This document lists observations made by the FDA representative(s) during the inspection of your facility. They are inspectional observations, and do not represent a final Agency determination regarding your compliance. If you have an objection regarding an observation, or have implemented, or plan to implement, corrective action in response to an observation, you may discuss the objection or action with the FDA representative(s) during the inspection or submit this information to FDA at the address above. If you have any questions, please contact FDA at the phone number and address above.

DURING AN INSPECTION OF YOUR FIRM WE OBSERVED:
QUALITY SYSTEM

OBSERVATION 1
Procedures describing the handling of written and oral complaints related to drug products are deficiently written or followed.

Specifically,

Investigations initiated in response to complaints are not always adequate. In that, you do not always identify the root cause of the complaint. SOP GQA033-02 Investigation Methodologies, utilized to guide investigations, including complaint investigations, does not include root cause evaluations extending to potential human actions including human actions intended to cause harm. Additionally, SOP FTCQA004-15 Handling of Market Complaints, requires in point 6.10 that you check if similar complaints have been received during the last 12 months. However, examples of complaints reviewed showed you documented no other similar complaints for the reported batch, Tablets mg and did not document consideration of other batches or products.

The market complaint logs since the last inspection show 300 closed complaint reports in 2017, 356 closed complaint reports in 2018 and 7 closed complaint reports thus far in 2019 for a total of 663 closed complaints. For these complaints your firm identified 63.3%, 59.8% and 100% as “Not substantiated” for the years respectively. Examples of not substantiated complaints are:

Complaint 200237338 for a strong odor in batch of tablets mg, was reported to on May 1, 2017. The resulting investigation included document review and organoleptic testing of reserve samples. No chemical analyses were
DEPARTMENT OF HEALTH AND HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION

12420 Parklawn Drive, Room 2032
Rockville, MD 20857

DATE OF INSPECTION: 1/30/2019–2/8/2019*

NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED:
Mr. Venkata Narayan Venkatanarayanan, Vice President Site Head

FIRM NAME:
Dr. Reddy's Laboratories Ltd.

STREET ADDRESS:
No 41 Quthbullapur Mandal

CITY, STATE, ZIP CODE, COUNTRY:
Bachupally, Telangana, 500090 India

TYPE ESTABLISHMENT INSPECTED:
Drug Manufacturer

performed on the reserve samples or on the returned complaint sample. The complaint was classified “Not substantiated”.

Complaint 200311153 for comingling of [b] mg tablets of [b] mg tablets in a [b] mg bottle, batch [b] was received on November 7, 2018. The complaint alleges that there were [b] mg tablets and [b] mg tablets in one [b] mg bottle. The investigation revealed that both the [b] mg tablets were manufactured by the firm. Investigational conclusions include that this was the first complaint of its kind reported for this batch, and review of batch manufacturing and packaging records, and reserve samples the possibilities of mix-up is unlikely, therefore the complaint was classified “Not substantiated”. Your investigation did not include consideration of intentional comingling or document interview of operators.

Complaint 200221861, received January 27, 2017, for comingling in batch [b] mg tablets, [b] mg. The complaint states that [b] tablets were a smaller, white round scored tablet that on one side at the top was letters AN and on the bottom was 642 and the other side was blank. Your investigation included review of batch and packaging records and inspection of reserve samples. You determined that the foreign tablet was Flecainide 100 mg manufactured by a different manufacturer. The investigation states that personal medications are not allowed into the production area as per standard operating procedure and the foreign tablet is “neither manufactured nor packed at Dr. Reddy’s-Unit 5”. Hence there is no possibility of this co-mingling at Dr. Reddy’s...there is no impact on product quality and other batches manufactured at Dr. Reddy’s...”. The complaint was classified “Not substantiated”.

You have filed 17 FARS since the last inspection: including but not limited to four for [b] mg, two for Metoprolol Succinate and one for [b] mg. Of the 17, four were related to analytical failure, five were for foreign material, and seven were for product mix-up. Two FARs resulted in recalls and seven were identified as no action required.

OBSERVATION 2
The quality control unit lacks authority to review production records to assure that no errors have occurred and fully investigate errors that have occurred.

SEE REVERSE OF THIS PAGE

Angela E Glenn, Investigator - Dedicated Drug Cadre
Catherine A Clausen, Investigator - Dedicated Drug Cadre

DATE ISSUED: 2/8/2019

INSPECTIONAL OBSERVATIONS PAGE 2 of 16 PAGES
Specifically, your quality unit lacks the responsibility and authority to assure all errors are fully investigated in that your quality unit does not ensure all deviation investigations are thorough. For example,

A) your OOS (Out-of-Specification) investigation number 310016522 for (b)(4) Tablets USP (b)(4) mg batch (b)(4) (rejected January 29, 2019) initiated on December 12, 2018 and closed (b)(4) for OOS assay results (b)(4) % (specification NLT (b)(4) % and NMT (b)(4) %), identified the probable root cause as loss of excipients during the (b)(4) stage. You did not extend your investigation to stage. You did not have maintenance inspect the equipment involved in the (b)(4) stage or evaluate the need for additional preventive maintenance for equipment involved in the (b)(4) stage. You stated the (b)(4) was maintained at higher side of the limit (b)(4) to the same higher (b)(4) throughout the (b)(4) cycle of (b)(4) with batch (b)(4). You did not identify and compare other batches run at the same cycle with batch (b)(4). You do not have data to show the loss during (b)(4) could only come from excipients rather than from the active/excipients/or both resulting in non-uniform potential low dose/high dose tablets in the batch. In addition, you obtained tests results for UOD (Uniformity of Dosage) (b)(4) (specification Av ≤ (b)(4)) which met your specifications. You did not investigate the inconsistency between tablets used to conduct UOD tests and tablets used to conduct tests for Assay. You did not conduct a full risk analysis for this potential deviation which could be the result of a randomly occurring event, which could go undetected, with potential health hazards. You did not develop a CAPA (Corrective Action Preventive Action) plan to avoid recurrence of this potentially random event, which could go undetected, with potential health hazards.

B) your OOS investigation numbers 310016652/310016653 for (b)(4) Tablets (b)(4) mg batches (b)(4) (b)(4) initiated January 7, 2019 and closed (b)(4), identified the root cause for OOS assay results as analyst used the incorrect diluent. You did not thoroughly evaluate other tests performed by this analyst by verifying the accuracy of results reported for previous test results. Your CAPA plan did not include verification of the accuracy of other results reported by this analyst. You concluded in your Impact Assessment you “Verified the concern analyst previous analysis and no OOS/OOT results derived due to analytical error. Hence there is no impact on the previous analysis of concern analyst”. Your verification consisted of confirming this analyst was not associated with other OOS/OOT investigations. All tests and results
performed by this analyst are suspect until you verify the accuracy of the results reported by this analyst. You do not have data showing you tested and confirmed samples tested by this analyst are within the known variance of the test procedure and that the results reported by this analyst are reliable.

C) your OOS 310016465 documents out of specification assay results for (b) (4) Capsules USP (b) (4) mg batch (b) (4) during six-month long-term stability study conditions. You have been utilizing an in-house test method which you validated February 2008. That method requires use of (b) (4) capsules to be dissolved in (b) (4) ml of solution (b) (4) micrograms/mL. You performed hypothesis testing as part of this OOS investigation and changed the method to utilize (b) (4) capsules dissolved in (b) (4) ml of solution (b) (4) micrograms/mL. Results obtained from this hypothesis testing, utilizing a different concentration from your original method, were within specification. Rather than testing the other (b) (4) batches on the U.S. market, you conducted an impact assessment. You do not have a scientifically valid reason for recalculating the results of the previously tested, approved and shipped batches. You have not verified your original in-house test method nor the un-validated method you used to conduct analyses for (b) (4) mg strength (b) (4) Capsules USP are at least equivalent to the USP monograph method. Additionally, there are currently no less than (b) (4) batches of the (b) (4) mg strength of (b) (4) Capsules USP on the U.S. market and you have not performed the comparison test between the USP monograph method and your in-house method utilized to test, approve and ship batches of that strength of the drug product.

This is a repeat from the inspection conducted in 2017.

OBSERVATION 3
The quality control unit lacks the responsibility and authority to reject all drug products.

Specifically, consumer complaint 200309230 was received for batch (b) (4) of (b) (4) Capsules USP (b) (4) mg for (b) (4) spots when the product release specifications state in part (b) (4) filled in size (b) (4) capsule shell. A Field Alert Report (FAR) was submitted to the FDA and your
OBSERVATION 4

Appropriate controls are not exercised over computers or related systems to assure that changes in master production and control records or other records are instituted only by authorized personnel.

Specifically,

A) your written procedure for Management of Empower 3 Chromatography Data Station FTGQC376-07 effective May 2, 2018, page 10 section 6.8.22.1 states “Supervisor can raise request …for project unlocking”. The same procedure states on page 11 section 6.8.22.2 “Upon completion of the activity the project shall be locked again and audit trail review shall be performed for unlocking of sample set, reprocessing, etc.” Your written procedure is silent regarding the maximum allowed time for projects to remain in unlocked status.
B) you do not always ensure projects are locked in a timely manner. Out-of-Trend (OOT) investigation no. 420001120 was initiated May 16, 2018 and closed September 3, 2018, for OOT Related Substance results for single unspecified degradation product and total degradation product in [b] (4) [b] (4) [b] (4) [b] (4) mg batch. [b] (4) [b] (4) [b] (4) [b] (4) nine-month intermediate stability study storage condition 30 C/65% RH. Your Record for Project Restoration/unlocking/locking Request Form Jan. 25, 2018 to Jan. 17, 2019, Register No. FTGIS045/F04-02/IT/18-001 page 27 includes an entry for Required project: 2018-May-STB, 2018-JULY-FP. Your IT Manager stated a request to unlock the project was made and approved August 30, 2018 (approximately 3.5 months after the OOT result was obtained), and IT unlocked the project the same day. The QC Supervisor did not request IT lock the project until September 21, 2018 (18 days after completion of the OOT investigation). The request to lock the project was approved by QA and completed by IT the same day of the request to lock the project.

C) your Analytical QA (AQA) reviewers are responsible for reviewing electronic data and ensuring all data is reported and no data is omitted. On February 6, 2019 an AQA reviewer and a QC Team Leader attempted to demonstrate how they would identify the total number of injections made for a specific batch of finished dosage drug product. Neither of your employees were able to successfully identify the total number of injections made for a specific batch of a finished dosage drug product. Neither was able to identify the date and time injections were made or the total number of injections for a specific batch of finished dosage drug product from either your paper ROA (Record of Analysis) laboratory records or from a combination of your LIMS, SAP and Empower electronic documentation systems. Your Manager of LIMS and Empower Systems stated you are transitioning from a paper system to an electronic system. The AQA reviewer referred to the paper ROAs to obtain an AR number, however, once your transition is complete your AQA reviewers will not have paper ROAs to use to retrieve AR numbers. Your AQA reviewer did not demonstrate you are effectively ensuring all data is reported and no data is omitted. Batches involved in a deviation investigation(s) have multiple AR numbers over different time periods (projects). Without a list of all the AR numbers associated with each batch, your AQA reviewer was not able to identify all injection sequences for a specific batch to determine the total number of injections for the batch to ensure all data is reported and no data is omitted.
This is a repeat observation from the inspection conducted in 2017.

**OBSERVATION 5**
The responsibilities and procedures applicable to the quality control unit are not in writing and fully followed.

Specifically, procedures are not always written and followed or written procedures are not always adequate. For example:

A) you do not always follow your written procedures. You do not always immediately report OOS (Out-of-Specification) results. Your written procedure Handling of Out of Specification Results SOP-GLOB-QA-0062 v. 3.0 effective January 2, 2019 page 10 section 6.1.1 states “Upon observation* of (b) (4) OOS result, analyst shall immediately report the same to QC” and section 6.1.2 states “Upon reporting to supervisor, the analyst shall post the results … against failed results within (b) (4) from the observation of the results”.

Capsules USP (b) (4) mg batch (b) (4) was tested for Related Substance in October 2018. The sequence for Related Substance testing started October 15, 2018 at (b) (4) and ran until October 16, 2018 at (b) (4). The data from the sequence for Related Substance was processed on October 17, 2018 at (b) (4). When the sequence was processed the batch sample and standard solution preparations were approximately 48 hours old. STP (b) (4) Capsules USP (b) (4) mg (Strategy (b) (4) MET-CFO-003007 v. 2.0 effective December 14, 2018 page 31 states “Note: Do not use test preparation if stored beyond (b) (4) in (b) (4) or (b) (4) on bench top.” An incidence report was initiated October 22, 2018. Investigation Report Incident Report No. 200309571 indicates the incident was not reported until October 22, 2018 (approximately 5 days after the injection data was processed). The sample solution was no longer usable at the time the incident was reported.
Your written procedure Handling of OOS Results SOP-GLOB-QA-0062 v. 3.0 effective January 2, 2019, is silent regarding verification of the accuracy of all results reported by analysts you identify as responsible for lab related errors/incidence as part of an OOS investigation.

Your written procedures do not always include sufficient detail to ensure consistent implementation. OOT investigation number 420001371 was initiated July 13, 2018 and closed September 5, 2018, for OOT Related Substance results in Capsules mg batch (sixth month accelerated stability study storage condition 40C/75% RH). In your written QA Evaluation and Approval of Investigation (Attachment - A) OOT No. 420001371, page 3 section 5.0 you state “Root Cause: …reported out of trend results might be due to UPLC tubing (mm) which leads to peak split and integrated as related compound (mm) and unknown peak (RT: ). Your Assistant Manager Analytical QA stated you initiated a CAPA plan to update the test procedure for Related Substance to specify the use of mm tube connecting the column outlet and detector. CAPA No. 340012100 includes an STP revision request on September 3, 2018 at and states “As a preventive action, it is recommended to incorporate the below mentioned point in respective STP#s of the product to avoid the ambiguity in consideration of peaks. If any peak split observed with respect to the impurity integrate and consider as related compounds impurity”. CAPA No. 340012100 is silent regarding tubing size mm or mm. Your current STP is also silent regarding tubing size connecting the column to the detector.

D) both your Reserve Sample Visual Inspection Report and your written procedure for Collection, Storage, Retrieval, Review and Disposition of Reserve Samples FTCQA033-09 effective June 30, 2017, are silent regarding the specific physical properties to evaluate as part of visual inspection such as: chipping, cracking, spots, or particulates in tablets or cracking, dents, splitting, empty capsules, separation, or sticking in capsules. Your Annual Product Quality Review (APQR) for Capsules USP mg for April 15, 2017 – Ap. 14, 2018, page 45 Summary and Conclusion: states “The reserve sample is evaluated for its description and packing integrity during the review period and observations found”. Your Associate Director of
QA stated operators performing the annual visual examination have a library of photographs showing potential evidence of product deterioration. Neither your written procedure nor your forms used for recording evidence of product deterioration as part of visual examination reference this library.

E) you do not have a written procedure describing specific actions production personnel should take a maintenance intervention production operations such as clearing all in-process/finished drug product the intervention and cleaning equipment a maintenance intervention manufacturing.

F) the Record of Analysis (ROA) for USP mg batch includes two sets of calculations for the same sample set tested for Related Compounds. One calculation set was reported on template Report Method RS_A which was printed August 20, 2018 at . A second calculation set was reported on template Report Method RS_AreaNormalization which was printed August 20, 2018 at .

Your written procedure STP Capsules mg MO-200011752-00 effective June 6, 2014 includes calculations for Related Compounds. STP MO-200011752-00 is silent regarding the use of templates to make the calculations required in the procedure. The ROA for mg batch is also silent regarding the use of templates to calculate the results for Related Compounds and it does not identify a template to use to calculate the test results if a template should be used.

This is a repeat observation from the inspection conducted in 2017.
OBSESSION 6

Master production and control records lack sampling and testing procedures.

Specifically,

A) your Supervisor (b)(4) Area, stated operators regularly reset the (b)(4) for the (b)(4) maximum (b)(4) to override alarms. For example, Capsules USP (b)(4) mg (Drug (b)(4) & Filling) batch (b)(4) Equipment number: PRE276. S. No. 2 (b)(4) Equipment Name: 500C. Your Event Report (b)(4) page 2 Event occurrence January 29, 2019 at 13:22 shows User (b)(4) changed (b)(4) Max. Limit from Old: (b)(4) to New: (b)(4) over the maximum MPR specification limit of (b)(4). On January 29, 2019 at 13:30 User (b)(4) changed Max. Limit from Old: (b)(4) to New: (b)(4). Your Supervisor (b)(4) set to (b)(4) for (b)(4). The Alarm Report (b)(4) -500C PRE276 page 1 shows on January 29, 2019 at 13:22 an Alarm message for “(b)(4) > Maximum”. The Batch Data Report (b)(4) 500C does not include (b)(4) data for the time range when (b)(4) was higher than your MPR specification. You do not have documentation showing you opened a deviation investigation for this over MPR specification (b)(4) for Capsules (b)(4) mg batch (b)(4), shipped to the U.S. (b)(4).

B) During manufacture of batch (b)(4) of (b)(4) for (b)(4) stage, your operator pressed the acknowledge alarm button four times while no alarm was documented. There is no documentation in the batch production record explaining why he acknowledged undocumented alarms, nor is there documentation showing that this was identified and investigated during quality assurance's record review and release of the batch. These (b)(4) were later utilized in the manufacture of finished drug product batch (b)(4) which is the subject of consumer complaint 200309230 and (b)(4). Your Investigation Report states in part that the most probable
root cause for batch [b] [4] to display few [b] [4] color [b] [4] was due to possible [b] [4] imperfections of [b] [4]. These imperfections could have exposed the drug [b] [4] to the [b] [4], resulting in [b] [4]. It also states that the investigation has concluded the following process parameters during stages could have contributed to [b] [4] imperfections leading to failure: [b] [4].

Your Investigation Report goes on to say that from the trend it can be concluded that this exposure is very batch specific and is an isolated case. However, all of these parameters during production of the [b] [4] batch, [b] [4], of [b] [4], were within specifications identified in the batch manufacturing record. Your Head Manufacturing Science and Technology explained that these parameters are affected by scale and it is not possible to manufacture full scale batches at each extreme of the range documented in the batch manufacturing record in order to fully validate the process and they monitor the multiple variables over the continued life of the product and make process improvements as they identify areas of concern. He also explained that the recipe includes [b] [4] of [b] [4] specific process parameters in stages, which is not documented in the batch manufacturing record.


D) your batch packaging record for [b] [4] mg batch [b] [4] (shipped to the US [b] [4]) is silent regarding how to obtain representative samples of the finished dosage drug product. In addition, Sampling Procedure for Solid Dosage Intermediate & Finished Products FTCQA034-10 effective April 18, 2017, does not describe when samples are collected or how samples are collected with sufficient detail to ensure representative samples are obtained from each finished dosage drug product.

LABORATORY CONTROL SYSTEM
OBSERVATION 7

Laboratory controls do not include a determination of conformance to written specifications for in-process materials.

Specifically, your batch record for Capsules [b] mg (for [b] and [b]) used to manufacture Capsules USP [b] mg batch instructs in Step No. [b] to "Send Request for Analysis QA for sampling and onward submission of samples to QC for [b] batch in [b] for the [b] prior to encapsulation."

You do not test the [b] for [b] or [b].

This is a repeat observation from inspections conducted in 2015 and 2017.

OBSERVATION 8

Reserve drug product samples are not representative of each lot or batch of drug product.

Specifically, SOP FTCQA033-09 effective 6/30/17, Collection, Storage, Retrieval, Review and Disposition of Reserve Samples states in point 6.1.3 that equal amount of samples are to be collected at [b] of a batch, [b]. However, under the review of reserve samples section, point 6.4.4 it states that for higher counts [b] container is collected as reserve sample. Examples include products identified in your Reserve Sample Quantity listing showing [b] container of [b] count to be collected as reserve sample for [b] tablets [b] mg, [b] tablets [b] mg, [b] tablets [b] mg. On 1/31/2019, your Quality Assurance-Packing Supervisor reiterated that during packaging activities of higher count containers, a container is collected from 100% of the run, however, of these containers is retained as a reserve sample. Therefore, the
reserve sample does not cover the full range of packaging operations and is not representative of the entire finished drug product batch.

FACILITIES AND EQUIPMENT SYSTEM

OBSERVATION 9
Adequate lab facilities for testing and approval or rejection of in-process materials and drug products are not available to the quality control unit.

Specifically, your SOP FTGQC306-01 Procedure for monitoring Environmental conditions in Quality Control Laboratory, effective 2/22/2017 and the associated temperature monitoring logs, FTGQC306/F01-00, provide for acceptance criteria for the temperature in the Quality Control Laboratory to be not more than 27°C. Temperatures are outside of acceptable limits for:

A) labeled storage conditions for finished drug products, including but not limited to Tablets (20-25°C) and Tablets USP (20-25°C), from which samples are maintained and tested in the Quality Control Laboratory.

B) Test certificates for Class A volumetric glassware utilized within the laboratory specifies use at 20°C for accurate measurements within specified tolerance levels. Utilizing glassware to perform measurements outside of this temperature does not ensure accurate measurements and may affect results of quantitative tests.

Examples of temperatures documented in the Quality Control Laboratory stability rooms 243 and 245 are:

Date

(b)(4)
### DEPARTMENT OF HEALTH AND HUMAN SERVICES
#### FOOD AND DRUG ADMINISTRATION

**District Address and Phone Number**
12420 Parklawn Drive, Room 2032
Rockville, MD 20857

**Date(s) of Inspection**
1/30/2019-2/8/2019*

**PEI Number**
3002949099

**Name and Title of Individual to Whom Report Issued**
Mr. Venkata Narayan Venkatanarayan, Vice President Site Head

**Firm Name**
Dr. Reddy's Laboratories Ltd.

**Street Address**
No 41 Quthbullapur Mandal

**City, State, ZIP Code, Country**
Bachupally, Telangana, 500090 India

**Type Establishment Inspected**
Drug Manufacturer

---

**See Reverse of This Page**

**Employee(s) Signature**
Angela E Glenn, Investigator - Dedicated Drug Cadre
Cheryl A Clausen, Investigator - Dedicated Drug Cadre

**Date Issued**
2/8/2019
OBSERVATION 10
The building lacks adequate space for the orderly placement of equipment and materials to prevent mix-ups between drug products and to prevent contamination.

Specifically, you do not have data to show finished dosage drug products manufactured in your facility are not cross-contaminated with (b)(4) drug products. You manufacture (b)(4) finished dosage
drug products including but not limited to in an area of your manufacturing building you designate as the area. There is a separate employee entrance for the area, operators assigned to the area do not work in other areas, there is a separate laboratory and a separate HVAC system for the area. Your Associate Director of QA stated you do not test and have never tested finished dosage drug products manufactured in the area for the presence/absence of drug products manufactured in the area.

**OBSERVATION 11**

Drains are not provided with an air break or other mechanical device to prevent back-siphonage where connected directly with a sewer.

Specifically, you do not have valves (NRV) to prevent back-siphonage installed in all drain pipes throughout your facility and you do not have P&ID (Piping and Installation Diagrams) for drain pipelines in your facility. Drug for Capsules were rejected for reverse flow observed from a drain in the manufacturing area. You took corrective action to install an in the drain in the area for capsules and you initiated a schedule to clean the pipe line in the affected area. You did not take preventive actions to ensure are installed on all drains throughout your facility.

**DATES OF INSPECTION**

1/30/2019(Wed), 1/31/2019(Thu), 2/01/2019(Fri), 2/04/2019(Mon), 2/05/2019(Tue), 2/06/2019(Wed), 2/07/2019(Thu), 2/08/2019(Fri)