# **Resonance Laboratories Private Limited** 2/3/17



10903 New Hampshire Avenue Silver Spring, MD 20993

Via UPS 23 Return Receipt Requested

February 3, 2017

Tushar B. Gore Director Resonance Laboratories Pvt. Ltd. No. 8C & 9A, KIADB Industrial Area Bashettihalli, Doddaballapur Bangalore, India 561203

Dear Mr. Gore:

The U.S. Food and Drug Administration (FDA) inspected your drug manufacturing facility, Resonance Laboratories Private Limited at No. 8C & 9A, KIADB Industrial Area, Bashettihalli, Doddaballapur, Bangalore, from May 2 to 6, 2016.

This warning letter summarizes significant deviations from current good manufacturing practice (CGMP) for active pharmaceutical ingredients (API).

Because your methods, facilities, or controls for manufacturing, processing, packing, or holding do not conform to CGMP, your API are adulterated within the meaning of section 501(a)(2)(B) of the Federal Food, Drug, and Cosmetic Act (FD&C Act), 21 U.S.C. 351(a)(2)(B).

We reviewed your May 26, 2016, response in detail and acknowledge receipt of your subsequent correspondence.

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Your, response was inadequate. Although you committed to addressing issues identified with the water systems and cleaning validation, your overall response lacked details. You also did not include a retrospective review of CGMP deficiencies on the quality of your products already distributed to the United States.

During our inspection, our investigator observed specific deviations including, but not limited to, the following.

## 1. Failure to validate that your water system is capable of consistently producing water suitable for its intended use.

Your firm manufactures API that are used by your customers to produce sterile drug products. You failed to demonstrate that distilled water used to clean equipment downstream of the **(b)(4)** purification steps is suitable for use. For example, the distilled water used for cleaning equipment in the **(b)(4)** cleanrooms, after passing through a **(b)(4)** micrometer filter, had an unacceptable level of bioburden.

## 2. Failure to have adequate cleaning procedures to prevent contamination or carry-over of a material that would alter the quality of the API.

Your firm uses shared equipment for the API you manufacture. Data from cleaning verification and validation studies found that your cleaning procedures were ineffective. For example, our investigator discovered that 105 of **(b)(4)** cleaning verification samples taken between 2015 and the start of our 2016 inspection failed your firm's specification of no more than **(b)(4)** ppm for residual drug. After obtaining failing cleaning verification results, you repeated cleaning until you obtained passing verification results. Your firm failed to investigate recurring cleaning procedure ineffectiveness and did not remediate the deficient procedures.

#### **CGMP** consultant recommended

Based upon the nature of the deviations we identified at your firm, we strongly recommend engaging a consultant, qualified as set forth in 21 CFR 211.34, to assist your firm in meeting CGMP requirements. Your use of a consultant does not relieve your firm's obligation to comply with CGMP. Your firm's executive management remains responsible for fully resolving all deficiencies and for ensuring ongoing CGMP compliance.

#### Conclusion

Deviations cited in this letter are not intended as an all-inclusive list. You are responsible for investigating these deviations, for determining the causes, for preventing their recurrence, and for preventing other violations.

If you are considering an action that is likely to lead to a disruption in the supply of drugs produced at your facility, FDA requests that you contact CDER's Drug Shortages Staff immediately, at drugshortages@fda.hhs.gov, so that FDA can work with you on the most effective way to bring your operations into compliance with the law. Contacting the Drug Shortages Staff also allows you to meet any obligations you may have to report discontinuances or interruptions in your drug manufacture under 21 U.S.C. 356C(b) and allows FDA to consider, as soon as possible, what actions, if

any, may be needed to avoid shortages and protect the health of patients who depend on your products.

Until you correct all deviations completely and we confirm your compliance with CGMP, FDA may withhold approval of any new applications or supplements listing your firm as a drug manufacturer.

Failure to correct these deviations may also result in FDA refusing admission of articles manufactured at Resonance Laboratories Private Limited at No. 8C & 9A, KIADB Industrial Area, Bashettihalli, Doddaballapur, Bangalore, into the United States under section 801(a)(3) of the FD&C Act, 21 U.S.C. 381(a)(3). Under the same authority, articles may be subject to refusal of admission, in that the methods and controls used in their manufacture do not appear to conform to CGMP within the meaning of section 501(a)(2)(B) of the FD&C Act, 21 U.S.C. 351(a)(2)(B).

After you receive this letter, respond to this office in writing within 15 working days. Specify what you have done since our inspection to correct your deviations and to prevent their recurrence. If you cannot complete corrective actions within 15 working days, state your reasons for delay and your schedule for completion.

Send your electronic reply to CDER-OC-OMQ-Communications@fda.hhs.gov or mail your reply to:

Rokhsana Safaai-Jazi Compliance Officer U.S. Food and Drug Administration White Oak Building 51, Room 4359 10903 New Hampshire Avenue Silver Spring, MD 20993 USA

Please identify your response with FEI 3004483648.

Sincerely, /S/ Thomas Cosgrove Director Office of Manufacturing Quality Office of Compliance Center for Drug Evaluation and Research