1.540057000

DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION ACTIVITY REPORT: Other

N510957692			
FACILITY: Centurion Medical Products		SRN / ID: N5109	
LOCATION: 301 Catrell Dr., HOWELL		DISTRICT: Lansing	
CITY: HOWELL		COUNTY: LIVINGSTON	
CONTACT: Jasper Titus, Director of Environmental Health and Safety		ACTIVITY DATE: 04/12/2021	
STAFF: Samantha Davis	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT	
SUBJECT: Engineering study performed by CleanAir Engineering to determine airflow and non-draft openings within the facility.			
RESOLVED COMPLAINTS:			

April 12, 2021 - Site visit to Centurion

EGLE staff present: April Lazzaro, Lindsey Wells, Samantha Davis

Centurion staff present: Jasper Titus, Rod Severn, Erica Kuchler, Andy Szakal, Ron Woosley

The purpose of this site visit was to observe an engineering study being performed by Kenny Sullivan of CleanAir Engineering. The study was being performed to establish where the non-draft openings (NDO) are in the building, measure the pressure differential (PD) of different areas, and establish cubic feet per minute (CFM) of the ceiling mounted airflow unit.

We arrived on site at approximately 12:00 pm. We were required to take our temperature for safety precautions due to COVID and were escorted upstairs to a conference room for a discussion and to wait for Kenny of CleanAir to arrive. During our meeting we talked about how the engineering study was going to go, and what they wanted to look at. It was determined that the manual garage doors that connected the staging/sterilization area to the production and shipping and receiving area were considered NDOs. Centurion believes they are already controlling emissions to the best of their ability. The only possible limitations they see are space, technology, and airflow.

Since this was Lindsey's first time at Centurion, Andy and Rod agreed to take us on a tour of the sterilization side of the facility until CleanAir arrived. It was noted that the eight (8) facility gas chromatography (GC) ethylene oxide monitors were reading 0.0000 ppm. During this time, we stopped outside to verify the stack height of the dry bed and thermal oxidizer stack. The dry bed stack had recently been raised to meet the parameters in the permit. We used a Nikon Forester Pro 2 range finder on the 2-point measurement setting to measure the height of the stacks. Point 1 being the ground and point 2 being the top of the stack. The dry bed stack was measuring approximately 40 feet above ground level and the thermal oxidizer stack was measuring approximately 35 feet above ground. Both stacks meet the height requirement in Permit to Install (PTI) 24-94B.

Around 2pm the engineering survey started. Jasper notified Kenny of the area they were interested in possibly tightening up to meet the Method 204 Permanent Total Enclosure (PTE). The sterilization area is the portion of the facility where the PD measurements were taken. Below is a table that indicates the PDs taken and the location number can be identified on the map on page 2. During PD measurements, both manual garage doors (located at 1 & 2 on the map) used for forklift traffic were closed, except for during sampling 7 event. These doors are usually always open during normal business operations. It was determined that the manual garage doors that connected the staging/sterilization area to the production and shipping and receiving area were considered NDOs. They would most likely have to be converted into speed doors that are motion censored for forklift traffic with man doors off to the side for foot traffic. As I understood it, there are also a couple roof vents in the staging area, located out of the negative pressure area, that would have to be sealed up to meet PTE.

Table 1. This table represents the pressure differential readings taken in the sterilization area ofCenturion.

Location	Reading 1 (inches of water column)	Reading 2 (inches of water column)
1 – Staging Area to Shipping/Receiving	-0.0024 w/ air unit* on	-0.0186 w/ air unit off
2 – Staging Area to Warehouse	-0.0026 w/ air unit on	-0.0180 with air unit off
3 – Sterilization Chamber to Transfer Corridor**	-0.4346	NA
4 – Transfer Corridor to Aeration	-0.0088 w/ opening in aeration door	-0.0356 w/ cardboard taped over opening in aeration door
5 – Transfer Corridor to Outside	-0.0055	NA
6 – Transfer Corridor to Staging Area	-0.0407 w/ door shut***	NA
7 – Aeration to Staging Area	-0.0163 w/ air unit on	-0.0172 w/ air unit off

* air unit refers to a ceiling mounted air unit (CFM currently unknown) that directs air into the staging area.

** Transfer corridor refers to where the products are transferred from the preconditioning room to the sterilization chambers, and from the sterilization chambers to the aeration room.

*** There is a manual garage door that separates the product transfer corridor from the staging area. This door is usually open, but under negative pressure during normal business operations.

PD measurements wrapped up around 3:30. Next, CleanAir was going to measure the CFM of the ceiling air unit. Jasper said that he could relay the results of this next part of the study to EGLE. EGLE staff signed out and left the site at approximately 3:45pm.

