

**DEPARTMENT OF HEALTH AND HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION**

DISTRICT ADDRESS AND PHONE NUMBER One Montvale Avenue Stoneham, MA 02180 (781) 587-7500 Fax: (781) 587-7556 ORAPHARM1_RESPONSES@fda.hhs.gov	DATE(S) OF INSPECTION 3/4/2020-3/30/2020*
	FEI NUMBER 3010490167

NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED
William Chatoff, CEO

FIRM NAME Edge Pharma, LLC	STREET ADDRESS 856 Hercules Dr
-------------------------------	-----------------------------------

CITY, STATE, ZIP CODE, COUNTRY Colchester, VT 05446-8014	TYPE ESTABLISHMENT INSPECTED Outsourcing Facility
---	--

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

There is a failure to thoroughly review any unexplained discrepancy and the failure of a batch or any of its components to meet any of its specifications whether or not the batch has been already distributed.

Specifically,

A. The firm failed to conduct and/or failed to conduct adequate investigations for the following recalled sterile drug products:

- 1 Neostigmine Methyl Sulfate 1mg/ml 5CC lot# 05-2018-11@5 with BUD of 08/23/18. The product was recalled on 05/29/2018 by the firm via Recall# RC-2018-003 after the firm determined that approximately 726 units out of (b) (4) units were mislabeled with the incorrect lot number (05-2018-25@2) and BUD (09/06/2018). An investigation was not conducted.
- 2 (b) (4) (Bevacizumab) Intraocular Injection (Ophthalmic Solution) 25mg/ml 1CC lot#: 01-2019-22@4 with BUD 05/07/2019 (b) (4) units), 01-2019-09@9 with BUD 04/23/2019 (b) (4) units), 12-2018-28@9 with BUD 04/11/2019 (b) (4) units), 12-2018-13@6 with BUD 03/27/2019 (b) (4) units), 11-2018-28@5 with BUD 03/12/2019 (b) (4) units), 11-2018-28@6 with BUD 03/12/2019 (b) (4) units), 11-2018-21@23 with BUD 03/05/2019 (b) (4) units), and 11-2018-08@5 with BUD 02/20/2019 (b) (4) units). The products were recalled on 02/11/2019 via Recall# RC-2019-001 for higher than acceptable number of subvisible particles. An investigation was not conducted by the firm.

SEE REVERSE OF THIS PAGE	EMPLOYEE(S) SIGNATURE John P Mistler, Investigator Samir C Gala, Investigator Jonah S Ufferfilge, Investigator Erik W Koester, Investigator	John P Mistler Investigator Signed By John P. Mistler-S Date Signed 03-30-2020 13:16:40 X _____	DATE ISSUED 3/30/2020

**DEPARTMENT OF HEALTH AND HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION**

DISTRICT ADDRESS AND PHONE NUMBER One Montvale Avenue Stoneham, MA 02180 (781) 587-7500 Fax: (781) 587-7556 ORAPHARM1_RESPONSES@fda.hhs.gov	DATE(S) OF INSPECTION 3/4/2020-3/30/2020*
	FEI NUMBER 3010490167

NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED
William Chatoff, CEO

FIRM NAME Edge Pharma, LLC	STREET ADDRESS 856 Hercules Dr
-------------------------------	-----------------------------------

CITY, STATE, ZIP CODE, COUNTRY Colchester, VT 05446-8014	TYPE ESTABLISHMENT INSPECTED Outsourcing Facility
---	--

3 Dibutyl Squaric Acid 2% lots# 12-2017-04@10 with BUD 02/02/2018 (b)(4) units) and 12-2017-27@7 with BUD 02/25/2018 (b)(4) units). The firm opened OOS investigation I-2018-004 on 01/15/2018 for stability sample Dibutyl Squaric Acid 2% lot# 12-2017-04@10 having sub-potent results of 0.05652, which was (b)(4) % of the expected amount (b)(4) at 30-day time point. The Dibutyl Squaric Acid specifications are (b)(4) %. An additional lot of Dibutyl Squaric Acid lot#12-2017-27@7 was analyzed and was found to be (b)(4) % of expected (b)(4) at 23 days post compounding. The firm recalled the products on 01/22/2018 via Recall# RC-2018-001 (lot# 12-2017-27@7) and Recall# RC-2018-002 (lot# 12-2017-04@10). The investigation did not include an evaluation to rule out laboratory error and the root cause was noted to be a formulation issue resulting in a change in the diluent from (b)(4). No change control was initiated for this formulation change. The OOS investigation report was prepared on 04/04/2018; however, the report wasn't approved by QA until 10/26/2018 without any documentation to explain the delayed time frame.

B. The firm failed to conduct investigations into presumptive sterility positives for drug products purported to be sterile. For example:

- On 10/29/19, the firm found filaments during the day (b)(4) read of media (day (b)(4) and (b)(4) had passing results) used to conduct sterility testing of Cefuroxime PF 3mg/0.3ml (Formula Id (b)(4), Lot 10-2019-15@6, BUD 11/28/2019). A deviation (DR-2019-182) was initiated as the firm failed to follow procedure, S-QMR-021 Sterility Failure Investigation, during subculturing (no growth occurred during subculturing); however, the firm's sterility testing method is not validated, and no sterility failure investigation was conducted. This batch of (b)(4) 1ml syringes was released by the firm's Quality Unit on 11/4/19 and distributed.
- On 11/07/19, the firm found a contaminant (contaminant type was not documented) during QA review of the day (b)(4) read of media (day (b)(4) and (b)(4) had passing results) used to conduct

SEE REVERSE OF THIS PAGE	EMPLOYEE(S) SIGNATURE John P Mistler, Investigator Samir C Gala, Investigator Jonah S Ufferfilge, Investigator Erik W Koester, Investigator	John P Mistler Investigator Signed By John P. Mistler-S Date Signed 03-30-2020 13:16:40 X _____	DATE ISSUED 3/30/2020

**DEPARTMENT OF HEALTH AND HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION**

DISTRICT ADDRESS AND PHONE NUMBER One Montvale Avenue Stoneham, MA 02180 (781) 587-7500 Fax: (781) 587-7556 ORAPHARM1_RESPONSES@fda.hhs.gov	DATE(S) OF INSPECTION 3/4/2020-3/30/2020*
	FEI NUMBER 3010490167

NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED
William Chatoff, CEO

FIRM NAME Edge Pharma, LLC	STREET ADDRESS 856 Hercules Dr
-------------------------------	-----------------------------------

CITY, STATE, ZIP CODE, COUNTRY Colchester, VT 05446-8014	TYPE ESTABLISHMENT INSPECTED Outsourcing Facility
---	--

sterility testing of Phenylephrine HCl 0.1mg/ml (Formula Id (b) (4), Lot 10-2019-24@4, BUD 02/05/2020). The batch record notes the media was subcultured on 11/07/2019; however, subculture results were not documented, and no sterility failure investigation was conducted. This batch of (b) (4) 10ml syringes was released by the firm's Quality Unit on 11/25/19 and distributed.

3. On 06/20/19, the firm found contaminant (contaminant type was not documented but described as "most likely a particle" by firm personnel) during the day (b) (4) read (day (b) (4) and (b) (4) had passing results) of a pump to bag Media Fill (Formula Id (b) (4), Lot 06-2019-06@1, BUD 07/08/2019). The Media Fill batch record notes the media was subcultured on 06/20/2019 and no growth occurred during subculturing; however, the firm's sterility testing method is not validated, and no sterility failure investigation was conducted. This batch of (b) (4) (50ml and 250ml) bags was reviewed and approved by the firm's Quality Unit on 06/25/2019.
4. On 06/19/19, the firm found a contaminant (contaminant type was not documented) during the day (b) (4) read of media (day (b) (4) and (b) (4) had passing results) used to conduct sterility testing of Cefuroxime PF 3mg/0.3ml (Formula Id (b) (4) Lot 06-2019-05@3, BUD 9/1/2019). The batch record notes the media was subcultured on 06/19/2019 and no growth occurred during subculturing; however, the firm's sterility testing method is not validated, and no sterility failure investigation was conducted. This batch of (b) (4) 1ml syringes was released by the firm's Quality Unit on 6/26/19 and distributed.

C. The firm failed to conduct investigations of customer complaints.

1. The firm updated their complaints procedure, S-QAC-018 - Handling Customer Complaints, on 8/14/2019 and included training for the processing of customer complaints by sales team members. The firm's sales team received 9 customer complaints (October 2018 – March 2020) regarding leaking or broken container closure systems. None of the 9 complaints were

SEE REVERSE OF THIS PAGE	EMPLOYEE(S) SIGNATURE John P Mistler, Investigator Samir C Gala, Investigator Jonah S Ufferfilge, Investigator Erik W Koester, Investigator	John P Mistler Investigator Signed By John P. Mistler-S Date Signed 03-30-2020 13:16:40 X	DATE ISSUED 3/30/2020

**DEPARTMENT OF HEALTH AND HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION**

DISTRICT ADDRESS AND PHONE NUMBER One Montvale Avenue Stoneham, MA 02180 (781) 587-7500 Fax: (781) 587-7556 ORAPHARM1_RESPONSES@fda.hhs.gov	DATE(S) OF INSPECTION 3/4/2020-3/30/2020*
	FEI NUMBER 3010490167

NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED
William Chatoff, CEO

FIRM NAME Edge Pharma, LLC	STREET ADDRESS 856 Hercules Dr
-------------------------------	-----------------------------------

CITY, STATE, ZIP CODE, COUNTRY Colchester, VT 05446-8014	TYPE ESTABLISHMENT INSPECTED Outsourcing Facility
---	--

investigated despite 2 of them occurring after the sales team was trained on the customer complaint procedure.

Inadequate investigations into quality related events were also noted during the 2018 FDA inspection.

OBSERVATION 2

Aseptic processing areas are deficient regarding the system for monitoring environmental conditions. Specifically, the firm's environmental monitoring practices of classified and aseptic processing areas do not ensure appropriate levels of environmental cleanliness. For example:

- A. The firm failed to conduct investigations of environmental excursions to include microbial species identification and perform corrective and preventive actions following identification of objectionable microbes recovered from classified environments such as additional sporicidal cleanings. For example, on 9/25/2019, the firm recovered airborne mold from two locations in ISO-8 room 300 (the firm's (b) (4)) and airborne mold from 3 locations in ISO-7 room 302 (the firm's (b) (4)); however, the firm failed to initiate an EEI, only performed microbial species identification for 2 of the 5 mold recoveries (*Talaromyces wortmannii* and *Irpex lacteus*, both filamentous fungi), and failed to perform corrective actions such as additional sporicidal cleanings.
- B. Objectionable microorganisms such as mold and fungus are not identified to species level. For example, from 9/1/18 to 3/11/20 a total of 294 environmental monitoring sample recoveries from classified environments were phenotypically identified as mold or fungus and documented by the firm's staff; however, only 270 of these recoveries were microbially identified to species level.

SEE REVERSE OF THIS PAGE	EMPLOYEE(S) SIGNATURE John P Mistler, Investigator Samir C Gala, Investigator Jonah S Ufferfilge, Investigator Erik W Koester, Investigator	John P Mistler Investigator Signed By John P. Mistler-S Date Signed 03-30-2020 13:16:40 X	DATE ISSUED 3/30/2020

**DEPARTMENT OF HEALTH AND HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION**

DISTRICT ADDRESS AND PHONE NUMBER One Montvale Avenue Stoneham, MA 02180 (781) 587-7500 Fax: (781) 587-7556 ORAPHARM1_RESPONSES@fda.hhs.gov	DATE(S) OF INSPECTION 3/4/2020-3/30/2020*
	FEI NUMBER 3010490167

NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED
William Chatoff, CEO

FIRM NAME Edge Pharma, LLC	STREET ADDRESS 856 Hercules Dr
CITY, STATE, ZIP CODE, COUNTRY Colchester, VT 05446-8014	TYPE ESTABLISHMENT INSPECTED Outsourcing Facility

- C. Not all ISO-5 microbial recoveries are identified and investigated. The firm does not perform microbial species identification on all recoveries found on operator's sleeves unless the recovery is (b) (4) CFUs. Operator's sleeves were observed to routinely enter ISO-5 environments during the inspection. From 4/1/19 to 12/31/19, the firm failed to conduct investigations including microbial species identification on 73 microbial recoveries from operator's sleeves and it is unknown if these recoveries represent objectionable organisms such as spore formers.
- D. The firm's environmental monitoring practices of the (b) (4) laminar flow hoods (b) (4) LFH) located in the firm's ISO-7 Clean Room 202 are not supported by scientific justification for sampling locations. For example, the stainless-steel decks of the (b) (4) LFHs ((b) (4) in dimension) are perforated with approximately (b) (4) diameter holes except for an approximate (b) (4)-wide non-perforated strip of stainless-steel surface located in the center of the deck. The firm was observed to perform surface sampling of the perforated portion of the VLFH deck instead of the uniform portion of the deck, therefore not allowing for complete contact of sample media to the deck surface.
- E. The firm lacks scientific rationale for environmental monitoring alert and action levels. For example, the firm's ISO-7 surface sampling alert level is (b) (4) CFUs and action level is (b) (4) CFUs, and the firm's ISO-7 viable air alert level is (b) (4) CFUs and action level is (b) (4) CFUs. In addition, the firm does not perform EEIs to include microbial species identification (firm personnel morphologically identify mold and or fungus) and corrective actions for ISO-7 microbial recoveries unless the recovery is (b) (4) CFUs for surface sampling or (b) (4) CFUs for viable air sampling. It is unknown if these recoveries represent objectionable organisms.
- F. The firm's personnel monitoring practices are inadequate. For example, on 3/6/20, two technicians were observed to spray their hands with (b) (4) approximately 90 seconds prior to performing gloved fingertip monitoring, and on 3/11/20 a technician was observed spraying their hands with (b) (4) immediately before fingertip personnel monitoring.

SEE REVERSE OF THIS PAGE	EMPLOYEE(S) SIGNATURE John P Mistler, Investigator Samir C Gala, Investigator Jonah S Ufferfilge, Investigator Erik W Koester, Investigator	John P Mistler Investigator Signed By John P. Mistler-S Date Signed 03-30-2020 13:16:40 X	DATE ISSUED 3/30/2020

**DEPARTMENT OF HEALTH AND HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION**

DISTRICT ADDRESS AND PHONE NUMBER One Montvale Avenue Stoneham, MA 02180 (781) 587-7500 Fax: (781) 587-7556 ORAPHARM1_RESPONSES@fda.hhs.gov	DATE(S) OF INSPECTION 3/4/2020-3/30/2020*
	FEI NUMBER 3010490167

NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED
William Chatoff, CEO

FIRM NAME Edge Pharma, LLC	STREET ADDRESS 856 Hercules Dr
-------------------------------	-----------------------------------

CITY, STATE, ZIP CODE, COUNTRY Colchester, VT 05446-8014	TYPE ESTABLISHMENT INSPECTED Outsourcing Facility
---	--

G. The firm's environmental monitoring personnel procedures and sampling methods are inadequate and do not ensure recovery of microbes. For example, firm procedure, S-QMR-008 – Personnel Monitoring, states "(b) (4)"
On 3/6/2020 during a pump to syringe media fill a technician was observed to quickly and lightly tap their fingertips on the agar surface while performing gloved fingertip monitoring instead of (b) (4) with adequate pressure to ensure recovery of potential microbes.

Environmental monitoring deficiencies were also noted during the 2014 and 2018 FDA inspections.

OBSERVATION 3

Test procedures relative to appropriate laboratory testing for sterility are not written and followed.

Specifically, the firm does not conduct sterility testing of drug products purported to be sterile according to a validated test method. For example, per firm management and as referenced in procedure, S-QMR-005 – Sterility Testing, the firm conducts sterility testing of drug products according to USP <71> Sterility Tests. USP <71> states "If the material being tested renders the medium turbid so that the presence or absence of microbial growth cannot be readily determined by visual examination, 14 days after the beginning of incubation, transfer portions (each not less than 1mL) of the medium to fresh vessels of the same medium (TSB and FTM), and then incubate the original and transfer vessels for not less than 4 days"; however, per firm procedure, S-QMR-021 - Sterility Failure Investigation, sterility tests which are observed with contamination particles during review of sterility testing media at days (b) (4), are subcultured onto (b) (4) plates and incubated for (b) (4), and (b) (4) plates and incubated for (b) (4), and if no growth is observed, the sterility test is considered passing, with no further investigation required. The firm does not have validation data to support this alternative method, specifically to ensure coverage of all anaerobic microbes, such as *Clostridium sporogenes*.

OBSERVATION 4

SEE REVERSE OF THIS PAGE	EMPLOYEE(S) SIGNATURE John P Mistler, Investigator Samir C Gala, Investigator Jonah S Ufferfilge, Investigator Erik W Koester, Investigator	John P Mistler Investigator Signed By John P. Mistler-S Date Signed 03-30-2020 13:16:40 X	DATE ISSUED 3/30/2020

**DEPARTMENT OF HEALTH AND HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION**

DISTRICT ADDRESS AND PHONE NUMBER One Montvale Avenue Stoneham, MA 02180 (781) 587-7500 Fax: (781) 587-7556 ORAPHARM1_RESPONSES@fda.hhs.gov	DATE(S) OF INSPECTION 3/4/2020-3/30/2020*
	FEI NUMBER 3010490167

NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED
William Chatoff, CEO

FIRM NAME Edge Pharma, LLC	STREET ADDRESS 856 Hercules Dr
-------------------------------	-----------------------------------

CITY, STATE, ZIP CODE, COUNTRY Colchester, VT 05446-8014	TYPE ESTABLISHMENT INSPECTED Outsourcing Facility
---	--

The written stability testing program is not followed.

Specifically,

The firm failed to conduct appearance testing as part of their stability program following the T=0 timepoint for any of their products. For example, the stability studies for the following products failed to include appearance testing after the initial timepoint (T=44 days, T=74 days, T=104 days, and T=134 days): Buffered Lidocaine 1% in 10cc syringe, Buffered Lidocaine HCL/Epinephrine 1% and Succinylcholine Chloride 20mg/mL in 10cc syringe. In addition, the firm utilized multiple lots within their stability studies for testing of potency, sterility, endotoxins, and container closure; however, the firm conducted the tests on different lots rather than conducting all the tests on the same lots. Furthermore, the firm missed several timepoints within their stability studies and failed to institute a deviation or CAPA to address the issue. For example, the firm has no potency test results for Succinylcholine Chloride lot# 06-2018-07@4 for stability timepoints T=44 and T=134.

Stability program deficiencies were also noted during the 2018 FDA inspection.

OBSERVATION 5

Aseptic processing areas are deficient regarding the system for cleaning and disinfecting the room and equipment to produce aseptic conditions.

Specifically,

- A. Dwell times for disinfecting agents are not met. For example: The firm uses (b) (4) and (b) (4) ((b) (4)) for daily cleaning of ISO-5^{(b) (4)} LFHs and ISO-7 and ISO-8 environments. Per firm procedure, S-CMP-003 – Cleaning Classified Areas, and firm management, these disinfecting agents are used according to Technical Data Files from (b) (4)

SEE REVERSE OF THIS PAGE	EMPLOYEE(S) SIGNATURE John P Mistler, Investigator Samir C Gala, Investigator Jonah S Ufferfilge, Investigator Erik W Koester, Investigator	John P Mistler Investigator Signed By John P. Mistler-S Date Signed 03-30-2020 13:16:40 X	DATE ISSUED 3/30/2020

**DEPARTMENT OF HEALTH AND HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION**

DISTRICT ADDRESS AND PHONE NUMBER One Montvale Avenue Stoneham, MA 02180 (781) 587-7500 Fax: (781) 587-7556 ORAPHARM1_RESPONSES@fda.hhs.gov	DATE(S) OF INSPECTION 3/4/2020-3/30/2020*
	FEI NUMBER 3010490167

NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED
William Chatoff, CEO

FIRM NAME Edge Pharma, LLC	STREET ADDRESS 856 Hercules Dr
-------------------------------	-----------------------------------

CITY, STATE, ZIP CODE, COUNTRY Colchester, VT 05446-8014	TYPE ESTABLISHMENT INSPECTED Outsourcing Facility
---	--

(b) (4), stating surfaces must remain wet for (b) (4). On 3/6/20, (b) (4) was observed to be used on (b) (4) LFH 1C and appeared dry (b) (4) after application. Re-application was not observed. The firm has not conducted disinfectant efficacy testing to determine the efficacy of a (b) (4) dwell time for (b) (4) or (b) (4).

B. Disinfection of the plexiglas located at the top of each ISO-5 (b) (4) LFH and used to separate ISO-5 air from ISO-7 air, is not performed daily. The firm's Clean Room Manager stated the plexiglass which comes into contact with the ISO-5 air is only disinfected during their (b) (4) cleanings.

Deficiencies regarding cleaning practices were also noted during the 2018 FDA inspection.

OBSERVATION 6

Procedures designed to prevent microbiological contamination of drug products purporting to be sterile are not established and followed.

Specifically,

A. The firm failed to follow standard operating procedure (SOP), S-CMP-012, Aseptic Technique, which states "cleanroom technicians must move slowly, deliberately and avoid excess or unnecessary movements while working within classified areas". For example, on 3/4/20 through 3/6/20, firm personnel were observed to move rapidly within the ISO-7 Clean Room 202, immediately adjacent to the open ISO-5 (b) (4) LFHs during sterile compounding. In addition, (SOP), S-CMP-012, Aseptic Technique, fails to address personnel controls to prevent unnecessary activities that could increase the potential for introducing contaminants into ISO-5 environments. For example, on 3/9/20, firm personnel operating within ISO- (b) (4) LFHs were observed to place their forearms and elbows on the deck of the ISO-5 (b) (4) LFHs.

SEE REVERSE OF THIS PAGE	EMPLOYEE(S) SIGNATURE John P Mistler, Investigator Samir C Gala, Investigator Jonah S Ufferfilge, Investigator Erik W Koester, Investigator	John P Mistler Investigator Signed By John P. Mistler-S Date Signed 03-30-2020 13:16:40 X	DATE ISSUED 3/30/2020

**DEPARTMENT OF HEALTH AND HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION**

DISTRICT ADDRESS AND PHONE NUMBER One Montvale Avenue Stoneham, MA 02180 (781) 587-7500 Fax: (781) 587-7556 ORAPHARM1_RESPONSES@fda.hhs.gov	DATE(S) OF INSPECTION 3/4/2020-3/30/2020*
	FEI NUMBER 3010490167

NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED
William Chatoff, CEO

FIRM NAME Edge Pharma, LLC	STREET ADDRESS 856 Hercules Dr
CITY, STATE, ZIP CODE, COUNTRY Colchester, VT 05446-8014	TYPE ESTABLISHMENT INSPECTED Outsourcing Facility

- B. The firm's production & operations staff failed to follow procedure, P#.2.1.1 – Depyrogenating Reusable Devices and Glassware, to store depyrogenated, aluminum sealed glassware and reusable devices in an ISO class 8, or better, environment. During the current inspection, aluminum sealed glassware to include 20L beakers used during sterile drug production was found stored on a cart in a non-classified environment.
- C. The firm has not performed an assessment to determine if non-sterile hand sanitizer is adequate to be used during sterile gowning. For example, the firm utilizes non-sterile (b) (4) (b) (4)) on non-sterile gloved hands during the gowning process to enter the ISO-7 Clean Room 202 prior to the final step of putting on sterile gloves. During the inspection, employees were observed touching their sterile garments after utilizing the non-sterile hand sanitizer.

Deficiencies regarding prevention of microbiological contamination of drug products were also noted during the 2014 and 2018 FDA inspections

OBSERVATION 7

Aseptic processing areas are deficient regarding systems for maintaining any equipment used to control the aseptic conditions.

Specifically, the firm's smoke studies are inadequate. The smoke studies were conducted by vendor (b) (4) under mock dynamic conditions on 11/04/2019; however, the smoke study videos only include fixed operations within the ISO-5 (b) (4) LFHs and ISO-5 BSCs and do not include a full assessment of ISO-7 and ISO-5 air interaction such as the transfer of starting components and materials into the ISO-5 areas, common interventions performed by technicians, or retrieval of product from the ISO-5 areas to demonstrate unidirectional airflow and sweeping action over and away from sterile product under dynamic conditions. Firm management stated the firm had not reviewed the November smoke studies or compiled a final report.

SEE REVERSE OF THIS PAGE	EMPLOYEE(S) SIGNATURE John P Mistler, Investigator Samir C Gala, Investigator Jonah S Ufferfilge, Investigator Erik W Koester, Investigator	John P Mistler Investigator Signed By John P. Mistler-S Date Signed 03-30-2020 13:16:40 X	DATE ISSUED 3/30/2020

**DEPARTMENT OF HEALTH AND HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION**

DISTRICT ADDRESS AND PHONE NUMBER One Montvale Avenue Stoneham, MA 02180 (781) 587-7500 Fax: (781) 587-7556 ORAPHARM1_RESPONSES@fda.hhs.gov	DATE(S) OF INSPECTION 3/4/2020-3/30/2020*
	FEI NUMBER 3010490167

NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED
William Chatoff, CEO

FIRM NAME Edge Pharma, LLC	STREET ADDRESS 856 Hercules Dr
-------------------------------	-----------------------------------

CITY, STATE, ZIP CODE, COUNTRY Colchester, VT 05446-8014	TYPE ESTABLISHMENT INSPECTED Outsourcing Facility
---	--

Further, the firm has not performed smoke studies of floor vents located in ISO-7 Clean Room 202, which are partially obstructed by equipment, to demonstrate unidirectional airflow and ensure aseptic operations are not compromised. Additionally, the firm has not conducted smoke studies near the laptop computer located in ISO-7 Clean Room 202 to ensure aseptic operations are not compromised. Clean Room 202 houses (b)(4) ISO-5 (b)(4) laminar flow hood (b)(4) LFHs) used to produce sterile drug products.

Deficiencies regarding smoke studies were also noted during the 2017 and 2018 FDA inspections.

OBSERVATION 8

Buildings used in the manufacturing, processing, packing and holding of a drug product are not maintained in a good state of repair.

Specifically, the firm's facility and equipment are not of adequate design or in an adequate state of repair. The following concerns were noted during the current inspection:

- A. The doors to the firm's non-hazardous sterility suite (rooms 200-202) and hazardous sterility suite (rooms 300-302) do not adequately seal to the floor. A gap under the door was noticed during the facility walkthrough.
- B. The metal tracking used to secure ceiling tiles in the firm's ISO-7 Clean Room 202, which houses (b)(4) LFHs used to produce sterile drug products, was observed with chipped paint in two locations.
- C. Water-stained ceiling tiles were observed within the firm's refrigeration room, receiving and materials inspection room, shipping room, and main production room where materials are staged.

SEE REVERSE OF THIS PAGE	EMPLOYEE(S) SIGNATURE John P Mistler, Investigator Samir C Gala, Investigator Jonah S Ufferfilge, Investigator Erik W Koester, Investigator	John P Mistler Investigator Signed By John P. Mistler-S Date Signed 03-30-2020 13:16:40 X _____	DATE ISSUED 3/30/2020

**DEPARTMENT OF HEALTH AND HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION**

DISTRICT ADDRESS AND PHONE NUMBER One Montvale Avenue Stoneham, MA 02180 (781) 587-7500 Fax: (781) 587-7556 ORAPHARM1_RESPONSES@fda.hhs.gov	DATE(S) OF INSPECTION 3/4/2020-3/30/2020*
	FEI NUMBER 3010490167

NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED
William Chatoff, CEO

FIRM NAME Edge Pharma, LLC	STREET ADDRESS 856 Hercules Dr
-------------------------------	-----------------------------------

CITY, STATE, ZIP CODE, COUNTRY Colchester, VT 05446-8014	TYPE ESTABLISHMENT INSPECTED Outsourcing Facility
---	--

OBSERVATION 9

Routine calibration and checking of automatic, mechanical and electronic equipment is not performed according to a written program designed to assure proper performance.

Specifically, the firm has not adequately qualified all equipment as capable of performing its intended functions or operations before first use and your firm does not perform routine maintenance for all equipment. For example:

- A. Your firm has not adequately qualified all critical equipment used to produce, test, and store sterile drug products to include: (b) (4), temperature control chambers (incubators), and refrigerators. For example, the firm's initial qualification of refrigerator Model (b) (4) (ID# NS-FRIG-022) was inadequate. The firm failed to conduct an installation qualification (IQ) or operational qualification (OQ) (i.e. empty chamber mapping). The firm's performance qualification (PQ) only consisted of an (b) (4) chamber mapping. The PQ failed to include open door and recovery testing, power-loss simulation or alarms testing. The aforementioned refrigeration unit is located within the QC Laboratory and is utilized for the storage of samples awaiting QC analysis and for the storage of stability samples.

- B. The firm uses a (b) (4) water system to generate water which is subsequently (b) (4) into plastic buckets and used for dilution of disinfecting agents used in ISO-7 and ISO-8 classified spaces; however, there is no assurance the water used for the dilution of disinfecting agents and used for cleaning of ceilings, walls, and floors is appropriate for use. For example: the (b) (4) (b) (4) water system has not been qualified and the firm does not perform (b) (4) of (b) (4) (b) (4) used on the water system. In addition, on 3/6/20, the (b) (4) (Lot (b) (4)) used every (b) (4) for sanitizing and disinfecting the system were observed expired (expiry date of 11/05/2018), and the (b) (4) located on the water hold tank was observed as expired. Further, plastic buckets used to transport (b) (4) water to classified spaces are (b) (4) with non-sterile (b) (4) and filled in a non-classified environment.

SEE REVERSE OF THIS PAGE	EMPLOYEE(S) SIGNATURE John P Mistler, Investigator Samir C Gala, Investigator Jonah S Ufferfilge, Investigator Erik W Koester, Investigator	John P Mistler Investigator Signed By John P. Mistler-S Date Signed 03-30-2020 13:16:40 X _____	DATE ISSUED 3/30/2020

**DEPARTMENT OF HEALTH AND HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION**

DISTRICT ADDRESS AND PHONE NUMBER One Montvale Avenue Stoneham, MA 02180 (781) 587-7500 Fax: (781) 587-7556 ORAPHARM1_RESPONSES@fda.hhs.gov	DATE(S) OF INSPECTION 3/4/2020-3/30/2020*
	FEI NUMBER 3010490167

NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED
William Chatoff, CEO

FIRM NAME Edge Pharma, LLC	STREET ADDRESS 856 Hercules Dr
-------------------------------	-----------------------------------

CITY, STATE, ZIP CODE, COUNTRY Colchester, VT 05446-8014	TYPE ESTABLISHMENT INSPECTED Outsourcing Facility
---	--

OBSERVATION 10

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. Appropriate controls are not exercised over computers or related systems to assure that changes are instituted only by authorized personnel. For example, on 3/9/20, the admin login and password for the firm's (b) (4) software were observed on a sticky note immediately adjacent to the (b) (4) computer system. This software is used to perform endotoxin release testing of drug products purported to be sterile.
- B. Numerous examples of a lack of GMP document control were observed during the inspection. For example, all firm personnel have access to a central data folder containing numerous GMP documents and forms. In addition, blank forms such as QC Chemistry loose sheets and OJT training forms, and OC Microbiology forms such as sterility testing and (b) (4) were observed uncontrolled and throughout the firm.
- C. Complete record of all GMP data is not maintained. For example, partial GMP documents to include QC Chemistry loose sheets and OJT training forms were found located in the firm's shred bin. Further, a Sterility Testing of Sterile Batches and Preparations from (Form Code F-QMR-005.A), was found completed, reviewed and signed off by Quality, in the firm's shred bin. A different original F-QMR-005.A form was noted in the sterile drug product's batch record. The firm's procedure, S-GEN-005 – Good Documentation Practices (GDP) Procedure, prohibits this practice.

Deficiencies regarding controls over computers or related systems were also noted during the 2018 inspection.

SEE REVERSE OF THIS PAGE	EMPLOYEE(S) SIGNATURE John P Mistler, Investigator Samir C Gala, Investigator Jonah S Ufferfilge, Investigator Erik W Koester, Investigator	John P Mistler Investigator Signed By John P. Mistler-S Date Signed 03-30-2020 13:16:40 X _____	DATE ISSUED 3/30/2020

**DEPARTMENT OF HEALTH AND HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION**

DISTRICT ADDRESS AND PHONE NUMBER One Montvale Avenue Stoneham, MA 02180 (781) 587-7500 Fax: (781) 587-7556 ORAPHARM1_RESPONSES@fda.hhs.gov	DATE(S) OF INSPECTION 3/4/2020-3/30/2020*
	FEI NUMBER 3010490167

NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED
William Chatoff, CEO

FIRM NAME Edge Pharma, LLC	STREET ADDRESS 856 Hercules Dr
-------------------------------	-----------------------------------

CITY, STATE, ZIP CODE, COUNTRY Colchester, VT 05446-8014	TYPE ESTABLISHMENT INSPECTED Outsourcing Facility
---	--

OBSERVATION 11

Incoming components are not stored under quarantine until they have been tested or examined, as appropriate, and released.

Specifically, the firm's logistics staff failed to follow procedure, S-IRS-002 Receipt of Controlled Materials, to provide separate areas for "Quarantine", Released", and "Rejected" materials. Numerous quarantined and released materials were observed together.

OBSERVATION 12

Time limits are not established when appropriate for the completion of each production phase to assure the quality of the drug product.

Specifically, the firm failed to assess the impact on the quality of their refrigerated products when the products are exposed to ambient temperatures. For example, the validation batches for their sterile drug product Cefuroxime PF 10mg/mL in 1 CC syringes, formula ID (b) (4) does not establish time limits for the product to be out of refrigeration (2-8°C). According to the Quality Unit, they have an internal policy that all refrigerated product cannot be exposed to ambient temperatures for more than (b) (4) however this is not specifically recorded in the batch record and there's no data to support the firm's (b) (4) policy. During the inspection refrigerated product was observed being exposed to ambient temperatures during the initial counting of the products after compounding, visual inspection, and final product labeling.

OBSERVATION 13

Your outsourcing facility has not submitted an adverse event report to FDA in accordance with the content and format requirements established through guidance or regulation under 21 CFR 310.305 as required by section 503B(b)(5).

SEE REVERSE OF THIS PAGE	EMPLOYEE(S) SIGNATURE John P Mistler, Investigator Samir C Gala, Investigator Jonah S Ufferfilge, Investigator Erik W Koester, Investigator	John P Mistler Investigator Signed By John P. Mistler-S Date Signed 03-30-2020 13:16:40 X _____	DATE ISSUED 3/30/2020

**DEPARTMENT OF HEALTH AND HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION**

DISTRICT ADDRESS AND PHONE NUMBER One Montvale Avenue Stoneham, MA 02180 (781) 587-7500 Fax: (781) 587-7556 ORAPHARM1_RESPONSES@fda.hhs.gov	DATE(S) OF INSPECTION 3/4/2020-3/30/2020*
	FEI NUMBER 3010490167

NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED
William Chatoff, CEO

FIRM NAME Edge Pharma, LLC	STREET ADDRESS 856 Hercules Dr
CITY, STATE, ZIP CODE, COUNTRY Colchester, VT 05446-8014	TYPE ESTABLISHMENT INSPECTED Outsourcing Facility

Specifically, on 10/09/2019, the firm received a customer complaint with an associated adverse event (CC-2019-013) from the (b) (4) located in (b) (4), regarding 3 patients who developed Toxic Anterior Segment Syndrome (TASS) after receiving Epinephrine 0.025%/Lidocaine 0.75% (Formula Id (b) (4) Lot 09-2019-04@2, BUD 10/25/2019). This report was investigated by the firm and determined to represent a serious and unexpected adverse event; however, the adverse events were not submitted to the FDA because the investigation concluded not to suggest a link between the adverse events and the firm's product. The complaint investigation was closed on 3/3/2020.

OBSERVATION 14

The labels of your outsourcing facility's drug products are deficient.

Specifically, the labels of your outsourcing facility's drug products do not include information required by section 503B(a)(10)(A).

The direct product labeling is missing the following statements: "This is a compounded drug"; "Not for Resale", and, if the drug is dispensed or distributed other than pursuant to a prescription for an individual identified patient, the statement "Office Use Only".

The following list contains examples of labels for drug products which do not contain the aforementioned required information:

- Phenylephrine 1mg/mL and 0.5 mg/5 mL;
- Neostigmine methylsulfate 5mg/5mL;
- Lidocaine HCl/Epinephrine 1%:1/100,00;
- Succinylcholine Cl 100 mg/5mL and 140 mg/7mL;
- LET Topical Gel;
- Glycopyrrolate 1mg/5mL;
- Lidocaine HCL 1%;

SEE REVERSE OF THIS PAGE	EMPLOYEE(S) SIGNATURE John P Mistler, Investigator Samir C Gala, Investigator Jonah S Ufferfilge, Investigator Erik W Koester, Investigator	John P Mistler Investigator Signed By John P. Mistler-S Date Signed 03-30-2020 13:16:40 X _____	DATE ISSUED 3/30/2020

**DEPARTMENT OF HEALTH AND HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION**

DISTRICT ADDRESS AND PHONE NUMBER One Montvale Avenue Stoneham, MA 02180 (781) 587-7500 Fax: (781) 587-7556 ORAPHARM1_RESPONSES@fda.hhs.gov	DATE(S) OF INSPECTION 3/4/2020-3/30/2020*
	FEI NUMBER 3010490167

NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED
William Chatoff, CEO

FIRM NAME Edge Pharma, LLC	STREET ADDRESS 856 Hercules Dr
-------------------------------	-----------------------------------

CITY, STATE, ZIP CODE, COUNTRY Colchester, VT 05446-8014	TYPE ESTABLISHMENT INSPECTED Outsourcing Facility
---	--

- Lidocaine HCl/Epinephrine/Hyaluronidase

The direct product labeling for the following drug products are missing the complete address of the applicable outsourcing facility:

- Phenylephrine 1mg/mL and 0.5 mg/5 mL;
- Neostigmine methylsulfate 5mg/5mL;
- Lidocaine HCl/Epinephrine 1%:1/100,00;
- Succinylcholine Cl 100 mg/5mL and 140 mg/7mL;
- LET Topical Gel;
- Glycopyrrolate 1mg/5mL;
- Lidocaine HCL 1%;
- Lidocaine HCl/Epinephrine/Hyaluronidase
- Phenylephrine HCl/Lidocaine HCl 1.5%/1%;
- Cefuroxime 3mg/0.3 mL;
- Betadine 5%;
- Moxifloxacin 0.8 mg/0.8 mL;

Deficiencies regarding labeling information required by section 503B(a)(10)(A) were also noted during the 2018 FDA inspection.

***DATES OF INSPECTION**

3/04/2020(Wed), 3/05/2020(Thu), 3/06/2020(Fri), 3/09/2020(Mon), 3/10/2020(Tue), 3/11/2020(Wed), 3/12/2020(Thu), 3/13/2020(Fri), 3/16/2020(Mon), 3/17/2020(Tue), 3/30/2020(Mon)

SEE REVERSE OF THIS PAGE	EMPLOYEE(S) SIGNATURE John P Mistler, Investigator Samir C Gala, Investigator Jonah S Ufferfilge, Investigator Erik W Koester, Investigator	John P Mistler Investigator Signed By: John P. Mistler-S Date Signed 03-30-2020 13:16:40 X _____	DATE ISSUED 3/30/2020

**DEPARTMENT OF HEALTH AND HUMAN SERVICES
FOOD AND DRUG ADMINISTRATION**

DISTRICT ADDRESS AND PHONE NUMBER One Montvale Avenue Stoneham, MA 02180 (781) 587-7500 Fax: (781) 587-7556 ORAPHARM1_RESPONSES@fda.hhs.gov	DATE(S) OF INSPECTION 3/4/2020-3/30/2020*
	FEI NUMBER 3010490167

NAME AND TITLE OF INDIVIDUAL TO WHOM REPORT ISSUED
 William Chatoff, CEO

FIRM NAME Edge Pharma, LLC	STREET ADDRESS 856 Hercules Dr
-------------------------------	-----------------------------------

CITY, STATE, ZIP CODE, COUNTRY Colchester, VT 05446-8014	TYPE ESTABLISHMENT INSPECTED Outsourcing Facility
---	--

Erik W Koester
 Investigator
 Signed By: Erik W. Koester -S
 Date Signed: 03-30-2020 13:17:21

SEE REVERSE OF THIS PAGE	EMPLOYEE(S) SIGNATURE John P Mistler, Investigator Samir C Gala, Investigator Jonah S Ufferfilge, Investigator Erik W Koester, Investigator	DATE ISSUED 3/30/2020
	John P Mistler Investigator Signed By: John P. Mistler -S Date Signed: 03-30-2020 13:16:40 <input checked="" type="checkbox"/>	

The observations of objectionable conditions and practices listed on the front of this form are reported:

1. Pursuant to Section 704(b) of the Federal Food, Drug and Cosmetic Act, or
2. To assist firms inspected in complying with the Acts and regulations enforced by the Food and Drug Administration.

Section 704(b) of the Federal Food, Drug, and Cosmetic Act (21 USC 374(b)) provides:

"Upon completion of any such inspection of a factory, warehouse, consulting laboratory, or other establishment, and prior to leaving the premises, the officer or employee making the inspection shall give to the owner, operator, or agent in charge a report in writing setting forth any conditions or practices observed by him which, in his judgment, indicate that any food, drug, device, or cosmetic in such establishment (1) consists in whole or in part of any filthy, putrid, or decomposed substance, or (2) has been prepared, packed, or held under insanitary conditions whereby it may have become contaminated with filth, or whereby it may have been rendered injurious to health. A copy of such report shall be sent promptly to the Secretary."