DEPARTMENT OF HEALTH AND HUMAN SERVICES FOOD AND DRUG ADMINISTRATION			
DISTRICT ADDRESS AND PHONE NUMBER	DATE(S) OF INSPECTION		
12420 Parklawn Drive, Room 2032	2/22/2019-3/1/2019*		
Rockville, MD 20857	FEI NUMBER 3011905047		
NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED			
Mr. Madan Mohan Reddy, Director			
FIRM NAME	STREET ADDRESS		
Aurobindo Pharma Limited	Unit-XVI, SEZ, Plot No:S-5/A, S-6 & S-7		
	Polepally (Village), Jadcherla Mandal		
CITY, STATE, ZIP CODE, COUNTRY	TYPE ESTABLISHMENT INSPECTED		
Mahabubnagar District, Telangana, 509302 India	Manufacturer of Sterile Drug Products		

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:

OBSERVATION 1

The responsibilities and procedures applicable to the quality control unit are not fully followed.

Specifically,

The list of observations noted below document that the Quality Unit has not performed the necessary assessments/reviews to ensure that the objectionable conditions do not negatively affect the aseptic manufacturing processes and Quality Control tests in support of the finished sterile drug products.

Specifically,

All the deficiencies found during current FDA inspection are indicative that your Quality Unit has not taken the necessary steps with respect to the aseptic manufacturing processes and related systems to adequately assess the CGMPs and the impact on the finished sterile drug products.

OBSERVATION 2

Control procedures are not established which monitor the output and validate the performance of those manufacturing processes that may be responsible for causing variability in the characteristics of in-process material and the drug product.

From September 2017 to April 2018, your firm received 12 complaints regarding particulates found in nine (9) batches of (b) (4) and (b) (4) and (b) (4) and (b) (5) of the batches, your firm

Drug Cadre Walden H Lee, Chemist/Biologist X Total Signed (0.46) (2016 (0.57.36)

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DEPARTMENT OF HEALTH AND HUMAN SERVICES FOOD AND DRUG ADMINISTRATION			
DISTRICT ADDRESS AND PHONE NUMBER	DATE(S) OF INSPECTION		
12420 Parklawn Drive, Room 2032	2/22/2019-3/1/2019*		
Rockville, MD 20857	FEI NUMBER 3011905047		
NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED			
Mr. Madan Mohan Reddy, Director			
FIRM NAME	STREET ADDRESS		
Aurobindo Pharma Limited	Unit-XVI, SEZ, Plot No:S-5/A, S-6 & S-7,		
	Polepally (Village), Jadcherla Mandal		
CITY, STATE, ZIP CODE, COUNTRY	TYPE ESTABLISHMENT INSPECTED		
Mahabubnagar District, Telangana, 509302 India	Manufacturer of Sterile Drug Products		
Illula			
established that there was no product impact and stated the particles identified were intrinsic to the manufacturing process. However, analysis of two (2) of the returned complaint samples found unidentified material. For			

• According to Investigation Report for Complaint Nos. CUO1217-U16, and CUO1317-U16, titled, Investigation Report for "Little Black Particles Floating Inside the Vial / Black Particulate Matter in (b)(4) Vial", dated 27-Apr-18, one (1) of the 28 particulates isolated from each of 28 returned complaint sample vials of lot (b)(4) was analyzed by Scanning Electron Microscopy (SEM) and FTIR at an independent laboratory, which reported the sample consisted of heterogeneous material that

includes possible silicates, silica, W particles and protein, and nylon. The laboratory was not able to identify the exact nature of the particle. The investigation report's conclusion does not include a probable

cause of the unidentifiable material.

example:

• According to Investigation Report for Complaint Nos. CU01117-U16, CU01217-U16, and CU01317-U16, titled, *Investigation Report for Complaints on "Foreign Substance (Tiny Spec of Dark Red / Black Specs Observed in Vials After (b) (4) dated 04-Apr-18, one of the particulates isolated from returned complaint sample lot (b) (4) was analyzed by SEM and FTIR at an independent laboratory, which reported the sample was consistent with kaolin clay, styrene/acrylate ester, and "a small amount of unidentifiable material". The kaolin clay, styrene/acrylate ester were consistent with the (b) (4) stopper of the Active Pharmaceutical Ingredient container. The investigation report's root cause analysis does not include a probable cause of the unidentifiable material.*

The complaint investigations for the 9 batches resulted in the following conclusions:

• Particles in Batch Nos. (b) (4) the complainants (b) (4) selection or user technique caused a portion of the stopper to enter the vial during (b) (4)

SEE REVERSE OF THIS PAGE Linda F Murphy, Consumer Safety Officer Jose E Melendez, Investigator - Dedicated Drug Cadre Walden H Lee, Chemist/Biologist Linda F Murphy, Consumer Safety Officer Jose E Melendez, Investigator - Dedicated Drug Cadre Walden H Lee, Chemist/Biologist	DATE ISSUED 3/1/2019
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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 2/22/2019-3/1/2019* FEI NUMBER 3011905047		
Mr. Madan Mohan Reddy, Director	·		
Aurobindo Pharma Limited	Unit-XVI, SEZ, Plot No:S-5/A, S-6 & S-7, Polepally (Village), Jadcherla Mandal		
Mahabubnagar District, Telangana, 509302 India			
Particles in Batch Nos. (b) (4) and particles (b) (4) were due to shredde site. These batches were recalled.	attributed the red tint (b) (4) and red ed particles from a gasket located at the API manufacturing		
Particles in Batch Nos. (b) (4) and (b) when opening API canisters.	were attributed due to use of grooved forceps		
• Particles in Batch Nos. (b) (4) were attributed to API material which "could have entrapped between the operations at the API manufacturing site".			
The established acceptance criterion for particulate matter in constituted solution in Injection USP, (b) and (c) g finished product states, "the solution is essentially free from particles of foreign matter that can be observed on visual inspection".			
OBSERVATION 3 There is a failure to thoroughly review any unexplaine distributed.	ed discrepancy whether or not the batch has been already		
Specifically,			
There is a failure to thoroughly review any unexplained discrepancy whether or not the batch has been already distributed. Specifically,			
A. Complaint investigation CU00518-U16 was initiated on 23-Feb-18 due to the collar and stopper coming off three (3) vials of on and one stopper coming off three (3) vials of one off the caperate of the defect was observed when the caregiver tried to pop off the cap or work with the vial, and noted they had "two (2) vials pop off and one assembled to a plus and start leaking".			
SEE REVERSE OF THIS PAGE Linda F Murphy, Consumer S Jose E Melendez, Investiga Drug Cadre Walden H Lee, Chemist/Biol	tor - Dedicated Unda F Murphy Consumer Safety Officer Styred By Linds F, Murphy - S Date Signed 03-01-2019 09 57 36		

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DEPARTMENT OF HEALTH AND HUMAN SERVICES FOOD AND DRUG ADMINISTRATION DISTRICT ADDRESS AND PHONE NUMBER 12420 Parklawn Drive, Room 2032 2/22/2019-3/1/2019* Rockville, MD 20857 3011905047 NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED Mr. Madan Mohan Reddy, Director FIRM NAME Aurobindo Pharma Limited Unit-XVI, SEZ, Plot No:S-5/A, S-6 & S-7, Polepally (Village), Jadcherla Mandal CITY, STATE, ZIP CODE, COUNTRY TYPE ESTABLISHMENT INSPECTED Mahabubnagar District, Telangana, 509302 Manufacturer of Sterile Drug Products

The investigation report included the following information:

- The initial sealing machine qualification did not include validation of (b) (4) height with respect to vial sizes.
- A malfunction of the semi-automatic visual inspection machine occurred during inspection and was rectified; however, there was no re-inspection of vials.
- Because there was no procedure for reconciliation of vials during initial sealing machine set-up, it was possible that vials used for machine set up could be mixed up with the good vials.

A total of (b) (4) retention samples were visually inspected; however, no retention samples were leak tested. Although a maintenance requisition was issued for adjustment of the semi-automatic vial inspection during processing of this batch (b) (4) personnel did not perform an impact assessment of the equipment malfunction on the vials inspected prior to the breakdown.

Furthermore, the investigation did not include an evaluation of the number of rejects noted during sealing setup and optical inspection activities as compared with either the typical number of rejects. A comparison of the average number of rejects in (b) (4) and sealing found in the three (3) process validation batches to the number of rejects found in this batch is as follows:

Activity	Reject Type	Average no. rejects from process validation	Number of rejects in Batch No. (b) (4)
Sealing	(b) (4)	12.7	153
Sealing	Unsealed / Loose Seal	6.3	96
0 (17 ((b) (4)	7.7	315
Optical Inspection	Unsealed / Loose Seal	6.7	210

The investigation concluded the complaint defect of "collar and stopper coming off during removal of vial cap" was due to the malfunction of the semi-automatic visual inspection machine. The conclusion also stated

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	FH AND HUMAN SERVICES GADMINISTRATION		
DISTRICT ADDRESS AND PHONE NUMBER 12420 Parklawn Drive, Room 2032	DATE(S) OF INSPECTION 2/22/2019-3/1/2019*		
Rockville, MD 20857	FEI NUMBER		
	3011905047		
NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED			
Mr. Madan Mohan Reddy, Director	STREET ADDRESS		
Aurobindo Pharma Limited	Unit-XVI, SEZ, Plot No:S-5/A, S-6 & S-7,		
	Polepally (Village), Jadcherla Mandal		
Mahabubnagar District, Telangana, 509302 India	TYPE ESTABLISHMENT INSPECTED Manufacturer of Sterile Drug Products		
B. The assay of (b) (4) and (b) (4) inject respectively; the release specification was (b) (4) % to been releasing lots that showed results at the lo establishes that the current manufacturing process	tion, lot (b) (4) yielded results of (b) (4) % and (b) (4) %, (b) (4) % for both ingredients. The quality control unit has wer end of the release specification. This discrepancy is not sufficiently robust and reproducible to produce bility; therefore, your stability program does not represent		
	e a 360° inspection of the entire circumference of drug		
product vials. SOP FU16-PR-GEN-016, titled, <i>Procedure for Optical Inspection</i> , instructs personnel to inspect mm containers at a time. On 26-Feb-19, (b)(4) individuals were observed performing visual inspection of (b)(4) Injection USP(4) g, lot (b)(4) and in another room, (b)(4) individuals were observed visually inspecting (b)(4) vials by their caps, raised them to approximately eye-height, gently shook and inverted the vials against (b)(4) Body mechanics precluded an individual from twisting their wrist in a way to allow for inspection of the back side of the vials, since (b)(4) were held at a time. No employees were observed setting down vials and turning them around in order to examine the full circumference of the vials.			
SEE REVERSE Linda F Murphy, Consumer Saf OF THIS PAGE Jose E Melendez, Investigato			

Drug Cadre

Walden H Lee, Chemist/Biologist

		DEPARTMENT OF HEAL' FOOD AND DRUG			ES	
DISTRICT ADDRESS AND PHON		200m 2032		DATE(S) OF INS		
	20 Parklawn Drive, Room 2032 Ekville, MD 20857			FEI NUMBER	019-3/1/2019*	
				301190	0047	
NAME AND TITLE OF INDIVIDUA						
Mr. Madan Moh	nan Reddy,	Director	STREET ADDRESS			
Aurobindo Pha		ed	Polepall	y (Villa	Plot No:S-5/A, age), Jadcherla	
CITY, STATE, ZIP CODE, COUN Mahabubnagar India		Telangana, 509302	Manufact		Sterile Drug F	roducts
In addition (b) (4) inspectin	for (b)	dure requires personnel to On 26-Feb-19, antainers against (b) (4)	an employee	e multiple e located a a total of	t Inspection Station	A was observed
Stopper" Inspectio between retention	Neither then) in the (b) (4) Vial and Sto samples of (b)	ed to identify defects in the visual inspection chains and the period as a defect. This contact the contact is a defect.	llenge kit n Injection	or the Op Batch Prodentified	oduction Record list in the following rate	ord (by Manual t ' ^{(b) (4)} Product
• Lot (b)) (4)	Exp. Jun 2019				
• Lot (b) (4)	Exp. Feb 2020				
• Lot (b) (4)	Exp. Feb 2020				
• Lot ^{(b}) (4)	Exp. Nov 2020				
• Lot (b) (4)	Exp. Jan 2021				
• Lot (b) (4)	Exp. Jan 2021				
C. Personnel performing the final visual inspection of finished sterile injectable vials are not challenged on the identification and detection of defects such as red particles, which were found in two (2) complaint samples of (b) (4) Injectable (b) (4) g, which were produced on the Line.						
OBSERVATION Aseptic processin		eficient regarding the syst	em for moni	itoring env	rironmental condition	ons.
Specifically,						
		ation Protocol of Lamin 1; dated Dec 15, 2015				
SEE REVERSE OF THIS PAGE	Jose E Me Drug Cadr	urphy, Consumer Saf lendez, Investigato	or - Dedic		Linda F Murphy Consumer Safety Officer Signed By Linda F, Murphy -S Dalle Signed 03-01-2019 09 57 36	3/1/2019

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DEPARTMENT OF HEALTH AND HUMAN SERVICES FOOD AND DRUG ADMINISTRATION					
DISTRICT ADDRESS AND PHONE NO 12420 Parklawn	Drive, Room 2032		2/22/20	PECTION 019-3/1/2019*	
Rockville, MD			FEI NUMBER 301190		
NAME AND TITLE OF INDIVIDUAL TO	O WHOM REPORT ISSUED				
	n Reddy, Director				
Aurobindo Phari	ma Limited	Polepall	y (Villa	Plot No:S-5/A, age), Jadcherla	
CITY, STATE, ZIP CODE, COUNTRY Mahabubnagar D: India	istrict, Telangana, 509302	TYPE ESTABLISHME Manufact		Sterile Drug F	roducts
Unidirectional Air Flow (UDAF) with Restricted Access Barriers (RABs) (Grade A) in filling Line (10) (4) area "complies" with respect to the observed NVP count (10) (4) ampling locations were distributed throughout the LAFs units (i.e. PR-LAMAF-016, PR-LAMAF-017, PR-LAMAF-018, PR-LAMAF-019 and PR-LAMAF-020) ensuring that each LAF unit should get at least (10) (4) sampling location. However, there is no scientific justification to demonstrate that the selected distribution of sampling locations (particle counter probes) produces meaningful result and represents the critical zones of the filling Line (10) (11) [12] [13] [14] [15] [15] [15] [15] [15] [15] [15] [15					
C. Monitoring of Non-Viable Particle (NVP) of the Grade A interior of the Mobile Transfer Carts (MTC) is not performed during dynamic operations to ensure the Grade A environment is maintained during the manual transferring process of the sterile equipment parts and tools into the aseptic filling zones of the and injectable (b) (4) drug products, respectively.					
D. The vials of (b) (4) Injection are sealed and capped within a Grade A designated area in manufacturing Room (b) (4) However, there is no NVP monitoring performed to ensure the Grade A environment is maintained during the dynamic operations.					
SEE REVERSE JUDIE	MPLOYEE(S)SIGNATURE Linda F Murphy, Consumer Saf Jose E Melendez, Investigato Drug Cadre Walden H Lee, Chemist/Biolog	or - Dedio		Linda F Murphy Consumer Safety F, Murphy -S Date Signed 03-01-2019 09 57 36	DATE ISSUED 3/1/2019

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	TH AND HUMAN SERVICES G ADMINISTRATION		
DISTRICT ADDRESS AND PHONE NUMBER 12420 Parklawn Drive, Room 2032	DATE(S) OF INSPECTION 2/22/2019-3/1/2019*		
Rockville, MD 20857	FEI NUMBER		
	3011905047		
NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED			
Mr. Madan Mohan Reddy, Director	STREET ADDRESS		
Aurobindo Pharma Limited	Unit-XVI, SEZ, Plot No:S-5/A, S-6 & S-7,		
	Polepally (Village), Jadcherla Mandal		
Mahabubnagar District, Telangana, 509302 India	TYPEESTABLISHMENT INSPECTED Manufacturer of Sterile Drug Products		
Similar deficiency was also found in Line (b) manu Injectable.	ufacturing Room (b) (4) sealing/capping for (b) (4)		
E. The Protocol for Smoke Study in (b) (4) Inject dated Mar 08, 2018 describes/requires:	etable Area Line (b) Doc. Number FU16-(b) (4) -AFSP-0005;		
 Section 1.0 – To describe a procedure to perform Injectable Line area. And includes various as Section 5.0 – To simulate the all intervention pattern. 	orm the smoke studies in the clean rooms of (b) (4) eptic process simulations. ns in dynamic conditions for demonstrating the air flow		
for filling Line ^(b) ₍₄₎ in area (Equipment ID PR-V Area Line ^(b) ₍₄₎ dated Apr 02, 2018, used to ensure filled drug products, is deficient in that do not den area of the vial filling Line ^(b) ₍₄₎ is affected by the int the forceps and the forceps' stands during set-up pr (b) (4) Fo the referenced sterilized tools from the Mobile LAI	during the filling equipment transfer/assembly and process (FASM-001), and documented in the DVD Injectable unidirectional airflow during manufacture of aseptically nonstrate how the air flow pattern of the RABs (Grade A) ervention of two (2) operators simultaneously transferring occess to different locations into the filling zone or example, I noticed Operator #1 was manually transferred at Transfer Cart (MTC) to the stoppering area. Operator #2 iving the forceps and the stands from the Operator #1. The to 20 minutes.		
In addition,			
Similar deficiency was also observed in the Protocol for Smoke Study in Doc. Number FU16 -APSP-0003; dated Feb 09, 2018. Specifically, your air flow pattern study conducted during the filling equipment transfer/assembly and process for filling Line in DVD in Divident Area; dated Feb 09, 2018, utilized to ensure unidirectional airflow during manufacture of aseptically filled drug products, is deficient in that do not demonstrate how the air			
SEE REVERSE Linda F Murphy, Consumer Sa. OF THIS PAGE Jose E Melendez, Investigate			

Drug Cadre

Walden H Lee, Chemist/Biologist

DEPARTMENT OF HEALTH AND HUMAN SERVICES FOOD AND DRUG ADMINISTRATION			
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Rockville, MD 20857	FEI NUMBER 3011905047		
NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED	<u> </u>		
Mr. Madan Mohan Reddy, Director	STREET ADDRESS		
Aurobindo Pharma Limited	Unit-XVI, SEZ, Plot No:S-5/A, S-Polepally (Village), Jadcherla M		
Mahabubnagar District, Telangana, 509 India	TYPE ESTABLISHMENT INSPECTED 802 Manufacturer of Sterile Drug Pro	oducts	
flow pattern of the RABs (Grade A) area of the vi of removing fallen vial from the (b)(4) area		intervention	
OBSERVATION 6 Procedures designed to prevent microbiological coestablished and followed.	ntamination of drug products purporting to be ster	rile are not	
Specifically,			
A. Your control procedure FU16-MIS-VSP-036 Aseptic Process Simulation Validation Plan (b) (4) Line; dated Feb 04, 2018 and the Protocol Aseptic Process Simulation By Media Fill (b) (4) Injectable Section; Doc. Number FU16-(b) (4) -APSP-002; dated Feb 04, 2018 were found inadequate. Specifically, these control procedures do not require a periodic simulation of new intervention (RABs open during the routine commercial filling process of (b) (4) drug products.			
During the inspection, I randomly selected 34 lots of (b) (4) products to evaluate the routine and non-routine interventions performed during the commercial aseptic filling process. From my review, I found that 85% of the selected lots show a new open (b) (4) RABs intervention that is identifies as "removal of fallen vial from area". However, your Quality Unit did not initiate an assessment of this new open intervention to evaluate its impact over the (b) (4) aseptic filling operations.			
B. There is no assurance that your process simulation studies (media fills) performed in the filling Line (Equipment ID PR-VFASM-001) and filling Line (Equipment ID PR-PMDME-001) for injectable (b) (4) drug products respectively are truly representative of the conditions observed and/or that might occur during routine aseptic filling operations of vials. This is evidenced in that, although routine and non-routine operator's interventions are simulated during the media fills, the frequency and the duration at which these interventions are simulated are not established on a historical and/or retrospective evaluation of the filled commercial batches.			
SEE REVERSE OF THIS PAGE Unda F Murphy, Consume: Jose E Melendez, Invest: Drug Cadre Walden H Lee, Chemist/B:	Safety Officer gator - Dedicated Dinds F Murphy Officer Consumer Safety Officer Signed 19 Juni F, Murphy - S Dalle Signed 03-01-2019 09 57 36 X	ATE ISSUED 3/1/2019	

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	DEPARTMENT OF HEAL FOOD AND DRUG			ZS .	
DISTRICT ADDRESS AND PHONE NUMBER 12420 Parklawn Drive, Room 2032			2 / 2 2 / 2 0	PECTION 019-3/1/2019*	
Rockville, MD 20857			FEI NUMBER		
			301190	0047	
NAME AND TITLE OF INDIVIDUA					
Mr. Madan Moh	nan Reddy, Director	STREET ADDRESS			
Aurobindo Pharma Limited Unit-XV			/I, SEZ, Plot No:S-5/A, S-6 & S-7, ly (Village), Jadcherla Mandal		
CITY, STATE, ZIP CODE, COUN Mahabubnagar India		TYPE ESTABLISHMENT INSPECTED Manufacturer of Sterile Drug Products			
SEE REVERSE OF THIS PAGE	EMPLOYEE(S) SIGNATURE Linda F Murphy, Consumer Saf Jose E Melendez, Investigate Drug Cadre Walden H Lee, Chemist/Biolog	or - Dedic		Linda F Murphy Consumer Safety Officer Signed By Linda F, Murphy -S Date Signed 03-01-2019 09 57 36	3/1/2019

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	DEPARTMENT OF HEAL FOOD AND DRUG		ION			
DISTRICT ADDRESS AND PHONE NUMBER 12420 Parklawn Drive, Room 2032 Rockville, MD 20857			DATE(S) OF INSPECTION 2/22/2019-3/1/2019*			
			FEI NUMBER 3011905047			
Mr. Madan Moh	altowhom Report issued nan Reddy, Director					
FIRM NAME						
Aurobindo Pha		Unit-XVI, SEZ, Plot No:S-5/A, S-6 & S-7, Polepally (Village), Jadcherla Mandal				
City, state, zip code, coun Mahabubnagar India	District, Telangana, 509302	Manufacturer of Sterile Drug Products				
	ols do not include the establishment of esigned to assure that drug products co					
A. According to In-House procedure GTP/RF/031/03, titled, <i>Test for Particulate Matter</i> ", the required sample size for (b)(4) and (b)(4) products such as (b)(4) and (b)(4) Injection and (b)(4) Injection and (b)(4) Injection use for (b)(4) g, is (b)(4) vials, and the standard batch size for (b)(4) and Injection USP (b)(4) grams/vial is (b)(4) vials. According to the Microbiology Laboratory Manager, (b) vials are selected at random from a group of (b)(4) vials collected every (b)(4) throughout production and then tested according to GTP101-05, titled, <i>Particulate Matter (By light obscuration method)</i> . He acknowledged the sample size was not based on a statistical rationale.						
B. The assay of (b) (4) and (b) (4) injection, lot (b) (4) yielded results of (b) (4) % and (b) (4) %, respectively; the finished product specification was (b) (4) % to (b) (4) % for both ingredients. The control alert limits established by your firm for (b) (4) were (b) (4) % to (b) (4) % and for (b) (4) % to (b) (4) % which were outside the finished product release specification, and no assessment was performed. C. The uniformity of dosage by weight variation of (b) (4) and (b) (4) injection, yielded the results						
for the following released US lots:						
SEE REVERSE OF THIS PAGE	EMPLOYEE(S) SIGNATURE Linda F Murphy, Consumer Sat Jose E Melendez, Investigato Drug Cadre Walden H Lee, Chemist/Biolog	or - Dedio	rated Unda	F Murphy mer Salfey Officer d By Linds F, Murphy -S Signed 03-01-2019 09 57 36	DATE ISSUED 3/1/2019	
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DEPARTMENT OF HEALTH AND HUMAN SERVICES FOOD AND DRUG ADMINISTRATION				
DATE(S) OF INSPECTION				
2/22/2019-3/1/2019*				
FEI NUMBER 3011905047				
STREET ADDRESS				
Unit-XVI, SEZ, Plot No:S-5/A, S-6 & S-7,				
Polepally (Village), Jadcherla Mandal				
TYPE ESTABLISHMENT INSPECTED				
Manufacturer of Sterile Drug Products				

Lots	(b) (4)	(b) (4)		
(b) (4)	(b) (4)	(b) (4)		
Specification (AV): NMT (b) (4)				

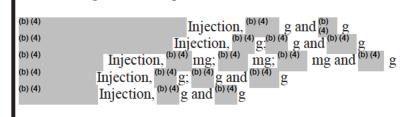
These high acceptance values were atypical of the results normally obtained for this product and were not investigated for being out of trend to assess control of the manufacturing process.

OBSERVATION 8

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,

Specifically, access privileges to the Waters Empower Chromatographic Data System allowed users with the Analyst role to change chromatographic processing methods without prior authorization from management. Chromatograms processed with the original versions of the processing methods were not reviewed to assess the changes to peak integration. Peak integration affects the area of a chromatographic peak used to calculate sample assay values and impurity percentage levels. The system was used to perform assay and related substance tests of the following U.S. bound product lots:



SEE REVERSE OF THIS PAGE

Linda F Murphy, Consumer Safety Officer Jose E Melendez, Investigator - Dedicated Drug Cadre Walden H Lee, Chemist/Biologist

DATE ISSUED 3/1/2019

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Rockville, MD 20857	FEI NUMBER 3011905047			
NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED				
Mr. Madan Mohan Reddy, Director	STREET ADDRESS			
Aurobindo Pharma Limited	Unit-XVI, SEZ, Plot No:S-5/A, S-6 & S-7, Polepally (Village), Jadcherla Mandal			
Mahabubnagar District, Telangana, 509302 India	Manufacturer of Sterile Drug Products			
to monitor suppliers of Active Pharmaceutical Ingredi	Qualification Program for Raw Materials; which is used ents (APIs), requires your firm to consider disqualifying cipt of contaminated material which has adverse impact on			
On 01-May-18, your firm initiated a recall of (2) lots of (b) (4) and (b) (4) Injection USP (b) g, Batch Nos. (b) (4) manufactured in September 2017, due to Market Complaint Nos. CU01517-U16 and CU01617-U16, which were received regarding red tint (Batch (b) (4) and red-colored particulates in (b) (4) solution (Batch (b) (4) and red-colored particulates in (b) (4) solution (Batch (b) (4) and red-colored particulates in (b) (4) solution (Batch (b) (4) and red-colored particulates in (b) (4) solution (Batch (b) (4) and red-colored particulates in (b) (4) solution (Batch (b) (4) and (b) (4) and (b) (4) g, Batch (b) (b) (4) g, Batch (b)				
In addition, Complaint No. CU01217-U16 was received due to black particles found inside a vial of and injection USP g., Batch g., Batch and the particles were attributed to the filling operations at the API manufacturer.				
Your firm did not disqualify the supplier, or otherwise require additional evaluation of incoming batches after these events in order to prevent reoccurrence.				

	EMPLOYEE(S) SIGNATURE		DATE ISSUED
SEE REVERSE	Linda F Murphy, Consumer Safety Officer		3/1/2019
OF THIS PAGE	Jose E Melendez, Investigator - Dedicated Drug Cadre Walden H Lee, Chemist/Biologist	Linda F Murphy Consumer Saflety Officer Signed By Linda F, Murphy -S Date Signed 03-01-2019 09 57 36	

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	DEPARTMENT OF HEAL FOOD AND DRUG			.5	
DISTRICT ADDRESS AND PHONE NUMBER 12420 Parklawn Drive, Room 2032			DATE(S) OF INSPECTION 2/22/2019-3/1/2019*		
Rockville, MI	ockville, MD 20857		FEI NUMBER 3011905047		
NAME AND TITLE OF INDIVIDUA	nan Reddy, Director		l		
FIRM NAME	lan Reddy, Director	STREET ADDRESS			
Aurobindo Pha		Unit-XVI, SEZ, Plot No:S-5/A, S-6 & S-7, Polepally (Village), Jadcherla Mandal			
CITY, STATE, ZIP CODE, COUN Mahabubnagar India	District, Telangana, 509302	TYPE ESTABLISHMENT INSPECTED Manufacturer of Sterile Drug Products			roducts
Specifically,					
sterile Active Pha microbiological t	P CQA-CP-GEN-043, titled, <i>Sampling</i> armaceutical Ingredients (API) from westing. Records are not available shown perature log for incoming tailgate samples are s	hich sample ving the rece	s are collec	cted for raw materi	al analytical and
For example, records dated 30-Aug-17 show receipt of (b) batches of sterile (b) (4) and (b) (4) These records showed (b) (4) of each batch were received; however, this information did not account for receipt of any tailgate samples.					
OBSERVATION 11 The accuracy, sensitivity and specificity of test methods have not been documented.					
Specifically,					
A. The test method, (b) (4) was used to determine the (b) (4) of (b) (4) raw materials. It was also used to determine the (b) (4) Injection, (b) (4) Injection, (b) (4) Injection, (b) (4) Injection during finished product and stability testing. This method has not been verified by the quality control laboratory.					
B. The test method, GTP013-06 Heavy Metals Method-E, was used to determine the heavy metal content of USP and USP and USP. This method was adopted from USP <231> Heavy Metals, Method II which was removed from the USP January 2018.					
*DATES OF INSPECTION					
SEE REVERSE OF THIS PAGE	EMPLOYEE(S) SIGNATURE Linda F Murphy, Consumer Sat Jose E Melendez, Investigate Drug Cadre Walden H Lee, Chemist/Biolog	or - Dedio		Linda F Murphy Consumer Safety Officer Signed By Linda F, Murphy-S Date Signed 03-01-2019 09 57 36 X	3/1/2019

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DEPARTMENT OF HEALTH AND HUMAN SERVICES FOOD AND DRUG ADMINISTRATION DISTRICT ADDRESS AND PHONE NUMBER 12420 Parklawn Drive, Room 2032 2/22/2019-3/1/2019* Rockville, MD 20857 3011905047 NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED Mr. Madan Mohan Reddy, Director FIRM NAME STREET ADDRESS Unit-XVI, SEZ, Plot No:S-5/A, S-6 & S-7, Aurobindo Pharma Limited Polepally (Village), Jadcherla Mandal CITY, STATE, ZIP CODE, COUNTRY TYPE ESTABLISHMENT INSPECTED Mahabubnagar District, Telangana, 509302 Manufacturer of Sterile Drug Products 2/22/2019(Fri), 2/23/2019(Sat), 2/25/2019(Mon), 2/26/2019(Tue), 2/27/2019(Wed), 2/28/2019(Thu), 3/01/2019(Fri) Jose E Melendez Investigator - Dedicated Drug Cadre X Signed By: Jose E. Melendez -S Date Signed: 03-01-2019 09:58:08



EMPLOYEE(S) SIGNATURE
Linda F Murphy, Con

Linda F Murphy, Consumer Safety Officer Jose E Melendez, Investigator - Dedicated Drug Cadre Walden H Lee, Chemist/Biologist

Linda F Murphy Consumer Safety Officer Signed By Linda F. Murphy-S Dalle Signed 03-01-2019 09 57 36 X 3/1/2019

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