)

Koshland shall further notify the Board in writing within ten (10) days of any change in name, residence address, mailing address, e-mail address or phone number.

Failure to timely notify the Board of any change in employer, name, address, or phone number shall be considered a violation of probation.

8. Restrictions on Supervision and Oversight of Licensed Facilities

During the period of probation, Koshland shall not serve as a consultant to any entity licensed by the Board. Koshland may be a pharmacist-in-charge, designated representative-in-charge, responsible manager or other compliance supervisor of Pharmacy only. Assumption of any unauthorized supervision responsibilities shall be considered a violation of probation.

9. Reimbursement of Board Costs

As a condition precedent to successful completion of probation, Koshland shall pay to the Board its costs of investigation and prosecution in the amount of $10,000.[26]

Koshland shall be permitted to pay these costs in a payment plan approved by the Board or its designee, so long as full payment is completed no later than one (1) year prior to the end date of probation.

There shall be no deviation from this schedule absent prior written approval by the Board or its designee. Failure to pay costs by the deadline(s) as directed shall be considered a violation of probation.

10. Probation Monitoring Costs

Koshland shall pay any costs associated with probation monitoring as determined by the Board each and every year of probation. Such costs shall be payable to the Board on a schedule as directed by the Board or its designee. Failure to pay such costs by the deadline(s) as directed shall be considered a violation of probation.

11. Status of License

Koshland shall, at all times while on probation, maintain an active, current registered pharmacist license with the Board, including any period during which suspension or probation is tolled. Failure to maintain an active, current registered pharmacist license shall be considered a violation of probation.

[26] This cost recovery is imposed jointly and severally with respect to Pharmacy's cost recovery, as identified below. In other words, Koshland and Pharmacy are jointly and severally liable for a total cost recovery amount of $10,000.

If Koshland's registered pharmacist license expires or is cancelled by operation of law or otherwise at any time during the period of probation, including any extensions thereof due to tolling or otherwise, upon renewal or reapplication Koshland's license shall be subject to all terms and conditions of this probation not previously satisfied.

12. License Surrender While on Probation/Suspension

Following the effective date of this decision, should Koshland cease practice due to retirement or health, or be otherwise unable to satisfy the terms and conditions of probation, Koshland may relinquish his license, including any indicia of licensure issued by the Board, along with a request to surrender the license. The Board or its designee shall have the discretion whether to accept the surrender or take any other action it deems appropriate and reasonable. Upon formal acceptance of the surrender of the license, Koshland will no longer be subject to the terms and conditions of probation. This surrender constitutes a record of discipline and shall become a part of Koshland's license history with the Board.

Upon acceptance of the surrender, Koshland shall relinquish his pocket and/or wall license, including any indicia of licensure not previously provided to the Board within ten (10) days of notification by the Board that the surrender is accepted if not already provided.

Koshland may not reapply for any license from the Board for three (3) years from the effective date of the surrender. Koshland shall meet all requirements applicable to the license sought as of the date the application for that license is submitted to the Board, including any outstanding costs.

13. Practice Requirement – Extension of Probation

Except during periods of suspension, Koshland shall, at all times while on probation, be employed as a registered pharmacist in California for a minimum of 80 hours per calendar month. Any month during which this minimum is not met shall extend the period of probation by one month. During any such period of insufficient employment, Koshland must nonetheless comply with all terms and conditions of probation, unless Koshland receives a waiver in writing from the Board or its designee.

If Koshland does not practice as a registered pharmacist in California for the minimum number of hours in any calendar month, for any reason (including vacation), Koshland shall notify the Board in writing within ten (10) days of the

conclusion of that calendar month. This notification shall include at least: the date(s), location(s), and hours of last practice; the reason(s) for the interruption or reduction in practice; and the anticipated date(s) on which Koshland will resume practice at the required level. Koshland shall further notify the Board in writing within ten (10) days following the next calendar month during which Koshland practices as a registered pharmacist in California for the minimum of hours. Any failure to timely provide such notification(s) shall be considered a violation of probation.

It is a violation of probation for Koshland's probation to be extended pursuant to the provisions of this condition for a total period, counting consecutive and non-consecutive months, exceeding thirty-six (36) months. The Board or its designee may post a notice of the extended probation period on its website.

14. Violation of Probation

If Koshland has not complied with any term or condition of probation, the Board shall have continuing jurisdiction over Koshland, and the Board shall provide notice to Koshland that probation shall automatically be extended, until all terms and conditions have been satisfied or the Board has taken other action as deemed appropriate to treat the failure to comply as a violation of probation, to terminate probation, and to impose the penalty that was stayed. The Board or its designee may post a notice of the extended probation period on its website.

If Koshland violates probation in any respect, the Board, after giving Koshland notice and an opportunity to be heard, may revoke probation and carry out the disciplinary order that was stayed. If a petition to revoke probation or an accusation is filed against Koshland during probation, or the preparation of an accusation or petition to revoke probation is requested from the Office of the Attorney General, the Board shall have continuing jurisdiction and the period of probation shall be automatically extended until the petition to revoke probation or accusation is heard and decided.

15. Completion of Probation

Upon written notice by the Board or its designee indicating successful completion of probation, Koshland's license will be fully restored.

PHARMACY PERMIT AND STERILE COMPOUNDING PERMIT (PHARMACY)

1. Definition: Pharmacy

For the purposes of these terms and conditions, "Pharmacy" shall refer to Koshland Pharmacy, Inc. doing business as Koshland Pharm: Custom Compounding Pharmacy. All terms and conditions stated herein shall bind and be applicable to the licensed premises and to all owners, managers, officers, administrators, members, directors, trustees, associates, or partners thereof. For purposes of compliance with any term or condition, any report, submission, filing, payment, or appearance required to be made by Pharmacy to or before the Board or its designee shall be made by an owner or executive officer with authority to act on behalf of and legally bind the licensed entity.

2. Obey All Laws

Pharmacy shall obey all state and federal laws and regulations.

Pharmacy shall report any of the following occurrences to the Board, in writing, within seventy-two (72) hours of such occurrence:

- an arrest or issuance of a criminal complaint for violation of any provision of the Pharmacy Law, state and federal food and drug laws, or state and federal controlled substances laws;
- a plea of guilty, or nolo contendere, no contest, or similar, in any state or federal criminal proceeding to any criminal complaint, information or indictment;
- a conviction of any crime; or
- discipline, citation, or other administrative action filed by any state or federal agency which involves Pharmacy's permit(s) or which is related to the practice of pharmacy or the manufacturing, obtaining, handling or distributing, billing, or charging for any dangerous drug, and/or dangerous device or controlled substance.

Failure to timely report any such occurrence shall be considered a violation of probation.

3. Report to the Board

Pharmacy shall report to the Board quarterly, on a schedule as directed by the Board or its designee. The report shall be made either in person or in writing, as directed. Among other requirements, Pharmacy shall state in each report under penalty of perjury whether there has been compliance with all the terms and conditions of probation. Failure to submit timely reports in a form as directed shall be considered a violation of probation. Any period(s) of delinquency in submission

of reports as directed may be added to the total period of probation. Moreover, if the final probation report is not made as directed, probation shall be automatically extended until such time as the final report is made and accepted by the Board.

4. Interview with the Board

Upon receipt of reasonable prior notice, Pharmacy shall appear in person for interviews with the Board or its designee, at such intervals and locations as are determined by the Board or its designee. Failure to appear for any scheduled interview without prior notification to Board staff, or failure to appear for two (2) or more scheduled interviews with the Board or its designee during the period of probation, shall be considered a violation of probation.

5. Cooperate with Board Staff

Pharmacy shall timely cooperate with the Board's inspection program and with the Board's monitoring and investigation of Pharmacy's compliance with the terms and conditions of the probation, including but not limited to: timely responses to requests for information by Board staff; timely compliance with directives from Board staff regarding requirements of any term or condition of probation; and timely completion of documentation pertaining to a term or condition of probation. Failure to timely cooperate shall be considered a violation of probation.

6. Reimbursement of Board Costs

As a condition precedent to successful completion of probation, Pharmacy shall pay to the Board its costs of investigation and prosecution in the amount of $10,000.[27]

Pharmacy shall be permitted to pay these costs in a payment plan approved by the Board or its designee, so long as full payment is completed no later than one (1) year prior to the end date of probation.

There shall be no deviation from this schedule absent prior written approval by the Board or its designee. Failure to pay costs by the deadline(s) as directed shall be considered a violation of probation.

7. Probation Monitoring Costs

Pharmacy shall pay any costs associated with probation monitoring as determined

[27] This cost recovery is imposed jointly and severally with respect to Koshland's cost recovery, as identified above. In other words, Koshland and Pharmacy are jointly and severally liable for a total cost recovery amount of $10,000.

by the Board each and every year of probation. Such costs shall be payable to the Board on a schedule as directed by the Board or its designee. Failure to pay such costs by the deadline(s) as directed shall be considered a violation of probation.

8. Status of License

Pharmacy shall, at all times while on probation, maintain a current pharmacy permit and a current sterile compounding permit with the Board. Failure to maintain current licensure shall be considered a violation of probation.

If Pharmacy's license(s) expires or is cancelled by operation of law or otherwise at any time during the period of probation, including any extensions thereof or otherwise, upon renewal or reapplication Pharmacy's license(s) shall be subject to all terms and conditions of this probation not previously satisfied.

9. License Surrender While on Probation/Suspension

Following the effective date of this decision, should Pharmacy wish to discontinue business, Pharmacy may tender the premises license(s) to the Board for surrender. The Board or its designee shall have the discretion whether to grant the request for surrender or take any other action it deems appropriate and reasonable. Upon formal acceptance of the surrender of the license(s), Pharmacy will no longer be subject to the terms and conditions of probation.

Pharmacy may not apply for any new license from the Board for three (3) years from the effective date of the surrender. Pharmacy shall meet all requirements applicable to the license sought as of the date the application for that license is submitted to the Board.

Pharmacy further stipulates that it shall reimburse the Board for its costs of investigation and prosecution prior to the acceptance of the surrender.

10. Sale or Discontinuance of Business

During the period of probation, should Pharmacy sell, trade or transfer all or part of the ownership of the licensed entity, discontinue doing business under the license issued to Pharmacy, or should practice at that location be assumed by another full or partial owner, person, firm, business, or entity, under the same or a different premises license number, the Board or its designee shall have the sole discretion to determine whether to exercise continuing jurisdiction over the licensed location, under the current or new premises license number, and/or carry the remaining period of probation forward to be applicable to the current or new premises license

number of the new owner.

11. Notice to Employees

Pharmacy shall, upon or before the effective date of this decision, ensure that all employees involved in permit operations are made aware of all the terms and conditions of probation, either by posting a notice of the terms and conditions, circulating such notice, or both. If the notice required by this provision is posted, it shall be posted in a prominent place and shall remain posted throughout the probation period. Pharmacy shall ensure that any employees hired or used after the effective date of this decision are made aware of the terms and conditions of probation by posting a notice, circulating a notice, or both. Additionally, Pharmacy shall submit written notification to the Board, within fifteen (15) days of the effective date of this decision, that this term has been satisfied. Failure to timely provide such notification to employees, or to timely submit such notification to the Board shall be considered a violation of probation.

"Employees" as used in this provision includes all full-time, part-time, volunteer, temporary and relief employees and independent contractors employed or hired at any time during probation.

12. Owners and Officers: Knowledge of the Law

Pharmacy shall provide, within thirty (30) days after the effective date of this decision, signed and dated statements from its owners, including any owner or holder of ten percent (10%) or more of the interest in Pharmacy or Pharmacy's stock, and all of its officers, stating under penalty of perjury that said individuals have read and are familiar with state and federal laws and regulations governing the practice of pharmacy. The failure to timely provide said statements under penalty of perjury shall be considered a violation of probation.

13. Premises Open for Business

Pharmacy shall remain open and engaged in its ordinary business as a pharmacy and sterile compounding pharmacy in California for a minimum of 100 hours per calendar month. Any month during which this minimum is not met shall toll the period of probation, i.e., the period of probation shall be extended by one month for each month during with this minimum is not met. During any such period of tolling of probation, Pharmacy must nonetheless comply with all terms and conditions of probation, unless Pharmacy is informed otherwise in writing by the Board or its designee. If Pharmacy is not open and engaged in its ordinary business

as a pharmacy and sterile compounding pharmacy for a minimum of 100 hours in any calendar month, for any reason (including vacation), Pharmacy shall notify the Board in writing within ten (10) days of the conclusion of that calendar month. This notification shall include at minimum all of the following: the date(s) and hours Pharmacy was open; the reason(s) for the interruption or why business was not conducted; and the anticipated date(s) on which Pharmacy will resume business as required. Pharmacy shall further notify the Board in writing with ten (10) days following the next calendar month during which Pharmacy is open and engaged in its ordinary business as a pharmacy and sterile compounding pharmacy in California for a minimum of hours. Any failure to timely provide such notification(s) shall be considered a violation of probation.

14. Posted Notice of Probation

Pharmacy shall prominently post a probation notice provided by the Board or its designee in a place conspicuous to and readable by the public within two (2) days of receipt thereof from the Board or its designee. Failure to timely post such notice, or to maintain the posting during the entire period of probation, shall be considered a violation of probation.

Pharmacy shall not, directly or indirectly, engage in any conduct or make any statement which is intended to mislead or is likely to have the effect of misleading any patient, customer, member of the public, or other person(s) as to the nature of and reason for the probation of the licensed entity.

15. Violation of Probation

If Pharmacy has not complied with any term or condition of probation, the Board shall have continuing jurisdiction over Pharmacy, and probation shall be automatically extended, until all terms and conditions have been satisfied or the Board has taken other action as deemed appropriate to treat the failure to comply as a violation of probation, to terminate probation, and to impose the penalty that was stayed.

If Pharmacy violates probation in any respect, the Board, after giving Pharmacy notice and an opportunity to be heard, may revoke probation and carry out the disciplinary order that was stayed. If a petition to revoke probation or an accusation is filed against Pharmacy during probation, the Board shall have continuing jurisdiction and the period of probation shall be automatically extended until the petition to revoke probation or accusation is heard and decided.

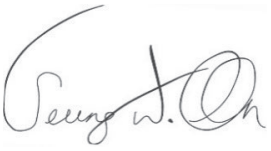
16. Completion of Probation

Upon written notice by the Board or its designee indicating successful completion of probation, Pharmacy's licenses will be fully restored.

This Decision After Rejection shall become effective at 5:00 p.m. on June 5, 2024.

It is so ORDERED on May 6, 2024.

BOARD OF PHARMACY
DEPARTMENT OF CONSUMER AFFAIRS
STATE OF CALIFORNIA

By 

Seung W. Oh, Pharm.D.
Board President

BEFORE THE
BOARD OF PHARMACY
DEPARTMENT OF CONSUMER AFFAIRS
STATE OF CALIFORNIA

In the Matter of the Second Amended Accusation Against:

KOSHLAND PHARMACY, INC. dba KOSHLAND PHARM: CUSTOM COMPOUNDING PHARMACY; PETER HALE KOSHLAND, OWNER,

Sterile Compounding Permit No. LSC 99955

Original Pharmacy Permit No. PHY 50041

and

PETER HALE KOSHLAND,

Registered Pharmacist License No. RPH 51804

Respondents.

Case No. 7147

OAH No. 2022070191

PROPOSED DECISION

Administrative Law Judge Michael C. Starkey, State of California, Office of Administrative Hearings, heard this matter on June 5–9 and 12–15, 2023, via videoconference.

Deputy Attorney General Aspasia A. Papavassiliou represented complainant Anne Sodergren, Executive Officer of the Board of Pharmacy.

Attorney Derek S. Davis represented respondents Koshland Pharmacy Inc., and Peter Koshland, Pharm.D., who was present.

The record was held open for briefing. Complainant submitted an initial closing brief and a reply closing brief which were marked for identification as Exhibits 38 and 39, respectively. Respondents submitted a closing argument brief which was marked for identification as Exhibit LL.

The record closed and the matter was submitted on September 29, 2023.

FACTUAL FINDINGS

Jurisdictional Matters

1. On September 6, 2000, the Board of Pharmacy (Board) issued Registered Pharmacist License Number RPH 51804 to respondent Peter Hale Koshland (Koshland). This license was in full force and effect at all relevant times and is scheduled to expire on June 30, 2024, unless renewed.

2. On September 1, 2009, the Board issued Original Pharmacy Permit Number PHY 50041 to respondent Koshland Pharmacy, Inc. doing business as Koshland Pharm: Custom Compounding Pharmacy (Pharmacy).

3. On June 20, 2014, the Board issued Sterile Compounding Permit Number LSC 99955 to Pharmacy. Both permits were in full force and effect at all relevant times and, as of May 23, 2023, were scheduled to expire on September 1, 2023, unless renewed.

4. Koshland has been the president, 100 percent shareholder, and pharmacist-in-charge (PIC) of Pharmacy at all relevant times.

5. On January 19, 2023, complainant Anne Sodergren issued the original accusation, solely in her capacity as Executive Officer of the Board.

6. Respondents timely filed notices of defense and this proceeding followed.

7. On January 19, 2023, complainant issued the second amended accusation in this matter. At hearing complainant submitted amendments to the second amended accusation. As amended, the second amended accusation is the operative pleading in this matter.

8. Complainant alleges that respondents violated pharmacy law and regulations regarding compounded preparations by (1) failing to perform container closure integrity tests to support extended beyond use dates; (2) failing to conduct stability studies to support extended beyond use dates; (3) using non-identical ingredients and packaging when referencing a study to support extended beyond use dates; (4) compounding and selling adulterated preparations of methylcobalamin by

using an ungraded ingredient; (5) using incorrect specific and essential compounding steps on their master formula/compounding record hybrid document; (6) failing to include the identity and signature of the pharmacist reviewing the final drug preparation on the compounding record under quantitative checks; (7) compounding a drug without listing the manufacturer, lot number, and/or expiration date of each component in the compounding record; (8) failing to assign a beyond use date for five lots of compounded preparations; (9) using incorrect beyond use dates for sterile compounded drug preparations; (10) failing to support assigned beyond use dates; (11) failing to maintain quality of assigned sterile preparations of glutathione by using a raw material which was of undetermined grade; and (12) compounding and selling adulterated preparations of sterile glutathione by using a raw material which was of undetermined grade; and that these alleged facts constitute cause to discipline respondents' pharmacist license and pharmacy and sterile compounding permits. Complainant also seeks costs.

Bulk Drug Substances Primarily at Issue

METHYLCOBALAMIN

9. Methylcobalamin is a synthetic form of Vitamin B-12 taken as a dietary supplement to treat Vitamin B-12 deficiency and anemia. It is also frequently prescribed as an injectable drug preparation for various claimed benefits. Also, the FDA has approved B-12 drugs for injection for certain medical conditions, such as severe anemia. Prescribed methylcobalamin for injection is deemed a dangerous drug under Business and Professions Code section 4022.

GLUTATHIONE

10. Glutathione is a substance made from amino acids and produced by the liver. It is involved in many bodily processes including tissue building and repair, making chemicals and proteins needed in the body, and in the functioning of the immune system. A manufactured version is sold as a dietary supplement and also frequently prescribed as an inhalable or ophthalmic drug preparation by integrative medical practitioners for a range of claimed benefits. Prescribed inhalable or ophthalmic glutathione is deemed a dangerous drug under Business and Professions Code section 4022.

Background and Statutory Framework

11. Compounding is the pharmacy practice of mixing, combining, or altering ingredients. Compounding may involve altering an existing drug product or creating an entirely new drug product. Compounded drugs can serve patients whose clinical needs cannot be met by a drug approved by the federal Food and Drug Administration (FDA). For example, compounding may be used when a patient is allergic to an ingredient in an FDA-approved drug or for children who need a lower strength drug than is commercially available. However, compounded drugs may pose a higher risk to patients because they are not FDA approved and because compounding pharmacies may be exempt from certain manufacturing requirements.

12. Compounded drugs can be made for topical use (including topical creams and eye drops); oral use (such as capsules or tablets intended for oral ingestion); or injectable preparations. Drugs administered orally present less danger to patients from residual contaminants than drugs injected into the human body. Drugs that are ingested orally go through the body's digestive tract which enables the

human body to filter out and excrete some impurities. In contrast, drugs injected into a patient's body bypass the human body's main defense mechanisms to filter out residual impurities. For example, most vitamins and supplements are intended for oral use and are regulated as a food, and not a drug, for this reason. The acceptable levels of contaminants in sterile injectable drug preparations are lower than for topical or oral drugs. All injectable preparations must be sterile for this reason. A sterile injectable drug preparation compounded from non-sterile ingredients is considered a high-risk preparation due to its route of administration. (See Cal. Code Regs., tit. 16, § 1735.1, subd. (v).)

GENERAL REGULATION OF PHARMACY COMPOUNDING

13. Compounded drugs are not approved by the FDA, and the FDA does not review such drugs to evaluate their safety, effectiveness, and quality before they are administered to patients. However, the FDA has a role in approving the ingredients that may be used in compounding human drugs. States are the primary regulators of pharmacists and pharmacies engaged in compounding human drugs. Thus, pharmacists engaged in compounding (sterile or nonsterile) are subject to both federal and state law.

Federal Law

14. In 2012, fungal-contaminated compounded drug products from a compounding pharmacy in New England caused a fungal meningitis outbreak that resulted in numerous deaths and many cases of infection in patients across the United States.

15. This incident was a major impetus for the passage of the Drug Quality and Security Act (DQSA) that was enacted on November 27, 2013. Part I of the DQSA is

called the Compounding Quality Act and made many changes to the Federal Food, Drug and Cosmetic Act (FDCA) (21 U.S. Code, §§ 301 et seq.) in the areas of compounding, drug tracing, and requirements for wholesalers and third-party logistic providers.

16. Under the laws of the United States, the FDA has the sole authority to approve drugs for use in the United States. It is violation of federal law for anyone to introduce or deliver for introduction into interstate commerce any new drug unless the FDA has approved an application filed or an exception applies. (See section 505 (21 U.S.C. § 355).) Generally, each time a drug is compounded, it would be a new drug requiring compliance with all FDCA requirements, including required approval of an application by the FDA which is not practical and would effectively prohibit all compounding of human drugs without an exemption from the new drug approval and certain other requirements in the FDCA.

Section 503A Exemption

17. To ensure that compounding by state-licensed pharmacies is not effectively prohibited by the new drug approval process and other restrictions in the FDCA, Congress passed section 503A (21 U.S.C. § 353a) of the FDCA, that provides an exemption for products compounded by a licensed pharmacist in a state-licensed pharmacy from FDCA requirements related solely to the new drug approval process (section 505), the labeling of drugs with adequate directions for use (section 502(f)(1)) and concerning compliance with current good manufacturing practice (section 501(a)(2)(B)). This section, by its express terms, does not provide an exemption from other unenumerated provisions of the FDCA, including, but not limited to, the prohibition against distribution of adulterated drugs. (See section 301 (21 U.S.C.

§ 331(a)) (prohibiting the introduction of adulterated drugs into interstate commerce)) and section 501 (21 U.S.C. § 351(a)) (defining adulterated).)

18. The section 503A exemption provides that a drug product may be compounded if the licensed pharmacist or licensed physician compounds the drug using bulk substances that: 1) comply with the standards of an applicable United States Pharmacopoeia (USP) or National Formulary (NF) monograph; 2) if such a monograph does not exist, are drug substances that are components of drugs approved by the FDA; or 3) if such a monograph does not exist and the drug substance is not a component of a drug approved by the FDA, the substance appears on a list developed by the FDA. (21 U.S.C. § 353a(b)(1)(A)(i).)

Monographs

19. Monographs provide standards for identity, quality, purity, strength, packaging, and labeling for bulk substances and other ingredients that may be used in compounded preparations. A substance may have multiple monographs with different standards depending on the intended use, such as a dietary monograph and a drug or pharmaceutical grade monograph.

20. No pharmaceutical grade USP or NF monograph exists for methylcobalamin or glutathione. The only USP or NF monographs for these substances are USP dietary grade monographs.

FDA Interim Policy on Compounding Using Bulk Drug Substances Under Section 503A

21. The FDA is in the process of creating a list of Bulk Drug Substances permissible for compounding (503A Bulks List). On June 9, 2021, the Pharmacy

Compounding Advisory Committee (PCAC) recommended the inclusion of methylcobalamin and glutathione in the 503A Bulks List. The FDA is not bound by this recommendation and the FDA's decision is pending.

22. In January 2017, the FDA issued an Interim Policy on Compounding Using Bulk Drug Substances Under section 503A of the Federal Food, Drug, and Cosmetic Act, Draft Guidance for Industry (Interim Policy). Pursuant to this Interim Policy, the FDA is listing substances nominated for inclusion on the 503A Bulks List in one of three categories. The FDA describes bulk drug substances listed in Category 1 as substances that:

> may be eligible for inclusion on the 503A bulks list, were nominated with sufficient supporting information for FDA to evaluate them, and do not appear to present a significant safety risk.

23. Conversely, the FDA describes substances listed in Category 2 as "presenting a significant safety risk pending further evaluation." The FDA describes substances listed in Category 3 as potentially eligible, but nominated with insufficient supporting information.

24. In the Interim Policy, the FDA has stated that it generally does not intend to take enforcement action for compounding using a bulk drug substance that is listed in Category 1 provided that, among other conditions, the drug product is compounded in compliance with all other conditions of section 503A and the FDCA.

25. If a bulk substance does not qualify as an eligible ingredient under section 503A or on Category 1 of the bulk list, then a drug compounded using such an

ingredient is considered a new drug that is not exempt from the new drug approval process or other requirements of the FDCA.

26. In addition to satisfying the requirements of section 503A(b)(1)(A)(i) pertaining to eligible drug ingredients for compounding use, the substances must also comply with the other conditions in section 503A(b)(1). The most important additional conditions at issue in this case are that compounding must use products with an applicable (i.e., pharmaceutical grade) USP or NF monograph if one exists and comply with the USP chapter on pharmacy compounding. (section 503A(b)(1)(B) (codified at 21 U.S.C. § 353a(b)(1)(B).) Thus, under federal law, compounding by pharmacists must be done in compliance with the USP chapter on pharmacy compounding.

27. Both methylcobalamin and glutathione are listed as Category 1 substances under the Interim Policy.

California Law

28. California also has an extensive statutory and regulatory scheme governing compounding by pharmacies. Similar to federal law, Health and Safety Code section 111550, subdivision (a), prohibits the sale, delivery or giving away of a new drug that has not had a new drug application approved under section 505 of the FDCA. Thus, the delivery of a new drug that does not comply with the exemption from section 505 provided in section 503A of the FDCA would violate both federal and state law. Moreover, unlike the FDA, the Board has not issued similar enforcement discretion guidance expanding the list of statutorily eligible drug ingredients.

29. Business and Professions Code section 4126.8 became operative on January 1, 2020. It provides that the compounding of drug preparations by a pharmacy for furnishing in this state shall be consistent with "standards established in the

pharmacy compounding chapters of the current version of the USP." This section also expressly authorizes the Board to adopt "regulations to impose additional standards for compounding drug preparations." Thus, both state and federal law require compounding pharmacies to comply with the USP chapters on compounding.

Relevant USP Standards

30. Drug manufacturers and outsourcing facilities must comply with current good manufacturing practices. Both federal and state law specifically require pharmacists and pharmacies to comply with the applicable USP chapter governing compounding practices in lieu of compliance with current good manufacturing practices. USP has general standards and specific chapters dedicated to sterile compounding (intended for injection) and nonsterile compounding (intended for oral or topical use).

PROHIBITION AGAINST DISTRIBUTION OF ADULTERATED DRUGS

31. In addition to the general overlay of the USP compounding standards and compliance with the section 503A Exemption, both federal and state law have additional specific prohibitions against the distribution of adulterated drugs that apply to all drugs, including compounded drugs prepared by pharmacies operating under the section 503A Exemption.

Federal Law

32. Section 301(a) of the FDCA prohibits, among other things, "[t]he introduction or delivery for introduction into interstate commerce of any food, drug, device, or cosmetic that is adulterated or misbranded." (21 U.S.C. § 331(a).) Section

501(a)(1) and (2) (21 U.S.C. § 351(a)(1) & (2)) of the FDCA define "adulterated" and state, in pertinent part, that:

> A drug or device shall be deemed to be adulterated –
>
> (a) Poisonous, insanitary, etc., ingredients; adequate controls in manufacture
>
> (1) If it consists in whole or in part of any filthy, putrid, or decomposed substance; or
>
> (2) (A) if it has been prepared, packed or held under insanitary conditions whereby it may have been contaminated with filth, or whereby it may have been rendered injurious to health; or (B) if it is a drug and the methods used in, or the facilities or controls used for, its manufacture, processing, packing, or holding do not conform to or are not operated or administered in conformity with current good manufacturing practice to assure that such drug meets the requirements of this chapter as to safety and has the identity and strength, and meets the quality and purity characteristics, which it purports or is represented to possess . . .

33. The section 503A Exemption, by its own terms, does not exempt compounders from compliance with the prohibition against distributing adulterated drugs. Drugs held or produced under insanitary conditions are deemed to be adulterated under federal law even if the drugs qualify for the exemptions set forth in section 503A under the statutory definitions in the FDCA. (section 301(a)(2) of the

FDCA, codified at 21 U.S.C. § 331(a).) One potential insanitary condition is using ingredients that have or may have higher levels of impurities compared to compendial or pharmaceutical grade equivalents. The quality of the starting ingredient must be appropriate for the mode of administration of the final compounded product.

California Law

34. Similar to federal law, California law makes it unlawful for any person to manufacture, sell, deliver, hold or offer for sale any drug that is adulterated. (Health & Saf. Code, §111295.) California law also provides that "[a]ny drug . . . is adulterated if it consists, in whole or part, of any filthy, putrid, or decomposed substance." (Health & Saf. Code, § 111250.) California law also provides that "[a]ny drug or device is adulterated if it has been produced, prepared, packed, or held under conditions where it may have been contaminated with filth, or where it may have been rendered injurious to health." (Health & Saf. Code, § 111255.) Finally, Health & Safety Code section 111260 also provides that:

> Any drug or device is adulterated if the methods, facilities, or controls used for its manufacture, processing, packing or holding do not conform to, or are not operated or administered in conformity with current good manufacturing practice to assure that the drug or device meets the requirements of this part as to safety and has the identity and strength, and meets the quality and purity characteristics that it purports or is represented to possess.

The Board has not further defined the term adulterated.

35. Board regulations also address issues such as quality, beyond use dates, recordkeeping, training and validation processes, end product testing for sterility and pyrogens, quarantine, and furnishing of compounded drugs.

36. Under California law, the designated PIC "shall be responsible for a pharmacy's compliance with all state and federal laws and regulations pertaining to the practice of pharmacy," including compounding. (Bus. & Prof. Code, § 4113, subd. (c).) The Board's sterile compounding regulations define "quality" as "the absence of harmful levels of contaminants, including filth, putrid or decomposed substances, the absence of inactive ingredients other than those listed on the label, and the absence of inactive ingredients other than those listed on the master formula label." (Cal. Code Regs., tit. 16, § 1735.1, subdivision (ae).)

37. On January 11, 2019, the Board sent licensees via email a "Compounding Safety Alert." The email alert stated, in relevant part:

> It has come to the attention of the California State Board of Pharmacy that sterile compounded drug preparations have recently been prepared with a dietary supplement grade ingredient which is NOT intended for use in such preparations. In addition, a sterile compounded preparation that included a currently available dietary supplement of L-Glutathione Reduced, when tested, revealed an endotoxin level 2.5 times higher than the acceptable limit. (California Code Regulations, title 16 (CCR}, section 1751.7.) This resulted in at least six cases of consumer harm.

> In accordance with its consumer protection mandate, the board strongly encourages pharmacies to immediately review their quality assurance and recall policies and procedures to determine if any corrective action is required. (CCR section 1735.8.)
>
> Please note that the label may say that the ingredient may be used for "pharmaceutical compounding," but the caution, indicating "dietary supplement" reflects that the ingredient is only appropriate for compounding OTC products.
>
> Dietary supplements, food grade chemicals, and cosmetic grade ingredients may have as much as 10 times more impurities when compared to pharmaceutical grade standards appropriate for compounding. These impurities can cause patient harm. The pharmacist performing or supervising the compounding has the responsibility to ensure all chemicals, bulk drug substances, drug products, and other components used to make compounding drug preparations are of the appropriate integrity, potency, quality. (CCR section 1735.2.)

Notably, although this email alert specifically mentions glutathione, for which there is no pharmaceutical grade USP or NF monograph, the Board did not state that glutathione (or methylcobalamin) cannot ever be legally or safely compounded into a sterile preparation.

38. On January 23, 2019, the California Pharmacists Association (CPhA) sent a "Compounding SIG Alert" email providing a hyperlink to the Board's January 11, 2019, email alert, and opined that:

> • Glutathione, and other dietary supplements like methylcobalamin, have been used widely in compounded medications. The Board's statement that dietary supplements are not intended for use in compounded medications is false.
>
> • The Board's statement regarding dietary supplements being only appropriate for compounding OTC products is also false. OTC compounding is not allowed by the FDA.
>
> • The recall email that was sent out January 14, 2019 involved one single compounding pharmacy facility and should not have implicated Glutathione generally. CPhA has since requested the Board of Pharmacy to clarify, correct, and/or retract this proclamation.
>
> • There is no state statute or regulation that prohibits compounding of dietary supplements. Furthermore, the FDA has specifically stated in their interim guidance that they do not intend to take regulatory action on pharmacists who compound bulk drug products, if they meet certain conditions. The FDA has decided that compounding dietary supplements is allowable until such a time that it is

expressly prohibited by the publishing of a Final Rule on the matter.

While CPhA supports the Board of Pharmacy enforcing existing compounding statutes and regulations for proper compounded sterile products (CSP), CPhA believes that as long as compounding pharmacists are performing proper endotoxin and pyrogen testing, as reflected in current regulation, and with the current FDA guidance, there is nothing that prohibits sterile compounding of dietary supplements approved on the FDA's Category 1 list of bulk drug substances, including glutathione and methylcobalamin.

CPhA does not believe that the Board's Compounding Safety Alerts were intended to be a de-facto ban on compounding glutathione. Rather, compounding pharmacists should check their quality assurance procedures to ensure operational compliance with all existing laws insofar as proper testing of CSPs. CPhA has asked the Board of Pharmacy to clarify and/or correct its previously-issued Compounding Safety Alerts.

39. Subsequently members of the Board and representatives of the Board have made numerous public statements to the effect that compounding methylcobalamin and glutathione is not prohibited in California and that the Board's priority regarding this issue was to educate, not discipline, pharmacists regarding this developing area of pharmacy practice.

40. The Board has considered proposals to bar Category 1 compounding or otherwise formally preclude the sterile compounding of methylcobalamin and/or glutathione. However, to date the Board has taken no such action.

41. In a disciplinary matter dated March 30, 2023, and styled *In the Matter of the Second Amended Accusation Against: LA VITA COMPOUNDING PHARMACY LLC dba LA VITA COMPOUNDING PHARMACY, and CHRISTINE ANN GIVANT* (*La Vita*), the Board revoked the sterile compounding permit of a pharmacy and placed its pharmacy permit and the pharmacist license of its PIC on probation for four years, primarily based on its sterile compounding of methylcobalamin and/or glutathione, including from the same lot of methylcobalamin ingredient at issue in this matter. Complainant's counsel in this matter reports that the Board was scheduled to discuss whether to designate *La Vita* as a precedential decision, but that discussion has been postponed. As of the date of this proposed decision, no such designation has been applied and *La Vita* does not constitute binding precedent in this matter.

Brief Background of Koshland and Pharmacy

42. Koshland holds a doctoral degree in pharmacy. He has been licensed as a pharmacist in California since 2000. He has completed multiple sterile compounding training programs and more than 250 hours of continuing education on compounding. For the first five years of his career, Koshland worked at a community retail pharmacy. From 2005 through 2009, he worked as a pharmacist and director of a compounding pharmacy. That pharmacy ceased operations due to the 2008 financial crisis and Koshland decided to start his own compounding pharmacy. He has operated Pharmacy since that time. Since 2009, Koshland has also taught as an adjunct professor of clinical pharmacy as the University of California, San Francisco School of Pharmacy.

43. Pharmacy is a compounding pharmacy in San Francisco. Pharmacy has approximately 35 employees, including 5 pharmacists in addition to Koshland, its PIC. Pharmacy has been performing sterile compounding for approximately nine years.

The Expert Witnesses

BOARD INSPECTOR DENISE DUKATZ

44. Denise Dukatz, Pharm.D., has been licensed as a pharmacist in California since 1994. Dukatz worked for four years as a consultant pharmacist, then for approximately 15 years as an inpatient staff pharmacist. During this time Dukatz performed some sterile-to-sterile compounding. Since December 2014, she has worked as an inspector for the Board. In 2017 Dukatz spent four weeks training alongside FDA inspectors. This training included instruction regarding nonsterile to sterile compounding. Since then, Dukatz has also completed several additional trainings related to compounding. As a Board inspector, she conducts investigations and inspections of many types of pharmacies, including those that perform sterile compounding. Dukatz conducted one of the two inspections at issue in this matter and opined that respondents' actions did not comply with various laws and regulations.

BOARD INSPECTOR ALYCE PETRUTIU

45. Alyce Petrutiu holds a bachelor's degree in pharmacy. She has been licensed as a pharmacist in California since 1986. She is also licensed in several other jurisdictions. Since January 2021, Petrutiu has been an inspector for the Board, assigned to the sterile compounding team. For the prior seven years, she was the PIC of a pharmacy that focused on non-sterile compounding. She has training in sterile compounding, but does "not hold herself out as a sterile compounding pharmacist."

Petrutiu conducted one of the two inspections at issue in this matter and opined that respondents' actions did not comply with various laws and regulations.

BOARD INSPECTOR CHRISTINE ACOSTA

46. Christine Acosta, Pharm.D., has been licensed as a pharmacist in California since 2006. Since 2014, she has been the supervising inspector of the Board's sterile compounding team. For three years prior she served as an inspector for the Board. For the three years before that, Acosta worked as a pharmacist for a hospital, and for the five years before that as a pharmacist for a large retail pharmacy. Acosta describes her sterile compounding training as "consistent and ongoing." She attends USP and FDA trainings, and FDA meetings whenever possible. She reviews and helps to draft the Board's implementation of new USP standards that relate to compounding. She oversees the inspection of pharmacies licensed to perform sterile compounding in California. Acosta testified as an expert for complainant, primarily regarding the allegations that respondents' compounding of methylcobalamin and glutathione violated state and federal law and that these preparations were adulterated because respondents used ungraded ingredients.

AMY SUMMERS

47. Amy Summers, Pharm.D., has been licensed as a pharmacist in California since 2007. Summers worked as a community pharmacist for more than three years, including some compounding, mostly non-sterile. From mid-2011 through mid-2012 she worked as compounding pharmacist at a compounding pharmacy. The following year she served as the director of pharmacy operations for another compounding pharmacy, including creating sterile and non-sterile compounding procedures. The following year, Summers was the PIC for a larger pharmacy and overhauled its

non-sterile compounding procedures, oversaw the creation of a new compounding laboratory, and shepherded the pharmacy through accreditation by the Pharmacy Compounding Accreditation Board. From 2016 through 2019, she was the managing director of a section 503B human drug compounding outsourcing facility (which unlike a 503A pharmacy, was required to follow good manufacturing practices). During this time, Summers also began providing pharmacy consulting services, some related to compounding. In September 2020, she began working full-time for a pharmacy regulatory compliance consulting firm. Summers testified as an expert for respondents regarding their compliance with various California laws and regulations.

GUS BASSANI

48. Gus Bassani, Pharm.D. has been licensed as a pharmacist in Iowa since 1996. He is also licensed in Kansas and Texas, but not in California. From 1996 through 2002, Bassani primarily worked in retail pharmacies, including a year and one-half as a compounding pharmacist. Since 2002 he has worked for PCCA, Inc. (PCCA), a large supplier of compounding pharmacy chemicals, equipment, and educational materials. Bassani became director of PCCA's research and development in 2004, and its chief scientific officer in 2019. Since 2010, he has been a member of the USP Compounding Expert Committee. He has participated in the USP's recent revisions to sections related to compounding. Since 2019, he has been a non-voting industry member of the FDA Pharmacy Compounding Advisory Committee. PCCA was one of the companies that nominated both glutathione and methylcobalamin for the FDA's 503A Bulks List. PCCA offers a subscription service to pharmacies, including Pharmacy. Bassani testified on behalf of respondents, primarily regarding USP standards and the status of compounding methylcobalamin and glutathione under federal law and FDA regulation.

ARJUN J. DAY

49. Arjun J. Day, Pharm.D. has been licensed as a pharmacist in Texas since 2007. Day has worked for PCCA in pharmacy compounding throughout his career, first as a consultant pharmacist for two years, then as director of clinical services, and since 2019 as vice president of clinical services. Day regularly makes presentations before regulatory bodies regarding various aspects of pharmacy compounding. Day testified as an expert witness on behalf of respondents, primarily regarding the FDA's Interim Policy on compounding, and consideration for placement on the Bulks List, of methylcobalamin and glutathione.

The August 13, 2020, Inspection

50. On August 13, 2020, Dukatz conducted a renewal inspection for Pharmacy's sterile compounding permit. The inspection subsequently turned into an investigation and Dukatz requested Pharmacy's compounding logs for January 2020 through August 2020. Pharmacy provided the logs on or about September 12, 2020. Dukatz issued an investigation report dated March 10, 2021. She reported several alleged violations, which correspond to the first through ninth causes for discipline (CFD) alleged by complainant in the Second Amended Accusation.

51. Dukatz testified at hearing. Her testimony appeared sincere and forthright. Her percipient testimony was credible in all respects.

The July 21, 2021, Inspection

52. On July 21, 2021, Petrutiu conducted a renewal inspection for Pharmacy's sterile compounding permit. The inspection subsequently turned into an investigation and Petrutiu requested Pharmacy's compounding logs for inhaled or ophthalmic

glutathione for the previous 12 months. Pharmacy provided the logs. Petrutiu issued an investigation report dated October 19, 2021. She reported alleged violations, which correspond to the 10th through 12th CFD alleged by complainant.

53. Petrutiu testified at hearing. Her percipient testimony was credible in all respects.

CFD 1 - NO CONTAINER CLOSURE INTEGRITY TESTS FOR THE 5 ML VIALS USED, TO SUPPORT EXTENDED BEYOND USE DATES

54. A beyond use date (BUD) is the date or time after which a compounded preparation may not be used, stored, or transported. Essentially it is an expiration date. It is calculated from the date or time of compounding. Compounded sterile preparations must be given and labelled with a BUD.

55. For the types of compounded sterile preparations at issue in this proceeding, "in the absence of passing a sterility test in accordance with standards for sterility testing found in Chapter 797" of the USP, the baseline BUD "shall specify that storage and exposure periods cannot exceed 24 hours at controlled room temperature, 3 days at controlled cold temperature, and 45 days in solid frozen state." (Cal. Code Regs., tit. 16, § 1751.8, subd. (c).)

56. A pharmacy may extend the BUD of such a preparation if the extended BUD is supported by a Chapter 797 sterility test and (A) a method suitability test, (B) a container closure integrity test, and (C) stability studies. (Cal. Code Regs., tit. 16, § 1735.2, subd. (i)(3).) The term "stability studies" is not further defined in the regulation. (*Ibid.*)

57. The extended BUD shall not exceed any of the following:

(A) The shortest expiration date or beyond use date of any ingredient in the sterile compounded drug product preparation,

(B) The chemical stability of any one ingredient in the sterile compounded drug preparation,

(C) The chemical stability of the combination of all ingredients in the sterile compounded drug preparation, and

(D) The beyond use date assigned for sterility in section 1751.8.

(Cal. Code Regs., tit. 16, § 1735.2, subd. (i)(2).)

58. Pharmacy dispensed a total of approximately 44 lots of sterile compounded: methylcobalamin, Bi-Mix (a combination of papaverine and phentolamine, primarily used to treat erectile dysfunction), and Tri-Mix (a combination of papaverine, phentolamine, and alprostadil, primarily used to treat erectile dysfunction) from January 1 through September 1, 2020. For each of these lots of compounded preparation, Pharmacy assigned an extended BUD based upon container closure integrity tests that did not include the size of container closure device actually used to dispense the preparations (a 5 ml amber serum vial). Instead, the container closure devices tested included testing of 2 ml and 30 ml vials.

59. In her report and direct testimony, Dukatz opined that such testing was insufficient to extend the BUD of these preparations under California Code of

Regulations, title 16, section 1735.2, subdivision (i)(3)(B). Rather, a test of the size vial actually used was required.

60. However, on cross examination, Dukatz was shown an FDA document titled "GUIDANCE FOR INDUSTRY, Q1A(R2) Stability Testing of New Drugs Substances and Products" which includes the following statement:

> **Bracketing**: The design of a stability schedule such that only samples on the extremes of certain design factors (e.g., strength, package size) are tested at all time points as in a full design. The design assumes that the stability of any intermediate levels is represented by the stability of the extremes tested. Where a range of strengths is to be tested, bracketing is applicable if the strengths are identical or very closely related in composition (e.g., for a tablet range made with different compression weights of a similar basic granulation, or a capsule range made by filling different plug fill weights of the same basic composition into different size capsule shells). Bracketing can be applied to different container sizes or different fills in the same container closure system.

(At p. 16, [emphasis in original].) After reviewing this statement, Dukatz conceded that "it appears" that Pharmacy's bracketed testing of the 2 ml and 30 ml vials was sufficient to satisfy the requirements of the regulation as to use of the 5 ml vials.

CFD 2 - No Appropriate Stability Study to Support Extended Beyond Use Dates

61. From January 1 through September 1, 2020, Pharmacy dispensed 8 lots of methylcobalamin 1000mcg/ml preservative free (PF); eight lots of methylcobalamin 1000mcg/ml injection preserved; 8 lots of Bi-Mix 30mg/0.5mg injection; nine lots of Bi-Mix 30mg/2ml injection; 11 lots of Tri-Mix 10mcg/30mg/1mg/ml injection; 8 lots of Tri-Mix 40mcg/30mg/2mg/ml injection; 11 lots of alprostadil 500 mcg/ml stock solution; and 8 lots of alprostadil 1000 mcg/ml stock solution. For each of these lots of compounded preparations, Pharmacy assigned an extended BUD. Dukatz reviewed stability studies provided by Koshland and determined that they were insufficient to support the extended BUD's, as follows:

62. Pharmacy assigned 90-day BUD's to Bi-Mix and Tri-Mix, on the basis of a PCCA study, even though the PCCA study had concluded that Tri-Mix had a BUD of only 60 days and Pharmacy was not using PCCA ingredients (this latter issue is discussed in Factual Findings 70–73).

63. Koshland reports that the alprostadil solution was merely used as an ingredient in other compounds, but Pharmacy's computer software required it to have its own expiration date. Pharmacy assigned a 180-day BUD to alprostadil so that it would not show up as expired on the compounding record for Tri-Mix. Koshland reports that this alprostadil solution was discarded within six hours if not used as part of a compounded Tri-Mix preparation. This testimony appears credible but was not corroborated by other evidence. Dukatz opined that any compounded preparation must have a BUD, regardless of whether it was intended for use in another compound. Summers opined that this subpart of a compounded preparation is not required to

have its own BUD and therefore no stability study was required but cited no authority for such an exception.

64. Pharmacy assigned a 90-day BUD for methylcobalamin allegedly on the basis of a PCCA Method Validation Report (A1154-A1189), which is not a stability study. Moreover, Pharmacy used methylcobalamin supplied by Medisca, not PCCA.

65. Further, Dukatz reported that Koshland also told her that he was not using the same compounding method as used in certain stability studies. Summers opined that some "tweaks" to a compounding formula might be acceptable.

66. Both Koshland and Summers testified that it is appropriate to rely upon outside studies and scientific literature utilizing the same ingredients. They opined that the law does not require funding a $25,000 study where a reliable stability study exists, just because the pharmacy uses an ingredient from a different manufacturer. They also opined that potency-over-time studies supported the stability study requirement and met the standard of care. However, respondents apparently do not dispute Dukatz's observation that at least one BUD was greater than the supporting study indicated. Dukatz's opinions on these issues are more persuasive and it is found that respondents failed to support their extended BUD's for these preparations with an appropriate stability study.

67. In aggravation, Pharmacy had previously received a correction order in 2017 regarding the lack of stability studies to justify BUD's assigned to compounded, non-sterile to sterile injectables.

68. In mitigation, Dukatz acknowledges that the practice of compounding has changed "so much" over the last two decades and that many practices previously

accepted are no longer considered appropriate. She further opines that respondents have, for the most part, "kept up" with these changes.

69. Relevant to rehabilitation, respondents later funded independent stability studies to support BUD's of compounded products, and the most recent Board inspection of Pharmacy did not include findings of any deficiencies related to stability studies.

CFD 3 - Inappropriate Reliance on Stability Studies Based on Non-Identical Ingredients

70. For each of the lots of compounded preparations referenced in Factual Finding 61, Dukatz reviewed stability studies provided by Koshland and opines that the stability studies used by respondents to justify the extended BUD's were insufficient solely because the studies referenced ingredients from a different manufacturer than the manufacturer of the ingredients actually used (PCCA vs. Medisca).

71. A PCCA "Formula Plus Report" which is a key part of the stability report relied upon by respondents, contains a "blue box warning" on the first page that states that only PCCA chemicals and proprietary bases were used in testing and that:

> Any variations to this formulation, including substitution with a non-PCCA chemical or non-PCCA base, may affect physical integrity, solubility, organoleptic properties or result in potency or content uniformity issues. This type of substitution will cause the assigned BUD to be invalid.

Respondents used non-PCCA ingredients. Dukatz opines that, to extend the BUD for a compounded drug, a pharmacy must use the same ingredients, containers, container

closure system, and compounding formula that were used in the stability study relied upon.

72. Koshland acknowledges that the PCCA studies respondents relied upon have such a blue box warning. He opines that PCCA wants pharmacies to buy their products, but a "USP drug is a USP drug" if it complies with the monograph. He regarded PCCA as a gold standard study. He reports that he felt the "data was reliable" because he used the same drugs, in the same quantities in the finished products. However, he now understands that the Board inspectors disagree. Nevertheless, several years before Dukatz's August 2020 inspection, respondents had already commissioned their own studies, which were completed in 2021 (Bi-Mix) and 2022 (Tri-Mix). He reports that respondents' own studies supported the same extended BUD's as the PCCA studies.

73. Dukatz's opinion on this issue was more persuasive. The PCCA stability studies used by respondents were insufficient to support the extended BUD's.

CFD 4 AND 12 - ADULTERATED PREPARATIONS

74. From January 1, 2020, to September 12, 2020, respondents compounded for sale 16 lots of methylcobalamin by using methylcobalamin from Medisca lot number 155828 as a raw material. The Board, after significant investigative efforts, was able to determine that this ingredient was graded as "JP" (Japanese Pharmacopoeia) by the manufacturer. The certificate of analysis (COA) for this ingredient indicates that the applicable specifications for heavy metals were less than one part per million (ppm) of lead, arsenic, and cadmium, and less than 0.1 ppm of mercury. The COA states that none of those metals were detected, except 0.03 ppm arsenic (3 percent of the specified allowable amount).

75. From August 14, 2020, through July 15, 2021, Pharmacy compounded at least 25,780 ml of non-sterile to sterile glutathione PF 200 mg/ml inhalation solution, in 83 lots, and 20 ml of non-sterile to sterile glutathione 1-percent ophthalmic solution, in one lot, using a raw material which was graded "EP" (European Pharmacopoeia). A photograph taken of the container of this ingredient showed a statement on the label that "further processing and testing required for use in parenteral applications." The Board defines "parenteral" as administered in a manner other than through the digestive tract, but does not include topical, sublingual, rectal, or buccal (held against the inside of cheek) routes of administration. (16 Cal. Code Regs., § 1735.1, subd. (w).) The COA for this ingredient shows that it contains less than 200 ppm of chloride and ammonium, and less than 300 ppm of sulfates. It states that it "complies with standard" and "passes test" regarding "elemental impurities" and "related substances," respectively.

76. Respondents received the Board's January 11, 2019, Compounding Safety Alert, advising pharmacies not to compound sterile drug preparations using dietary grade ingredients, and also warning that dietary supplements, food grade chemicals, and cosmetic grade chemicals may contain as much as 10 times the impurities of pharmaceutical grade ingredients.

77. Koshland reports that in response to this email, he checked all of Pharmacy's sterile compounding ingredients and verified that none were labelled as dietary grade or otherwise indicated it might not be an appropriate grade of chemical. Koshland further notes that Pharmacy had been compounding methylcobalamin for many years, Board inspectors were aware of that and discussed it with him at multiple inspections, yet none ever suggested that he was not permitted to compound sterile

preparations of methylcobalamin based on the lack of a pharmaceutical grade USP monograph for that ingredient.

78. The evidence shows that during the relevant time frame, information from the Board regarding the legality of nonsterile to sterile compounding of methylcobalamin and glutathione or other Category 1 substances was unclear and at times suggested that such compounding was permissible.

79. On August 24, 2020, Koshland, via email communications from Dukatz, first received notice that Board inspectors believed his sterile compounding of methylcobalamin was impermissible, even if the ingredient was not labelled as a dietary grade. In response, respondents immediately stopped sterile compounding of methylcobalamin.

80. Respondents' first notice that Board inspectors believed that their nonsterile to sterile compounding of glutathione was impermissible was during or after Petrutiu's July 21, 2021, inspection. Koshland reports that on the advice of legal counsel, and based upon his perception of patient need, he continued such compounding. However, prior to the hearing of this matter, he ceased such compounding.

81. Complainant contends that the methylcobalamin and glutathione preparations were "adulterated" because: (1) there is no pharmaceutical grade USP monograph for methylcobalamin (only a dietary grade monograph); (2) a grade of JP or EP does not provide legal justification for pharmaceutical use of a drug in the United States; (3) respondents did not know the raw methylcobalamin material was JP grade until after they began using it; and (4) respondents did not obtain a valid COA

from the original manufacturer of the methylcobalamin prior to compounding, in violation of the FDA's Interim Policy.

82. Complainant further argues that:

> the regulation most on point is 21 C.F.R., section 216.23 (d), which says that "Based on evidence currently available, there are inadequate data to demonstrate the safety or efficacy of any drug product compounded using any of the drug substances listed in paragraph (a) of this section, or to establish general recognition of the safety or effectiveness of any such drug product. Any person who represents that a compounded drug made with a bulk drug substance that appears on this list is FDA approved, or otherwise endorsed by FDA generally or for a particular indication, will cause the drug to be misbranded under section 502(a) and/or 502(bb) of the Federal Food, Drug, and Cosmetic Act." If the six approved substances currently in regulation have not been found to be safe or effective, then certainly bulk drug substances in Category 1, which have NOT been approved by the FDA for compounding, cannot have a[n] FDA finding of safety or efficacy.

83. The Board did not perform any testing of the methylcobalamin or glutathione ingredients at issue in this proceeding.

84. Acosta opined that respondents' compounding of methylcobalamin and glutathione did not satisfy any of the requirements of section 503 (set forth in Factual

Finding 18) because neither ingredient is on the 503A Bulks List. Acosta further opines that respondents also did not comply with the FDA's Interim Policy (described in Factual Finding 24) because the methylcobalamin and glutathione used did not meet even a dietary grade. She opined that the Board places no weight on a JP or EP grade.

85. Acosta also points to position papers considered by the PCCA that suggest that these substances should not be included on the Bulk's List, but acknowledges that the PCCA recommended inclusion and the FDA has not yet made a decision.

86. Petrutiu reports that respondents did not perform endotoxin and pyrogen testing on the glutathione, despite the statement suggesting this was necessary in the January 23, 2019, California Pharmacists Association "Compounding SIG Alert" email (see Factual Finding 38). However, Petrutiu testified that she did not think that pyrogen testing was required. She did not opine that endotoxin testing was required. Koshland explained that endotoxin testing is only required to extend the BUD for injectable preparations (the glutathione preparations at issue were intended for inhalation and not intended for injection or ophthalmic administration) and respondents did such testing for all injectable preparations.

87. Complainant further argues that:

> USP Chapter 797 clarifies that compounded sterile preparations are either contaminated or at a high risk to become contaminated if "nonsterile ingredients, including manufactured products not intended for sterile routes of administration (e.g. oral) are incorporated ....." Therefore, the placement of these two substances on the Category 1

> list only allows for the compounding of a final product for the same route of administration as the bulk drug substance; i.e. if the bulk drug substance is dietary grade, then only drugs administered orally may be compounded if all other requirements are met.

Complainant cites no further authority for this conclusion. All ingredients on the Category 1 list have no pharmaceutical grade USP monograph. Complainant contends no other monograph is valid. Complainant does not explain why the FDA's Interim Policy would not specify that only an oral route of administration is permissible for all substances on the Category 1 list, if that were the FDA's intention.

88. Summers opined that a reasonable pharmacist would consider the guidance provided by the Board through 2020 and the FDA's Interim Policy to mean that compounding with Category 1 substances such as methylcobalamin and glutathione is permissible. Summers reports that she compared the USP dietary grade monograph for methylcobalamin to that of the JP monograph and observed that the JP monograph had a "tighter range for assay," therefore she opines that it is a superior standard. Summers opines that respondents' preparations of methylcobalamin and glutathione were not adulterated.

89. Bassani explained that, for "re-packers" (middlemen) of pharmaceutical products, the identity of the original manufacturer is valuable and confidential information, therefore re-packers issue their own COA's, which is the type of COA respondents originally received for the methylcobalamin at issue. He further reports that after a dispute over this issue, the FDA acknowledged to PCCA that it is not required to provide that information, and a COA from the re-packer is acceptable to the FDA. This testimony was unrebutted.

90. Bassani reports that USP Chapter 232 describes the acceptable amounts of elemental impurities in drug substances and products, depending on factors such as the route of administration and daily exposure limits. Bassani reviewed the COA's for the methylcobalamin and glutathione ingredients at issue in this matter. He opines that based on the COA's, impurity levels, dosing levels, and route of administration, these ingredients were significantly below the permitted daily exposure levels set forth in USP Chapter 232.

91. Bassani noted that Category 1 ingredients "by definition" have no USP pharmaceutical grade monograph. He emphasizes that placement on the Category 1 list shows that the FDA regards the ingredient as having no serious safety concerns. He disagrees with Acosta's opinion that JP and EP graded ingredients are "ungraded" for the purpose of use in California. He opines that USP, JP and EP are the three standards considered reputable. He reports that there have been considerable efforts over the years to harmonize these three standards. Bassani points to language in USP Chapter 797 that states:

> NONSTERILE INGREDIENTS AND DEVICES
>
> If any nonsterile components, including containers and ingredients, are used to make a CSP, such CSPs must be high risk. Nonsterile active ingredients and added substances or excipients for CSPs should preferably be official USP or NF articles. When nonofficial ingredients are used, they shall be accompanied by certificates of analysis from their suppliers to aid compounding personnel in judging the identity, quality, and purity in relation to the intended use in a particular CSP. Physical inspection of a

> package of ingredients is necessary in order to detect breaks in the container, looseness in the cap or closure, and deviation from the expected appearance, aroma, and texture of the contents.

Bassani persuasively opines that this shows that the USP contemplates and permits the use of non-sterile ingredients that do not have a USP pharmaceutical monograph in sterile compounding, and the USP relies on the pharmacist's judgment.

92. Overall, Bassani opines that based upon the COA's, the methylcobalamin and glutathione at issue meet the purported pharmacopeia standards (JP and EP, respectively), with "pretty good" testing, including testing for elemental impurities. He opines that these ingredients were of pharmaceutical grade, appropriate for respondents' purported use (injection, inhalation, and ophthalmic), with caveat that respondents had to test the final preparation and stability (which they did).

93. Bassani's opinions are most persuasive on this issue. Complainant cites no authority that compounding with a Category 1 ingredient is per se creating an adulterated compound. The USP expressly contemplates using ingredients that do not conform to a USP pharmaceutical grade monograph. Complainant has not shown that any specific aspect of the ingredients used was impermissibly dangerous or exceeded the daily exposure levels set forth in USP Chapter 232. Complainant did not prove that respondents' preparations of methylcobalamin and glutathione were adulterated.

CFD 5 – INCORRECT COMPOUNDING STEPS

94. Dukatz observed that respondents' records showed that, between January 1 and September 12, 2020, respondents compounded eight lots of methylcobalamin 1000mcg PF, which was supposed to be preservative-free, but they

used a master formula/compounding record hybrid document that incorrectly directed the use of a preservative (benzalkonium chloride) in the preparation. Dukatz opined that this error could possibly lead to patient harm.

95. Koshland acknowledges this error in the formula and reports that it was promptly corrected. He further reports that respondents' logs show that this preservative was never actually added to the preservative-free preparation or dispensed. He explains that respondents' computer system would not allow a technician to add this substance to the preparation because all ingredients must be scanned before added; and although mistakenly in the master formula, the preservative was not in the formula's list of ingredients. Therefore, there was never an actual danger of the preservative being added.

CFD 6 – No Pharmacist Signature

96. Dukatz observed that between January 1 and September 12, 2020, respondents compounded four lots of alprostadil where the line for the identification and signature of the pharmacist reviewing the final drug preparation on the compounding record under "quantitative checks" was left blank.

97. Koshland reports that these lots of alprostadil were compounded as part of sub formulas for Tri-Mix. He opines that only the final dispensed compound requires a validating signature.

98. Summers reviewed another copy of respondents' records for the four lots of alprostadil which contains pharmacists' signatures. Respondents contend this copy is the "electronic final copy of the compounding log" and blame restrictions related to the COVID-19 "lockdown" for the discrepancy. Complainant argues that a pharmacy

may only have "one official compounding log, per California Code of Regulations, title 16, section 1735.3, subdivision (a)(2)."

99. "Preparation" means a drug or nutrient compounded in a licensed pharmacy; the preparation may or may not be sterile." (Cal. Code Regs., tit. 16, § 1735.1, subd (z).) Respondents have not cited authority that the signature requirement only applies to dispensed preparations. Pharmacy software programs used to maintain electronic documents like compounding logs may present difficult challenges to the pharmacy using such software, but the evidence in this matter shows that respondents' compounding logs, as they presented them to Dukatz for inspection, impermissibly lacked the pharmacist's name and signature.

100. In mitigation, this is a minor, technical violation with no significant risk of patient harm.

CFD 7 – No Manufacturer, Expiration Date, and/or Lot Number Information

101. Based on records provided to her by respondents, Dukatz observed that between January 1 and September 12, 2020, respondents compounded eight lots of medication that did not list the manufacturer, lot number, or expiration date of the ingredient alprostadil in the compounding record. Again, respondents later produced records that contain the required information, and the violation appears related to difficulties with their computer software.

CFD 8 – No Documentation of Beyond Use Date

102. Based on records provided to her by respondents, Dukatz observed that between January 1 and September 12, 2020, respondents compounded the following

five lots of medications for which the compounding record lacked documentation of an assigned BUD: methylcobalamin 1,000 mcg/ml with preservative and preservative-free; Bi-Mix (Papaverine HCl/Phentolamine 30mg/0.5mg/ml); alprostadil 1000 mcg/ml stock solution injectable; alprostadil 500 mcg/ml stock solution injectable; and Tri-Mix (PGE1/Papaverine HCl/Phentolamine 10mcg/30mg/1mg/ml).

103. Again, respondents later produced records that contain the required BUD information and the violation appears related to difficulties with their computer software.

CFD 9 – Incorrect Beyond Use Date

104. Based on records provided to her by respondents, Dukatz observed that between January 1 and September 12, 2020, respondents compounded 19 lots of alprostadil stock solutions using a master formula stating that the BUD was 180 days. This extended BUD was not supported by a stability study.

105. As discussed above, Koshland explained that these lots of alprostadil were compounded as part of sub formulas for Tri-Mix. Respondents do not keep alprostadil as a stock solution or independently dispense it. They only compound it as a one of the ingredients in Tri-Mix. Koshland reports that the computer software used by respondents requires entry of an expiration date for the alprostadil, but the instructions for use on this sub formula compounded product clearly states "Note: This formula should be used within 6 hours for specific sterile formula(s). All remainder should be discarded after 6 hours." Again, Koshland opines that only the final dispensed product requires an expiration date. Complainant does not contend that the BUD assigned to the finished Tri-Mix preparation made with the alpostradil was erroneous.

106. In her report, Summers opined that since the alprostadil was used as a sub formula of the Tri-Mix preparation, it was appropriate to give the alprostadil a BUD to match the final Tri-Mix preparation.

107. Respondents provide no authority for the claim that only dispensed preparations require an extended BUD to be supported with a stability study, but in mitigation this violation appears merely technical and there is no evidence that respondents' procedure was unsafe.

CFD 10 – Failure to Support Assigned BUD's

108. Based on respondents' records, Petrutiu found that they failed to support extended BUD's as follows:

A. From May 4 to July 15, 2021, respondents compounded at least 4,580 ml of non-sterile to sterile Tri-Mix, in 27 lots, and assigned a BUD of 60 days without using identical packaging as the drug preparations tested and studied and without evidence of the compounded drug preparations being identical in specific and essential compounding steps to the drug preparations tested and studied.

B. From May 20 to July 16, 2021, respondents compounded at least 1,520 ml of non-sterile to sterile Bi-Mix, in eight lots, and assigned a BUD of 90 days without first having a container closure integrity test and without evidence of the compounded drug preparations being identical in specific and essential compounding steps to the drug preparations tested and studied.

C. From August 14, 2020, to April 20, 2021, respondents compounded at least 21,420 ml of non-sterile to sterile glutathione 200 mg/ml inhalation solution, in 68 lots, and assigned a BUD of 90 days without first having method suitability test, container closure integrity test, and stability studies. Petrutiu reports that the study referenced by respondents was completed on April 28, 2021, and thus post-dated the compounding. She also reports that respondents used the study to justify a 90-day BUD, but the study only supported a 60-day BUD. She reports that after April 20, 2021, respondents reduced the BUD for this preparation to 60 days and she believes that is an appropriate BUD going forward.

109. Each of these three contentions are partially based upon the belief that respondents' container closure integrity studies were inadequate because they did not test the exact size vial used in compounding. However, as discussed in Factual Findings 60, the studies permissibly utilized a bracketing technique. This criticism was unfounded.

110. Regarding the first two of these three claims, Koshland reports that respondents were using the identical compounding steps as used in the referenced stability study, and he does not know why they failed to provide this information to Petrutiu.

111. Regarding the second claim, Koshland reports that he later secured a copy of the container closure study from PCCA and provided a copy to Petrutiu to show that respondents followed the same steps used in the study.

112. Neither Summers nor Koshland provided a coherent defense to the third contention regarding using the stability study to justify a 90-day BUD when it only supported a 60-day BUD. It appears that Summers opines that respondents were relying on PCCA studies prior to the completion of their own study, but there is no evidence that respondents were using PCCA ingredients; therefore these studies are not sufficient support for the extended BUD's, as discussed in Factual Findings 70 through 73.

113. Except as to the contention that respondents lacked sufficient container closure integrity tests, the violations alleged in CFD 10 were proven.

CFD 11 – Failure to Maintain Quality of Assigned Sterile Preparations

114. As to respondents' nonsterile to sterile compounded preparations of glutathione only, complainant alleges that respondents violated California Code of Regulations, title 16, sections 1735.1, subdivision (ae), and 1735.2, subdivision (g), in that they failed to maintain quality of sterile preparations because they used a non-FDA approved glutathione ingredient for sterile compounding. This contention was not proven, for all the reasons set forth in Factual Findings 74 through 93.

Disciplinary Considerations

115. On October 2, 2019, the Board issued Citation No. CI 2108 81041 to Pharmacy for varying from a prescription in violation of California Code of Regulations, title 16, section 1716. Between January 11 and July 5, 2018, Pharmacy filled eight prescriptions with fludrocortisone instead of fluticasone. The citation, which did not assess a fine or order abatement, is final.

116. On October 2, 2019, the Board issued Citation No. CI 2019 95726 to Koshland for failing to follow compounding policies and procedures in violation of California Code of regulations, title 16, section 1735.5 (see Factual Finding 67). The citation assessed a $2,500.00 fine, which Koshland paid, and is final.

117. On September 6, 2022, the Board issued Pharmacy's sterile compounding permit a Written Notice that it was in violation of USC 353a(b)(1)(A), for compounding glutathione 200mg/ml inhalation solution . . . using an active ingredient, [the grade of which] was unable to be determine[d] beyond the classification 'EP'."

118. On July 20, 2022, Petrutiu conducted another inspection of Pharmacy. She observed only one minor issue that required an action item. This was the failure of Pharmacy to provide the results of surface sampling tests in the "buffer rooms." This oversight was promptly remedied. Petrutiu observed no problems related to the allegations in this proceeding, except that, at that time, respondents were still compounding glutathione for inhalation.

Respondent's Additional Evidence

119. A City of Berkeley Fire Department Captain testified regarding the need for nebulized glutathione to remove toxins absorbed by firefighters. He reports that such treatments have helped him and that glutathione gives firefighters like him "hope" they may not die of cancer related to their duties.

ADDITIONAL EXPERT TESTIMONY

120. Jennifer Reigle, N.D., has been licensed as a naturopathic doctor in California for seven years. She has a clinical practice in Santa Rosa. She prescribes nebulized glutathione in the course of her practice via a licensed physician, who

oversees her prescriptions. Dr. Reigle reports that this compounded drug is an important tool to remove toxins and repair damage from oxidated free radicals, especially from firefighters exposed to smoke. She also opines that it is helpful for other lung problems such as cystic fibrosis and post-COVID-19 asthma. Until recently she acquired nebulized glutathione from Pharmacy. She knows of no other source in California. She also prescribes injectable glutathione, which she acquires from another source. Her opinions regarding the effectiveness of glutathione are based on her clinical observations and a small clinical trial she is conducting (with no control group), which was still in progress at the time of hearing. Dr. Reigle appears to sincerely believe that glutathione is a critical treatment and preventative therapy. She acknowledges that these beliefs are not at this time supported by peer-reviewed studies and she admits that she has not tried FDA-approved alternative treatments such as acetylcysteine (brand name Mucomyst) which she describes as a precursor of glutathione.

121. Simon Barker, N.D., has been licensed as a naturopathic doctor in California for 20 years. He has a primary care practice in Pasadena. Dr. Barker reports that he has treated hundreds of patients with injectable methylcobalamin. He views methylcobalamin as an important alternative for patients who do not respond to other therapies for neurodegenerative diseases such as amyotrophic lateral sclerosis (also known as ALS or Lou Gehrig's disease), but also for peripheral neuropathies. He reports no knowledge of side effects. He reports that since Pharmacy stopped compounding methylcobalamin, some of his patients have used other therapies, and some have gone out of state to acquire compounded methylcobalamin. Dr. Barker does not know of another source of injectable methylcobalamin in California.

122. Respondents' evidence shows that there are medical practitioners and patients in California who sincerely believe that methylcobalamin and glutathione are critical treatments and who believe that preventing the 503A compounding of these substances will likely result in the inability of patients to access these treatments in California. These issues are not central to the allegations in this proceeding and neither the safety nor clinical effectiveness (or lack thereof) of these treatments were established. Likewise, it is not clear from the evidence whether California patients would be able to access these drugs if 503A compounding of them ceases.

PETER KOSHLAND

123. Koshland's testimony was credible in all respects. Koshland appeared knowledgeable and conscientious. Respondents and the Board's enforcement team have a difference of opinion regarding the propriety of nonsterile to sterile compounding of methylcobalamin and glutathione, but the evidence shows that Koshland and Pharmacy are likely to accept the Board's decision on these issues and operate Pharmacy safely and in compliance with the law going forward.

Costs

124. In connection with the investigation and enforcement of this accusation, complainant requests an award of costs in the total amount of $75,547.25, comprised of $40,598.50 in investigative costs and $34,948.75 for attorney and paralegal services provided by the Department of Justice and billed to the Board. That request is supported by declarations that comply with the requirements of California Code of Regulations, title 1, section 1042. Those costs are found to be reasonable.

LEGAL CONCLUSIONS

Burden and Standard of Proof

1. The parties agree that complainant is required to prove cause for discipline of Koshland's registered pharmacist license by "clear and convincing proof to a reasonable certainty" (clear and convincing evidence). (See *Ettinger v. Board of Medical Quality Assurance* (1982) 135 Cal.App.3d 853, 856; Bus. & Prof. Code, § 23.7 [all subsequent statutory references are to the Business and Professions Code, unless otherwise stated].)

2. The parties disagree as to the applicable standard of proof regarding Pharmacy's original pharmacy and sterile compounding permits. Complainant contends it is only required to prove the allegations against Pharmacy by a preponderance of the evidence and respondents contend the standard of proof is clear and convincing evidence. Generally, that determination depends on the amount of education, training, or work entailed in obtaining the license at issue. (See *San Benito Foods v. Veneman* (1996) 50 Cal.App.4th 1889, 1892-95.).

3. Respondents cite two Board decisions, one that was designated as precedential (*In the Matter of the Accusation Against Pacifica Pharmacy; Thang Tran.* (*Pacifica*), Case No. 3802, OAH No. 2011010644., p.35:22, p.36:23-26 (August, 2013). Respondents accurately observe that, in the *Pacifica* decision, the Board applied the clear and convincing evidence standard to allegations against the pharmacy's permit as well as to the pharmacist's license. However, it did so with no discussion of any potential distinction between the applicable standards, based on the type of license or permit.

4. Complainant argues that a pharmacy permit and sterile compounding permit do not require the requisite education, training, or work to qualify as a professional license and therefore the preponderance standard is appropriate. Complainant responds to respondents' reliance on *Pacifica* with a citation to the Board's decision styled *In the Matter of the Accusation Against IV Solutions, Inc.* (*IV Solutions*), Case No. 3606, OAH No. 2011050988, pp.39–40, also designated a precedential decision. In *IV Solutions*, the Board expressly contemplated the standard of proof applicable to a pharmacist license and pharmacy permit and concluded that a pharmacy permit does not require the education, training, or testing requirements to constitute a professional license and the preponderance standard applies. *IV Solutions* is more recent and more fully addressed this issue than *Pacifica*. As a precedential decision it constitutes binding authority on the undersigned. The clear and convincing evidence standard is applied to the allegations against Koshland, and a preponderance standard is applied to the allegations against Pharmacy's pharmacy and sterile compounding permits.

5. The differing standards of proof did not impact the factual findings because all factual findings in this proposed decision that support discipline of any of the licenses or permits at issue were established by clear and convincing evidence and the evidence for the allegations that were not proven constituted less than a preponderance of the evidence.

First Alleged Cause for Discipline (No Container Closure Integrity Tests)

6. The Board may discipline the license or permit of a licensee who commits unprofessional conduct, including violating any federal or California law or regulation governing pharmacy. (§ 4301, subds. (j) and (o).) Complainant alleges that respondents

violated California Code of Regulations, title 16, section 1735.2, subdivision (i)(3)(B), by failing to perform container closure integrity tests with the container actually used in the final preparations (5 ml amber serum vial) to support extended BUD's for specified lots of Methylcobalamin, Bi-Mix, and Tri-Mix. At hearing, when shown an FDA guidance document stating that bracketing is an acceptable practice for container closure integrity testing, Dukatz conceded that respondents' bracketed testing of the 2 ml and 30 ml vials was sufficient to satisfy the requirements of the regulation as to use of the 5 ml vials. (Factual Finding 60.) Cause does not exist to discipline respondents' registered pharmacist license or original pharmacy or sterile compounding permits under section 4301, subdivisions (j) or (o), for failure to perform container closure integrity tests with the size of container actually used for dispensing final preparations.

Second Cause for Discipline (No Stability Studies)

7. Complainant alleges that respondents violated subdivisions (j) and (o) by failing to use appropriate stability studies to support extended BUD's, in violation of California Code of Regulations, title 16, section 1735.2, subdivision (i)(3)(C), when it dispensed 8 lots of methylcobalamin 1000mcg/ml PF; 8 lots of methylcobalamin 1000mcg/ml injection preserved; 8 lots of Bi-Mix 30mg/0.5mg injection; nine lots of Bi-Mix 30mg/2ml injection; 11 lots of Tri-Mix 10mcg/30mg/lmg/ml injection; eight lots of Tri-Mix 40mcg/30mg/2mg/ml injection; 11 lots of alprostadil 500 mcg/ml stock solution; and 8 lots of alprostadil 1000 mcg/ml stock solution. This allegation was proven. (Factual Finding 66.) Cause exists to discipline respondents' license and permits under section 4301, subdivisions (j) and (o), for failure to use appropriate stability studies to justify extended BUD's for these preparations.

Third Cause for Discipline (Inappropriate Reliance on Stability Studies Based on Non-Identical Ingredients)

8. Complainant alleges that respondents' extended BUD's for these same lots of compounded preparations also lacked the support of appropriate stability studies based solely on their use of non-identical ingredients and packaging (those of a different manufacturer) than those used in the referenced stability studies, which contain a warning that such use would invalidate any extended BUD. Cause exists to discipline respondents' license and permits under section 4301, subdivisions (j) and (o), for failure to use appropriate stability studies to justify extended BUD's for these preparations, based on Factual Finding 73.

Fourth and Twelfth Alleged Causes for Discipline (Adulterated Preparations)

9. Complainant seeks to discipline respondents' license and permits for unprofessional conduct under section 4301, subdivisions (j) and/or (o), for compounding and selling adulterated preparations in violation of section 4169, subdivision (a)(2) (prohibition against selling adulterated drugs), and Health and Safety Code sections 111250 (definition of adulterated), 111255 (further definition of adulterated), and/or 111295 (prohibition against selling adulterated drugs), and/or 501(a)(2)(A) of the Federal Food Drug and Cosmetic Act (21 U.S.C. 351(a)(2)(A)) (federal definition of adulterated), based on the allegation that respondents compounded 16 lots of injectable methylcobalamin, 83 lots of non-sterile to sterile glutathione inhalation solution, and one lot of non-sterile to sterile glutathione 1-percent ophthalmic solution, using a raw material that was of an "undetermined grade."

10. Prior to hearing, respondents moved to strike the fourth and twelfth causes for discipline based on the contentions that no state law violation could be proven and enforcement of the applicable federal law was preempted. Respondents cite *Nexus Pharmaceuticals, Inc. v. Central Admixture Pharmacy Services, Inc.* (*Nexus*) (9th Cir. 2022) 48 F.4th 1040. In *Nexus*, the Ninth Circuit considered a drug manufacturer's claim against a network of compounding pharmacies that their sale of ephedrine sulfate pre-loaded into ready-to-use syringes violated state laws prohibiting sale of drugs not approved by FDA. The *Nexus* court held that the FDCA includes a prohibition on private enforcement: all proceedings to enforce or restrain violations of the FDCA must be "by and in the name of the United States," except for certain proceedings by state governments. (*Id.* at 1044; see 21 U.S.C.A. § 337.) The *Nexus* court further held that although the plaintiff had pled its claim under state laws (laws prohibiting the sale of drugs that are not FDA-approved), the claim was preempted by the FDCA bar against private actions and by implied preemption. Respondents argue that complainant in this action is essentially attempting to enforce this federal law, and is similarly barred by the doctrine of preemption from imposing discipline on this basis.

11. Under the California Constitution, article III, section 3.5, subdivision (c), an administrative agency (and by extension the undersigned) has no power to "declare a statute unenforceable, or to refuse to enforce a statute on the basis that federal law or federal regulations prohibit the enforcement of such statute unless an appellate court has made a determination that the enforcement of such statute is prohibited by federal law or federal regulations." In this matter, a state agency is attempting to discipline its licensees for violating a state statute that prohibits selling adulterated preparations. The causes for discipline additionally cite the federal definition of "adulterated," but they cannot fairly be considered solely an attempt to enforce the

FDCA. The *Nexus* opinion is further inapposite as it only considered preemption in the context of an action by one private party versus another, not a state agency attempting to discipline its own licensees. *Nexus* does not constitute an appellate court determination that complainant's attempt to enforce the statutes cited in the fourth and twelfth causes for discipline is preempted. Whether it could be proven that respondents' preparations were adulterated under state law was an issue of fact, not appropriate for determination in a motion to dismiss. The motion to dismiss the fourth and twelfth alleged causes for discipline is denied.

12. Regarding the merits of these causes for discipline, complainant did not prove that these preparations of methylcobalamin and glutathione were adulterated. (Factual Finding 93.) Cause does not exist to discipline respondents' license or permits under section 4301, subdivisions (j) or (o), for selling adulterated preparations.

Fifth Cause for Discipline (Incorrect Compounding Steps)

13. Complainant seeks to discipline respondents' license and permits under section 4301, subdivisions (j) and/or (o), for using a master formula/compounding record that incorrectly directed the use of a preservative in a compound that was supposed to be preservative-free. A drug preparation shall not be compounded until the pharmacy has first prepared a written master formula document that includes, among other things, the "[s]pecific and essential compounding steps used to prepare the drug." (Cal. Code Regs., tit. 16, § 1735.2, subd. (e)(5).) This allegation was proven. (Factual Finding 94-95.) Cause exists to discipline respondents' license and permits under section 4301, subdivisions (j) and (o), for violation of California Code of Regulations., title 16, section 1735.2, subdivision (e)(5).

Sixth Cause for Discipline (No Pharmacist Signature)

14. Complainant seeks to discipline respondents' license and permits under section 4301, subdivisions (j) and/or (o), for failing to include the identity and signature of the pharmacist reviewing the final drug preparation on the compounding record under quantitative checks, in violation of California Code of Regulations, title 16, section 1735.3, subdivision (a)(2)(D). This allegation was proven. (Factual Finding 99.) Cause exists to discipline respondents' license and permits under section 4301, subdivisions (j) and (o), for violation of California Code of Regulations, title 16, section 1735.3, subdivision (a)(2)(D).

Seventh Cause for Discipline (No Manufacturer, Expiration Date, and/or Lot Number Information)

15. Complainant seeks to discipline respondents' license and permits under section 4301, subdivisions (j) and/or (o), for compounding a drug without listing the manufacturer, lot number, and expiration date of each component, in violation of California Code of Regulations, title 16, section 1735.3, subd. (a)(2)(F). This allegation was proven. (Factual Finding 101.) Cause exists to discipline respondents' license and permits under section 4301, subdivisions (j) and (o), for violation of California Code of Regulations, title 16, section 1735.3, subdivision (a)(2)(D).

Eighth Cause for Discipline (No Documentation of Beyond Use Date)

16. Complainant seeks to discipline respondents' license and permits under section 4301, subdivisions (j) and/or (o), for failing to assign a BUD for all compounded preparations, in violation of California Code of Regulations, title 16, section 1735.3, subdivision (a)(2)(H). This allegation was proven. (Factual Finding 102.) Cause exists to

discipline respondents' license and permits under section 4301, subdivisions (j) and (o), for violation of California Code of Regulations, title 16, section 1735.3, subdivision (a)(2)(H).

Ninth Cause for Discipline (No Documentation of Beyond Use Date)

17. Complainant seeks to discipline respondents' license and permits under section 4301, subdivisions (j) and/or (o), for incorrect BUD's for sterile compounded drug preparations, in violation of California Code of Regulations, title 16, section 1751.8, subdivision (c). This allegation was proven. (Factual Findings 104-07.) Cause exists to discipline respondents' license and permits under section 4301, subdivisions (j) and (o), for violation of California Code of Regulations, title 16, section 1751.8, subdivision (c).

Tenth Cause for Discipline (Failure to Support Assigned Beyond Use Date)

18. Complainant seeks to discipline respondents' license and permits under section 4301, subdivisions (j) and/or (o), for failing to support assigned BUD's, in violation of California Code of Regulations, title 16, section 1735.2, subdivision (i). Except as to the contention that respondents lacked sufficient container closure integrity tests, these alleged violations were proven. (Factual Findings 108 and 113.) Cause exists to discipline respondents' license and permits under section 4301, subdivisions (j) and (o), for violation of California Code of Regulations, title 16, section 1735.2, subdivision (i).

Eleventh Alleged Cause for Discipline (Failure to Maintain Quality of Assigned Sterile Preparations)

19. Complaint seeks to discipline respondents' license and permits under section 4301, subdivisions (j) and/or (o), for failing to maintain quality of assigned sterile preparations, in violation of California Code of Regulations, title 16, section 1735.1, subdivision (ae), and 1735.2, subdivision (g), because they used a non-FDA approved glutathione ingredient for sterile compounding. This allegation was not proven. (Factual Finding 114.) Cause does not exist to discipline respondents' license and permits under section 4301, subdivisions (j) or (o), for violation of California Code of Regulations, title 16, section 1735.1, subdivision (ae), and 1735.2, subdivision (g).

Determination of Discipline

20. Cause for discipline having been established, the remaining issue is what level of discipline is required to protect the public. (§ 4001.1.) Factors to be considered include: 1. actual or potential harm to the public; 2. actual or potential harm to any consumer; 3. prior disciplinary record, including level of compliance with disciplinary order(s); 4. prior warning(s), including but not limited to citation(s) and fine(s), letter(s) of admonishment, and/or correction notice(s); 5. number and/or variety of current violations; 6. nature and severity of the act(s), offense(s) or crime(s) under consideration; 7. aggravating evidence; 8. mitigating evidence; 9. rehabilitation evidence; 10. compliance with terms of any criminal sentence, parole, or probation; 11. time passed since the act(s) or offense(s); 12. whether the conduct was intentional or negligent or demonstrated incompetence; and 13. financial benefit to the respondent from the misconduct. (Disciplinary Guidelines at p. 3.) Respondents argue for a dismissal of this proceeding or, at most, a public reproval. Complainant argues for outright revocation, based on the assumption that the adulteration causes for

discipline were proven and respondents continued to compound unlawful nonsterile to sterile glutathione after being informed by Petrutiu that it was impermissible.

21. The allegations proven against respondents in this proceeding are predominantly technical violations. No complaint was received. No patient harm was shown. None of the violations evidence bad faith, incompetence, or any general inability or lack of willingness to act lawfully. Several are apparently the result of software difficulties. But for the adulteration claims that were ultimately not proven, it appears likely that this matter would have been resolved without license discipline. All the violations have been remedied. A 2022 inspection yielded only a minor concern that was not related to the allegations proven in this proceeding. In aggravation, respondents received a correction order in 2017 regarding the lack of appropriate stability studies and citations in 2019. In mitigation, the standards for compounding have changed much over the last decades and respondents have generally done a good job of staying abreast of these changes. The Board's Disciplinary Guidelines recommend a minimum of revocation, stayed, with a two-year period of probation for the least serious category of violations, but the Guidelines expressly provide for lesser forms of discipline. Respondents had to engage legal counsel and prepare for and participate in nine days of hearing. Koshland and his Pharmacy appear likely to operate Pharmacy safely and in compliance with the law going forward. A public reproval is sufficient to protect the public safety.

Costs

22. A licensee who is found to have committed a violation of the licensing act may be ordered to pay a sum not to exceed the reasonable costs of investigation and enforcement. (§ 125.3.) Cause exists to order respondents to pay the Board's costs

in the amount of $75,547.25. (Factual Finding 124 & Legal Conclusions 7, 8, and 13-18.)

23. Cost awards must not deter licensees with potentially meritorious claims from exercising their right to an administrative hearing. (*Zuckerman v. State Board of Chiropractic Examiners* (2002) 29 Cal.4th 32, 45.) Cost awards must be reduced where a licensee has been successful at hearing in getting the charges dismissed or reduced; a licensee is unable to pay; or where the scope of the investigation was disproportionate to the alleged misconduct. (*Ibid.*) The agency must also consider whether the licensee has raised a colorable challenge to the proposed discipline, and a licensee's good faith belief in the merits of his or her position. (*Ibid.*) Respondents successfully defended 4 of 12 alleged causes for discipline in their entirety and portions of others. The adulteration allegations defended by respondents were by far the most serious allegations and accounted for a disproportionate amount of this proceeding. Accordingly, pursuant to *Zuckerman*, the award of costs will be reduced from $75,547.25 to $10,000.

ORDER

1. It is hereby ordered that a public reproval be issued against Registered Pharmacist License Number RPH 51804, issued to Peter Hale Koshland.

2. It is hereby ordered that a public reproval be issued against Original Pharmacy Permit Number PHY 50041, issued to Koshland Pharmacy, Inc. doing business as Koshland Pharm: Custom Compounding Pharmacy.

3. It is hereby ordered that a public reproval be issued against Sterile Compounding Permit Number LSC 99955, issued to Koshland Pharmacy, Inc. doing business as Koshland Pharm: Custom Compounding Pharmacy.

4. Respondents are required to report these reprovals as a disciplinary action.

5. Respondents Peter Hale Koshland and Koshland Pharmacy, Inc. doing business as Koshland Pharm: Custom Compounding Pharmacy are jointly and severally liable to pay the Boards costs of investigation and enforcement in the total amount of $10,000.

DATE: 11/01/2023

MICHAEL C. STARKEY
Administrative Law Judge
Office of Administrative Hearings

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BEFORE THE
BOARD OF PHARMACY
DEPARTMENT OF CONSUMER AFFAIRS
STATE OF CALIFORNIA

In the Matter of the Accusation Against: **KOSHLAND PHARMACY, INC. DBA KOSHLAND PHARM: CUSTOM COMPOUNDING PHARMACY; PETER HALE KOSHLAND, OWNER** **301 Folsom Street, Suite B** **San Francisco, CA 94105** **Sterile Compounding Permit No. LSC 99955** **Original Pharmacy Permit No. PHY 50041,** **and** **PETER HALE KOSHLAND** **301 Folsom Street, Suite B** **San Francisco, CA 94105** **Registered Pharmacist License No. RPH 51804** Respondents.	Case No. 7147 OAH No. 2022070191 **SECOND AMENDED** **ACCUSATION**

PARTIES

1. Anne Sodergren (Complainant) brings this Second Amended Accusation solely in her official capacity as the Executive Officer of the Board of Pharmacy, Department of Consumer Affairs.

2. On or about June 20, 2014, the Board of Pharmacy issued Sterile Compounding Permit Number LSC 99955 to Koshland Pharmacy, Inc. doing business as Koshland Pharm: Custom Compounding Pharmacy (Respondent Pharmacy), with Peter Hale Koshland as Owner. The Sterile Compounding Permit was in full force and effect at all times relevant to the charges brought in this Accusation and will expire on September 1, 2023, unless renewed.

3. On or about September 1, 2009, the Board of Pharmacy issued Original Pharmacy Permit Number PHY 50041 to Respondent Pharmacy. The Original Pharmacy Permit was in full force and effect at all times relevant to the charges brought in this Accusation and will expire on September 1, 2023, unless renewed.

4. On or about September 6, 2000, the Board of Pharmacy issued Registered Pharmacist License Number RPH 51804 to Peter Hale Koshland (Respondent Pharmacist). The registered pharmacist license was in full force and effect at all times relevant to the charges brought in this Accusation and will expire on June 30, 2024, unless renewed.

JURISDICTION

5. This Accusation is brought before the Board of Pharmacy (Board), Department of Consumer Affairs, under the authority of the following laws. All section references are to the Business and Professions Code (Code) unless otherwise indicated.

6. Section 4300 of the Code states, in pertinent part:

> (a) Every license issued may be suspended or revoked.
>
> (b) The board shall discipline the holder of any license issued by the board, whose default has been entered or whose case has been heard by the board and found guilty, by any of the following methods:
>
> (1) Suspending judgment.
>
> (2) Placing him or her upon probation.
>
> (3) Suspending his or her right to practice for a period not exceeding one year.
>
> (4) Revoking his or her license.
>
> (5) Taking any other action in relation to disciplining him or her as the board in its discretion may deem proper.

7. Section 4300.1 of the Code states:

> The expiration, cancellation, forfeiture, or suspension of a board-issued license by operation of law or by order or decision of the board or a court of law, the placement of a license on a retired status, or the voluntary surrender of a license by a licensee shall not deprive the board of jurisdiction to commence or proceed with any investigation of, or action or disciplinary proceeding against, the licensee or to render a decision suspending or revoking the license.

8. Section 4307 of the Code states:

> (a) Any person who has been denied a license or whose license has been revoked or is under suspension, or who has failed to renew his or her license while it was under suspension, or who has been a manager, administrator, owner, member, officer, director, associate, partner, or any other person with management or control of any partnership, corporation, trust, firm, or association whose application for a license has been denied or revoked, is under suspension or has been placed on probation, and while acting as the manager, administrator, owner, member, officer, director, associate, partner, or any other person with management or control had knowledge of or knowingly participated in any conduct for which the license was denied, revoked, suspended, or placed on probation, shall be prohibited from serving as a manager, administrator, owner, member, officer, director, associate, partner, or in any other position with management or control of a licensee as follows:
>
> (1) Where a probationary license is issued or where an existing license is placed on probation, this prohibition shall remain in effect for a period not to exceed five years.
>
> (2) Where the license is denied or revoked, the prohibition shall continue until the license is issued or reinstated.
>
> (b) "Manager, administrator, owner, member, officer, director, associate, partner, or any other person with management or control of a license" as used in this section and Section 4308, may refer to a pharmacist or to any other person who serves in such capacity in or for a licensee.
>
> (c) The provisions of subdivision (a) may be alleged in any pleading filed pursuant to Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of the Government Code. However, no order may be issued in that case except as to a person who is named in the caption, as to whom the pleading alleges the applicability of this section, and where the person has been given notice of the proceeding as required by Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of the Government Code. The authority to proceed as provided by this subdivision shall be in addition to the board's authority to proceed under Section 4339 or any other provision of law.

9. Section 4113, subdivision (c), of the Code states that the pharmacist-in-charge shall be responsible for a pharmacy's compliance with all state and federal laws and regulations pertaining to the practice of pharmacy.

STATUTORY PROVISIONS

10. Section 4301 of the Code states, in pertinent part:

> The board shall take action against any holder of a license who is guilty of unprofessional conduct or whose license has been issued by mistake. Unprofessional conduct shall include, but is not limited to, any of the following:
>
> . . .
>
> (j) The violation of any of the statutes of this state, of any other state, or of the United States regulating controlled substances and dangerous drugs.
>
> . . .
>
> (o) Violating or attempting to violate, directly or indirectly, or assisting in or abetting the violation of or conspiring to violate any provision or term of this chapter or of the applicable federal and state laws and regulations governing pharmacy, including regulations established by the board or by any other state or federal regulatory agency.
>
> . . .

11. Section 4169 of the Code states, in pertinent part:

(a) A person or entity shall not do any of the following:

. . .

(2) Purchase, trade, sell, or transfer dangerous drugs that the person knew or reasonably should have known were adulterated, as set forth in Article 2 (commencing with Section 111250) of Chapter 6 of Part 5 of Division 104 of the Health and Safety Code.

12. Health and Safety Code section 111250 states that any drug or device is adulterated if it consists, in whole or in part of any filthy, putrid, or decomposed substance.

13. Health and Safety Code section 111255 states that any drug or device is adulterated if it has been produced, prepared, packed, or held under conditions whereby it may have been contaminated with filth, or whereby it may have been rendered injurious to health.

14. Health and Safety Code section 111295 states that it is unlawful for any person to manufacture, sell, deliver, hold or offer for sale any drug or device that is adulterated.

15. Section 501(a)(2)(A) of the Federal Food, Drug and Cosmetic Act (21 U.S.C. 351(a)(2)(A)) states that a drug or device shall be deemed to be adulterated if it has been prepared, packed, or held under insanitary conditions whereby it may have been contaminated with filth, or whereby it may have been rendered injurious to health.

REGULATORY PROVISIONS

16. California Code of Regulations, title 16, section 1735.1 states, in pertinent part:

. . .

(a)(e)"Quality" means the absence of harmful levels of contaminants, including filth, putrid, or decomposed substances, the absence of active ingredients other than those listed on the label, and the absence of inactive ingredients other than those listed on the master formula document.

17. California Code of Regulations, title 16, section 1735.2 states, in pertinent part:

. . .

(e) A drug preparation shall not be compounded until the pharmacy has first prepared a written master formula document that includes at least the following elements:

. . .

(5) Specific and essential compounding steps used to prepare the drug.

. . .

(g) "Compounding Aseptic Isolator (CAI)" means a form of isolator specifically designed for non-hazardous compounding of pharmaceutical ingredients or preparations while bathed with unidirectional HEPA-filtered air. It is designed to maintain an aseptic compounding environment within the isolator throughout the compounding and material transfer processes. Air exchange into the isolator from the surrounding environment should not occur unless the air has first passed through a microbial retentive filter (HEPA minimum) system capable of containing airborne concentrations of the physical size and state of the drug being compounded. Air within the CAI shall not be recirculated nor turbulent.

(h) All chemicals, bulk drug substances, drug products, and other components used for drug compounding shall be stored and used according to compendia and other applicable requirements to maintain their integrity, potency, quality, and labeled strength.

. . .

(i) Every compounded drug preparation shall be given a beyond use date representing the date or date and time beyond which the compounded drug preparation should not be used, stored, transported or administered, and determined based on the professional judgment of the pharmacist performing or supervising the compounding.

. . .

(3) For sterile compounded drug preparations, extension of a beyond use date is only allowable when supported by the following:

(A) Method Suitability Test,

(B) Container Closure Integrity Test, and

(C) Stability Studies

(4) In addition to the requirements of paragraph three (3), the drugs or compounded drug preparations tested and studied shall be identical in ingredients, specific and essential compounding steps, quality reviews, and packaging as the finished drug or compounded drug preparation.

. . .

(l) Packages of ingredients, both active and inactive, that lack a supplier's expiration date are subject to the following limitations:

(1) such ingredients cannot be used for any non-sterile compounded drug preparation more than three (3) years after the date of receipt by the pharmacy.

(2) such ingredients cannot be used for any sterile compounded drug preparation more than one (1) year after the date of receipt by the pharmacy.

18. California Code of Regulations, title 16, section 1735.3 states, in pertinent part:

(a) For each compounded drug preparation, pharmacy records shall include:

. . .

(2) A compounding log consisting of a single document containing all of the following:

. . .

(D) The identity of the pharmacist reviewing the final drug preparation.

. . .

(F) The manufacturer, expiration date and lot number of each component. If the manufacturer name is demonstrably unavailable, the name of the supplier may be substituted. If the manufacturer does not supply an expiration date for any component, the records shall include the date of receipt of the component in the pharmacy, and the limitations of section 1735.2, subdivision (l) shall apply.

. . .

(H) The beyond use date or beyond use date and time of the final compounded drug preparation, expressed in the compounding document in a standard date and time format.

19. California Code of Regulations, title 16, section 1751.8, states, in pertinent part:

> In conformity with and in addition to the requirements and limitations of section 1735.2, subdivision (h), every sterile compounded drug preparation shall be given and labeled with a beyond use date that does not exceed the shortest expiration date or beyond use date of any ingredient in sterile compounded drug preparation, nor the chemical stability of any one ingredient in the sterile compounded drug preparation, nor the chemical stability of the combination of all ingredients in the sterile compounded drug preparation, and that, in the absence of passing a sterility test in accordance with standards for sterility testing found in Chapter 797 of the United States Pharmacopeia - National Formulary (USP37-NF32) Through 2nd Supplement (37th Revision, Effective December 1, 2014), hereby incorporated by reference, that would justify an extended beyond use date, conforms to the following limitations:
>
> . . .
>
> (c) The beyond use date shall specify that storage and exposure periods cannot exceed 24 hours at controlled room temperature, 3 days at controlled cold temperature, and 45 days in solid frozen state, where the sterile compounded drug preparation is compounded solely with aseptic manipulations using non-sterile ingredients, regardless of intervening sterilization of that ingredient and the following applies:
>
> (1) The preparation is compounded entirely within an ISO Class 5 PEC located in an ISO Class 7 cleanroom with an ante-area or compounded entirely within a CAI which meets the requirements in 1751.4(f)(1)-(3).

COST RECOVERY

20. Section 125.3 of the Code states, in pertinent part, that the Board may request the administrative law judge to direct a licentiate found to have committed a violation or violations of the licensing act to pay a sum not to exceed the reasonable costs of the investigation and enforcement of the case.

DRUGS

21. Cobalamin (Vitamin B12), is a group of 4 substances, or vitamers, that include cyanocobalamin, hydroxocobalamin, adenosylcobalamin, and methylcobalamin. Cobalamin is required for integrity of myelin, neuronal function, proper red blood cell formation and DNA synthesis. Cobalamin is an essential nutrient which is not synthesized in humans and therefore must be obtained by dietary intake or supplementation. Methylcobalamin is the active form of cobalamin (vitamin B12) which helps in synthesis of methionine and s-adenosylmethionine.

A. Cobalamin is created by bacteria and can only be found naturally in animal products; however, synthetic forms are widely available as dietary supplements and added to many foods such as packaged cereals products. Methylcobalamin occurs naturally in foods such as fish, meat, eggs and milk. It is currently marketed as a dietary ingredient in dietary supplements capsules and tablets (1 mg and 5 mg).

B. Cyanocobalamin and hydroxocobalamin are FDA approved commercially available injectable cobalamin products approved to treat at least Addisonian (pernicious) anemia, malabsorption of vitamin B12, inadequate secretion of intrinsic factor, inadequate utilization of vitamin B12, and folic acid deficiency. Injectable methylcobalamin is not FDA approved and has not been showed to treat any disease or disorder.[1]

22. "Tri-Mix" is a drug combination marketed for erectile dysfunction and is a dangerous drug under Business and Professions Code section 4022, with no FDA-approved indications for its use. It consists of Papaverine HCL; Phentolamine Mesylate; and Prostaglandin E1 (PGE1, or Alpostradil).

23. "Bi-Mix" is a drug combination marketed for erectile dysfunction and is a dangerous drug under Business and Professions Code section 4022, with no FDA-approved indications for its use. It consists of Papaverine HCL and Phentolamine Mesylate.

24. Glutathione in an ophthalmic solution and Glutathione for nebulization, marketed as anti-oxidants, are dangerous drugs under Business and Professions Code section 4022, with no FDA-approved indications for their use.

INTRODUCTION

25. This case is about the compounding of prescription drugs, including those designated for sterile administration, in a pharmacy. Pharmacy compounding is when a licensed pharmacist combines, mixes, or alters drug ingredients to create a medication tailored to the needs of an individual patient. (e.g., Cal. Code Regs., tit. 16, § 1735.) Compounding is a form of drug

[1] At its Pharmacy Compounding Advisory Committee (PCAC) meeting on June 9, 2021, the FDA concluded that there was no need for pharmacies to be compounding methylcobalamin: "Based on the information the Agency has considered in balancing the four evaluation factors, the lack of effectiveness data and safety data for use of injectable products in patients *weighs against* methylcobalamin being added to the 503A Bulks list." (FDA Briefing Document, at page 355.)

manufacturing subject to the drug manufacturing requirements of the Federal Food, Drug, and Cosmetic Act (FDCA) [21 U.S.C. § 301 et seq.]. Compounding in a pharmacy as a form of drug manufacturing is permitted under federal law by section 503A of the FDCA [21 U.S.C. § 353a].

26. The Food and Drug Administration (FDA) oversees drug manufacturing, but does not license pharmacies or pharmacists, nor control when or how their licenses permit compounding. The states issue these licenses, and have primary jurisdiction. The states also set compounding standards that complement FDA standards for compounding as a form of drug manufacturing.

27. California law authorizes the Board to treat violations of federal statutes regulating controlled substances and dangerous drugs, as well as federal laws and regulations governing pharmacy practice, as grounds for discipline. (Bus. & Prof. Code, § 4301, subds. (j), (o).)

28. Among the federal law requirements for pharmacy compounding is that bulk drug substances used for compounding: (1) must comply with the standards of an applicable United States Pharmacopeia (USP) or National Formulary (NF) monograph, if a monograph exists, and the USP chapter on pharmacy compounding; (2) if such a monograph does not exist, must be components of drugs already otherwise approved by the Secretary; or (3) if such a monograph does not exist and the substance is not a component of a drug approved by the Secretary, must appear on a list promulgated in regulation by the Secretary. (21 U.S.C. § 353a(b)(1)(A)(i).) Each bulk drug substance must also be manufactured by an FDA registrant, and be accompanied by a valid certificate of analysis from the manufacturer. (21 U.S.C. § 353a(b)(1)(A)(ii) and (iii).)

29. Under both federal and California law, *any* manufactured drug, including a pharmacy compound, must not be "adulterated" by containing "any filthy, putrid, or decomposed substance" *or* by having been "prepared, packed, or held under insanitary conditions whereby it *may have* been contaminated with filth, or whereby it *may have* been rendered injurious to health." (21 U.S.C. § 351(a)(1) and (a)(2)(A) [definitions of "adulterated"] (emphasis added); 21 U.S.C. § 331(a), (b), (c) [adulterated drug prohibition]; Health & Saf. Code, §§ 11250, 11255 [definitions of "adulterated"] (emphasis added); Health & Saf. Code, § 11295 [adulterated drug prohibition].)

30. Compounds may be either "non-sterile" or "sterile," depending on the intended route of drug administration. Sterile drugs are those intended for parenteral administration (i.e., other than through the digestive system), including injectables and ophthalmic or inhalation drugs in aqueous format. It is important that these drugs be sterile and uncontaminated, because they bypass some of the body's natural defenses against pathogens and impurities.

31. California law allows all licensed pharmacists to compound *non-sterile* drug products in licensed pharmacies. (e.g., Bus. & Prof. Code, §§ 4037, 4051, 4110.) All compounding must be consistent with standards in the pharmacy compounding chapters of the current version of the United States Pharmacopeia-National Formulary (USP-NF), including relevant testing and quality assurance standards. (Bus. & Prof. Code, § 4126.8.) The Pharmacy Law also contains additional standards that supplement the USP-NF standards. (*Id.*; see, e.g., Bus. & Prof. Code, §§ 4126.10, 4127 *et seq*., 4128 *et seq*., 4129 *et seq*., Cal. Code Regs., tit. 16, §§ 1735 *et seq*., 1751 *et seq*.)

32. An additional specialty license is required before any licensed pharmacy is allowed to compound *sterile* drug products. (Bus. & Prof. Code, § 4127 *et seq*.) And particular regulatory requirements apply to preparation, maintenance, and distribution of sterile drug products. (Cal. Code Regs., tit. 16, § 1751 *et seq.*; see also Cal. Code Regs., tit. 16, § 1735 *et seq*.) Each sterile compounding pharmacy must be inspected prior to each annual renewal of a sterile compounding license to ensure compliance with all compounding and sterile compounding requirements. (Bus. & Prof. Code, § 4127.1, subd. (c).) Out-of-state sterile compounding pharmacies must also have this specialty license, and are also annually inspected. (Bus. & Prof. Code, § 4127.2, subd. (c).) All of this demonstrates the attention and resources devoted to sterile drug compounding. This is because of the unique risks posed by sterile drug products. In 2012, for instance, a contaminated sterile drug compound was widely distributed, and caused a nationwide fungal meningitis outbreak, killing 64 people and causing infections in almost 800

others who received the drug. [2]

33. Many or all of the bulk drug substances at issue in this case have not met the requirements of federal section 503A, e.g.: they are not the subject of an applicable USP or NF drug monograph, are not a component of a drug already approved by the FDA, and are not on the permissible "503A bulks list" identified by the FDA in regulation; they were not received from FDA-registered manufacturing sites; and/or they were not accompanied by a proper certificate of analysis. Many or all of the bulk drug substances at issue in this case are further questionable for reasons including that they were not intended by the manufacturers (i.e., they were not "graded") for use in pharmaceutical products, let alone sterile compounds. Some were graded for dietary use, a quite different standard. Some were graded for topical use. Some were not graded at all.

34. Lastly, some of the bulk drug substances at issue in this case have been included on a list of bulk drug substances identified by the FDA as "Category 1." Over the last several years, the FDA has engaged in a process to receive and review nominations for bulk drug substances to appear on the "503A bulks list" developed by the Secretary via regulation under the third option identified above: bulk drug substances appropriate for section 503A compounding that are neither the subject of an applicable USP or NF drug monograph nor a component of an approved drug. This "503A bulks list" is codified at 21 C.F.R. § 216.23(a). It so far includes only six (6) bulk drug substances approved for use in section 503A compounding,[3] and four (4) disapproved.[4] Accordingly, only those six (6) bulk drug substances listed in this regulation are approved for use in compounding under section 503A.[5] *Any other* bulk drug substance that is not the subject of an applicable USP or NF drug monograph, or a component of an approved drug, cannot be used.

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[2] In 2012, for instance, a contaminated sterile drug compound involving methylprednisone, used for epidural steroid injections, was widely distributed by the New England Compounding Center and caused a nationwide fungal meningitis outbreak, killing more than 100 people and causing infections in almost 800 others.

[3] (1) Brilliant Blue G, aka Coomassie Brilliant Blue G–250; (2) Cantharidin (topical use only); (3) Diphenylcyclopropenone (topical use only); (4) N–acetyl–D–glucosamine (topical use only); (5) Squaric acid dibutyl ester (topical use only); and (6) Thymol iodide (topical use only).

[4] (1) Oxitriptan; (2) Piracetam; (3) Silver Protein Mild; and (4) Tranilast.

[5] Even this approval for use in compounding is expressly limited by subdivision (d):

35. The FDA has received hundreds of nominations for bulk drug substances to be added to this "503A bulks list." While they are under consideration, nominated bulk drug substances are placed into one of three categories, depending on the amount of information/documentation received along with the nomination, and whether it presents a significant safety risk.

36. The FDA has said that bulk drug substances included in "Category 1" are those that *may be eligible* for inclusion on the "503A bulks list," were nominated with sufficient supporting information for the FDA to evaluate them, and do not appear to present significant safety risks.

37. However, bulk drug substances included on the Category 1 list have not been approved by the FDA for use in compounding under section 503A. By definition, bulk drug substances on this list are not the subject of an applicable USP or NF drug monograph, are not components of FDA-approved drugs, and have not been added to the "503A bulks list." They are therefore not deemed appropriate for use in compounding by the FDA under section 503A.

38. In January 2019, the Board issued Compounding Safety Alerts about the use of inappropriate ingredients to compound sterile injectable drugs and strongly encouraged sterile compounding pharmacies to immediately review their quality assurance and recall policies and procedures to determine if any corrective action was required. The Board noted that dietary supplements, food grade chemicals, and cosmetic grade ingredients could have as many as ten times the impurities when compared to pharmaceutical grade ingredients, increasing the risk of patient harm. On February 1, 2019, the FDA warned compounders not to use a dietary grade bulk substance from a particular manufacturer to compound sterile injectable drugs for patients due to its higher levels of endotoxins, and generally warned against using dietary grade bulk substances.

> (d) Based on evidence currently available, there are inadequate data to demonstrate the safety or efficacy of any drug product compounded using any of the drug substances listed in paragraph (a) of this section, or to establish general recognition of the safety or effectiveness of any such drug product. Any person who represents that a compounded drug made with a bulk drug substance that appears on this list is FDA approved, or otherwise endorsed by FDA generally or for a particular indication, will cause the drug to be misbranded under section 502(a) and/or 502(bb) of the Federal Food, Drug, and Cosmetic Act. (21 C.F.R. § 216.23(d).) In other words, no resulting compound is "FDA-approved."

39. In this case, Respondents have engaged in significant compounding of drug products intended for sterile administration. In numerous instances, they have done so utilizing active pharmaceutical ingredients (APIs) received as bulk drug substances. In many or all cases, they have taken non-sterile bulk drug substances and used them to create compounded preparations intended for sterile administration. Non-sterile to sterile compounding is the most high-risk, and warrants extra precautions, including end-product sterilization and testing. And the quality of the components used in sterile compounding is important. But Respondents have repeatedly used bulk drug substances that have either or both (a) not met the requirements of section 503A, and/or (b) not been graded for pharmaceutical use. The resulting compounds are "adulterated" drug products.

FACTUAL BACKGROUND

40. A sterile compounding renewal inspection of Respondent Pharmacy by the Board on or about August 13, 2020, found that Respondents violated pharmacy laws and regulations regarding compounded preparations (First through Ninth Causes for Discipline). A sterile compounding renewal inspection of Respondent Pharmacy by the Board on or about July 21, 2021, found further violations (Tenth through Twelfth Causes for Discipline).

FIRST CAUSE FOR DISCIPLINE

(No Container Closure Integrity Tests)

41. Respondent Pharmacy has subjected its sterile compounding permit and its original pharmacy permit to discipline, and Respondent Pharmacist has subjected his registered pharmacist license to discipline, for unprofessional conduct under Code section 4301, subdivisions (j) and/or (o), in that they failed to perform container closure integrity tests to support extended beyond use dates, in violation of California Code of Regulations, title 16, section 1735.2, subdivision (i)(3)(B). From on or about January 1, 2020, to on or about September 1, 2020, Respondents used extended beyond use dates on non-sterile to sterile compounded drugs without having performed a container closure integrity test with the container closure device used at the time (5-ml amber serum vial) to justify the extended beyond use dates for eight lots of Methylcobalamin 1000mcg/ml injection preserved; eight lots of Bi-Mix

30mg/0.5mg injection; nine lots of Bi-Mix 30mg/2ml injection; 11 lots of Tri-Mix 10mcg/30mg/lmg/ml injection; and eight lots of Tri-Mix 40mcg/30mg/2mg/ml injection.

SECOND CAUSE FOR DISCIPLINE

(No Stability Studies)

42. Respondent Pharmacy has subjected its sterile compounding permit and its original pharmacy permit to discipline, and Respondent Pharmacist has subjected his registered pharmacist license to discipline, for unprofessional conduct under Code section 4301, subdivisions (j) and/or (o), in that Respondents failed to conduct stability studies to support extended beyond use dates, in violation of California Code of Regulations, title 16, section 1735.2, subdivision (i)(3)(C). From on or about January 1, 2020, to on or about September 1, 2020, Respondents used extended beyond use dates on non-sterile to sterile compounded drugs without having performed stability studies justify the extended beyond use dates for eight lots of Methylcobalamin 1000mcg/ml Preservative Free (PF); eight lots of Methylcobalamin 1000mcg/ml injection preserved; eight lots of Bi-Mix 30mg/0.5mg injection; nine lots of Bi-Mix 30mg/2ml injection; 11 lots of Tri-Mix 10mcg/30mg/lmg/ml injection; eight lots of Tri-Mix 40mcg/30mg/2mg/ml injection; 11 lots of Alprostadil 500 mcg/ml stock solution; and eight lots of Alprostadil 1000 mcg/ml stock solution.

THIRD CAUSE FOR DISCIPLINE

(Non-Identical Ingredients)

43. Respondent Pharmacy has subjected its sterile compounding permit and its original pharmacy permit to discipline, and Respondent Pharmacist has subjected his registered pharmacist license to discipline, for unprofessional conduct under Code section 4301, subdivisions (j) and/or (o), in that Respondents used non-identical ingredients and packaging when referencing a study to support extended beyond use dates, in violation of California Code of Regulations, title 16, section 1735.2, subdivision (i)(4). From on or about January 1, 2020, to on or about September 1, 2020, Respondents used non-identical ingredients and packaging to justify extended beyond use dates for eight lots of Methylcobalamin 1000mcg/ml PF; eight lots of Methylcobalamin 1000mcg/ml injection preserved; eight lots of Bi-Mix 30mg/0.5mg injection;

nine lots of Bi-Mix 30mg/2ml injection; 11 lots of Tri-Mix 10mcg/30mg/lmg/ml injection; eight lots of Tri-Mix 40mcg/30mg/2mg/ml injection; 11 lots of Alprostadil 500 mcg/ml stock solution; and eight lots of Alprostadil 1000 mcg/ml stock solution.

FOURTH CAUSE FOR DISCIPLINE

(Adulterated Preparations)

44. Respondent Pharmacy has subjected its sterile compounding permit and its original pharmacy permit to discipline, and Respondent Pharmacist has subjected his registered pharmacist license to discipline, for unprofessional conduct under Code section 4301, subdivisions (j) and/or (o), in that Respondents compounded and sold adulterated preparations, in violation of Code section 4169, subdivision (a)(2), and Health and Safety Code sections 111250, 111255, and/or 111295, and/or 501(a)(2)(A) of the Federal Food Drug and Cosmetic Act (21 U.S.C. 351(a)(2)(A)). From on or about January 1, 2020, to on or about September 12, 2020, Respondents compounded for sale sixteen lots of Methylcobalamin by using a raw material (Methylcobalamin from Medisca lot number 155828) which was an ungraded ingredient

FIFTH CAUSE FOR DISCIPLINE

(Incorrect Compounded Steps)

45. Respondent Pharmacy has subjected its sterile compounding permit and its original pharmacy permit to discipline, and Respondent Pharmacist has subjected his registered pharmacist license to discipline, for unprofessional conduct under Code section 4301, subdivisions (j) and/or (o), in that Respondents used incorrect specific and essential compounding steps on their master formula/compounding record hybrid document, in violation of California Code of Regulations, title 16, section 1735.2, subdivision (e)(5). From on or around January 1, 2020 to September 12, 2020, Respondents compounded eight lots of Methylcobalmin 1000mcg PF, which was supposed to be preservative-free, but they used a master formula/compounding record hybrid document incorrectly directing the use of a preservative (benzalkonium chloride) in the preparation.

SIXTH CAUSE FOR DISCIPLINE

(No Pharmacist Signature)

46. Respondent Pharmacy has subjected its sterile compounding permit and its original pharmacy permit to discipline, and Respondent Pharmacist has subjected his registered pharmacist license to discipline, for unprofessional conduct under Code section 4301, subdivisions (j) and/or (o), in that Respondents failed to include the identity and signature of the pharmacist reviewing the final drug preparation on the compounding record under quantitative checks, in violation of California Code of Regulations, title 16, section 1735.3, subdivision (a)(2)(D). From on or about January 1, 2020, to on or about September 12, 2020, Respondents compounded four lots of Alprostadil where there the line for the identification and signature of the pharmacist reviewing the final drug preparation on the compounding record under quantitative checks was left blank.

SEVENTH CAUSE FOR DISCIPLINE

(No Manufacturer Information)

47. Respondent Pharmacy has subjected its sterile compounding permit and its original pharmacy permit to discipline, and Respondent Pharmacist has subjected his registered pharmacist license to discipline, for unprofessional conduct under Code section 4301, subdivisions (j) and/or (o), in that Respondents compounded a drug without listing the manufacturer of each component, in violation of California Code of Regulations, title 16, section 1735.3, subd. (a)(2)(F). From on or about January 1, 2020, to on or about September 12, 2020, Respondents compounded eight lots of medication that did not list the manufacturer of the ingredient Alprostadil in the compounding record.

EIGHTH CAUSE FOR DISCIPLINE

(No Documentation of Beyond Use Date)

48. Respondent Pharmacy has subjected its sterile compounding permit and its original pharmacy permit to discipline, and Respondent Pharmacist has subjected his registered pharmacist license to discipline, for unprofessional conduct under Code section 4301, subdivisions (j) and/or (o), in that Respondents failed to assign a beyond use date for all

compounded preparations, in violation of California Code of Regulations, title 16, section 1735.3, subdivision (a)(2)(H). From on or about January 1, 2020, to on or about September 12, 2020, Respondents compounded the following five lots of medications for which the compounding record lacked documentation of an assigned beyond use date: methylcobalamin 1,000mcg/ml with preservative and preservative-free; Bi-Mix (Papaverine HCl/Phentolamine 30mg/0.5mg/ml); Alprostadil 1000mcg/ml stock solution injectable; Alprostadil 500mcg/ml stock solution injectable; and Tri-Mix (PGE1/Papaverine HCl/Phentolamine 10mcg/30mg/1mg/ml).

NINTH CAUSE FOR DISCIPLINE

(Incorrect Beyond Use Date)

49. Respondent Pharmacy has subjected its sterile compounding permit and its original pharmacy permit to discipline, and Respondent Pharmacist has subjected his registered pharmacist license to discipline, for unprofessional conduct under Code section 4301, subdivisions (j) and/or (o), in that Respondents used incorrect beyond-use dates for sterile compounded drug preparations, in violation of California Code of Regulations, title 16, section 1751.8, subdivision (c). From on or about January 1, 2020, to on or about September 12, 2020, Respondents compounded 19 lots of Alprostadil stock solutions using a master formula stating that the beyond use date was 180 days, which was beyond what was allowed by California pharmacy law.

TENTH CAUSE FOR DISCIPLINE

(Failure to Support Assigned Beyond Use Date)

50. Respondent Pharmacy has subjected its sterile compounding permit and its original pharmacy permit to discipline, and Respondent Pharmacist has subjected his registered pharmacist license to discipline, for unprofessional conduct under Code section 4301, subdivisions (j) and/or (o), in that Respondents failed to support assigned beyond use dates, in violation of California Code of Regulations, title 16, section 1735.2, subdivision (i).

(A) From at least May 4, 2021, to July 15, 2021, Respondents compounded at least 4,580 ml of non-sterile to sterile Tri-Mix, in 27 lots, and assigned a beyond use date of 60 days without using identical packaging as the drug preparations tested and studied and without evidence of the

compounded drug preparations being identical in specific and essential compounding steps as the drug preparations tested and studied.

(B) From at least May 20, 2021, to July 16, 2021, Respondents compounded at least 1,520 ml of non-sterile to sterile Bi-Mix, in eight lots, and assigned a beyond use date of 90 days without first having a container closure integrity test and without evidence of the compounded drug preparations being identical in specific and essential compounding steps as the drug preparations tested and studied.

(C) From at least August 14, 2020, to April 20, 2021, Respondents compounded at least 21,420 ml of non-sterile to sterile glutathione 200 mg/ml inhalation solution, in 68 lots, and assigned a beyond use date of 90 days without first having method suitability test, container closure integrity test, and stability studies.

ELEVENTH CAUSE FOR DISCIPLINE

(Failure to Maintain Quality of Assigned Sterile Preparations)

51. Respondent Pharmacy has subjected its sterile compounding permit and its original pharmacy permit to discipline, and Respondent Pharmacist has subjected his registered pharmacist license to discipline, for unprofessional conduct under Code section 4301, subdivisions (j) and/or (o), in that Respondents failed to maintain quality of assigned sterile preparations, in violation of California Code of Regulations, title 16, section 1735.1, subdivision (ae), and 1735.2, subdivision (g). From at least August 14, 2020, to July 15, 2021, Respondents compounded at least 25,780 ml of non-sterile to sterile glutathione PF 200 mg/ml inhalation solution, in 83 lots, and 20 ml of non-sterile to sterile glutathione 1% ophthalmic solution, in one lot, using a raw material which was of undetermined grade.

TWELVTH CAUSE FOR DISCIPLINE

(Adulterated Preparations)

52. Respondent Pharmacy has subjected its sterile compounding permit and its original pharmacy permit to discipline, and Respondent Pharmacist has subjected his registered pharmacist license to discipline, for unprofessional conduct under Code section 4301, subdivisions (j) and/or (o), in that Respondents compounded and sold adulterated preparations, in

violation of Code section 4169, subdivision (a)(2), and Health and Safety Code sections 111250, 111255, and/or 111295, and/or 501(a)(2)(A) of the Federal Food Drug and Cosmetic Act (21 U.S.C. 351(a)(2)(A)). From at least August 14, 2020, to July 15, 2021, Respondents compounded at least 25,780 ml of non-sterile to sterile glutathione PF 200 mg/ml inhalation solution, in 83 lots, and 20 ml of non-sterile to sterile glutathione 1% ophthalmic solution, in one lot, using a raw material which was of undetermined grade.

DISCIPLINARY CONSIDERATIONS

53. Complainant further alleges, as disciplinary considerations, that the Board took prior administrative action against Respondent Pharmacy's original pharmacy permit and against Respondent Pharmacist's registered pharmacist license, as described below.

A. On or about October 2, 2019, the Board issued Citation No. CI 2108 81041 to Respondent Pharmacy for varying from a prescription in violation of California Code of Regulations, title 16, section 1716. Between on about January 11, 2018, and on or around July 5, 2018, Respondent Pharmacy filled eight prescriptions with fludrocortisone instead of fluticasone. The citation, which did not assess a fine or order abatement, is final.

B. On or about October 2, 2019, the Board issued Citation No. CI 2019 95726 to Respondent Pharmacist for failing to follow compounding policies and procedures in violation of California Code of regulations, title 16, section 1735.5. The citation assessed a $2,500.00 fine, which Respondent Pharmacist paid, and is final.

54. Complainant also alleges, as a disciplinary consideration, that on or about September 6, 2022, the Board issued Respondent Pharmacy's sterile compounding permit a Written Notice that it was in violation of USC 353a(b)(1)(A), which states that a drug product may be compounded under subsection (a) of this section if the licensed pharmacist or licensed physician compounds the drug product using bulk drug substances, as defined in regulations of the Secretary published at section 207.3(a)(4) of title 21 of the Code of Federal Regulations. More specifically, the Notice alleged:

> (i) that— (I) comply with the standards of an applicable United States Pharmacopoeia or National Formulary monograph, if a monograph exists, and the United States Pharmacopoeia chapter on pharmacy compounding; (II) if such a monograph does not

exist, are drug substances that are components of drugs approved by the Secretary; or (III) if such a monograph does not exist and the drug substance is not a component of a drug approved by the Secretary, that appear on a list developed by the Secretary through regulations issued by the Secretary under subsection (c); (ii) that are manufactured by an establishment that is registered under section 360 of this title (including a foreign establishment that is registered under section 360(i) of this title); and (iii) that are accompanied by valid certificates of analysis for each bulk drug substance;
In that at the time of inspection, glutathione 200mg/ml inhalation solution were compounded using an active ingredient, who grade was unable to be determine beyond the classification "EP" . This is a repeat violation from 2021 and a similar finding from currently pending AC 7141.

OTHER MATTERS

55. Under Code section 4307, if discipline is imposed on Original Pharmacy Permit Number PHY 50041 or Sterile Compounding Permit Number LSC 99955, issued to Koshland Pharmacy, Inc., doing business as Koshland Pharm: Custom Compounding Pharmacy, with Peter Hale Koshland as Owner, then Koshland Pharmacy, Inc. and Peter Hale Koshland shall be prohibited from serving as a manager, administrator, owner, member, officer, director, associate, or partner of a licensee for up to five years if Original Pharmacy Permit Number PHY 50041 or Sterile Compounding Permit is placed on probation or until Original Pharmacy Permit Number PHY 50041 or Sterile Compounding Permit Number LSC 99955 is reinstated if it is revoked.

56. Under section 4307 of the Code, if discipline is imposed on Registered Pharmacist License Number RPH 51804 issued to Peter Hale Koshland, then Peter Hale Koshland shall be prohibited from serving as a manager, administrator, owner, member, officer, director, associate, or partner of a licensee for up to five years if Registered Pharmacist License Number RPH 51804 is placed on probation or until Registered Pharmacist License Number RPH 51804 is reinstated if it is revoked.

PRAYER

WHEREFORE, Complainant requests that a hearing be held on the matters alleged here, and that following the hearing, the Board of Pharmacy issue a decision:

1. Revoking or suspending Sterile Compounding Permit Number LSC 99955, issued to Koshland Pharmacy, Inc. doing business as Koshland Pharm: Custom Compounding Pharmacy, with Peter Hale Koshland as Owner;

2. Revoking or suspending Original Pharmacy Permit Number PHY 50041, issued to Koshland Pharmacy, Inc. doing business as Koshland Pharm: Custom Compounding Pharmacy, with Peter Hale Koshland as Owner;

3. Prohibiting Koshland Pharmacy, Inc. and Peter Hale Koshland from serving as a manager, administrator, owner, member, officer, director, associate, or partner of a licensee for five years if Original Pharmacy Permit Number PHY 50041 is placed on probation or until Original Pharmacy Permit Number PHY 50041 is reinstated if revoked;

4. Revoking or suspending Registered Pharmacist License Number RPH 51804, issued to Peter Hale Koshland;

5. Prohibiting Peter Hale Koshland from serving as a manager, administrator, owner, member, officer, director, associate, or partner of a licensee for five years if Registered Pharmacist License Number RPH 51804 is placed on probation or until Registered Pharmacist License Number RPH 51804 is reinstated if revoked;

6. Ordering Koshland Pharmacy, Inc., doing business as Koshland Pharm:Custom Compounding Pharmacy, and Peter Hale Koshland to pay the Board of Pharmacy the reasonable costs of the investigation and enforcement of this case, pursuant to Business and Professions Code section 125.3; and,

7. Taking such other and further action as deemed necessary and proper.

DATED: 1/19/2023

Sodergren, Anne@DCA Digitally signed by Sodergren, Anne@DCA Date: 2023.01.19 08:17:46 -08'00'

ANNE SODERGREN
Executive Officer
Board of Pharmacy
Department of Consumer Affairs
State of California
Complainant

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