



DEPARTMENT OF HEALTH & HUMAN SERVICES

#FZ-35
Public Health Service
12/16/97
737

Food and Drug Administration
1141 Central Parkway
Cincinnati, OH 45202

December 16, 1997

**WARNING LETTER
CIN-WL-98-78**

**CERTIFIED MAIL
RETURN RECEIPT REQUESTED**

Elbert E. Goff, President
Medenet, Inc.
d.b.a. Advantage Care
3707 Nobel Court
Louisville, KY 40216

Dear Mr. Goff:

During a November 5 and 13, 1997 inspection of your compressed medical oxygen transfilling facility at 3707 Nobel Court, Louisville, KY, our investigator documented serious deviations from the Current Good Manufacturing Practices Regulations (Title 21 Code of Federal Regulations, Part 211). These deviations cause your drug product, Oxygen USP, to be adulterated within the meaning of section 501(a)(2)(B) of the Federal Food, Drug and Cosmetic Act.

Specific observations made during the Inspection include:

- (1) Failure to adequately calibrate your Servomex oxygen analyzer in accordance with the manufacturer's instructions in that an oxygen standard gas was not being used to perform the span adjustment.

Calibration of oxygen analyzers for medical oxygen require the use of either Ultra High Purity (UHP) Nitrogen or ambient air for zeroing, depending upon the equipment manufacturer's instructions, and FDA requires the use of a certified Oxygen standard gas of greater than 99.0% purity, purchased from a specialty gas supplier, for adjusting the span of the meter. Certificates of analyses should be maintained on file for these calibration gases.

- (2) Failure to calibrate your oxygen analyzer each day of use. Calibration was being performed only once per week. Calibration records should also include documentation of the actual span adjustment reading.

- (3) Failure to maintain on file the method of manufacture of incoming Oxygen U.S.P. compressed gas used for transfilling.
- (4) Failure to calibrate or document calibration of your vacuum gauges and production thermometers.
- (5) Failure to document management review and approval of production and test records, prior to release or before the end of each production day. This review is necessary to verify that each record entry is accurate, appropriate and complete.
- (6) Failure to establish and follow appropriate written operating procedures covering transfilling and testing of compressed medical Oxygen U.S.P., calibration of the oxygen analyzer, thermometers, pressure gauges and vacuum gauges used in the production of medical Oxygen U.S.P, and handling of recalls and consumer complaints.

The following objectionable practices were not listed on the FDA-483, Inspectional Observations, but were discussed with you verbally at the conclusion of the inspection.

- (7) Failure to use a temperature-pressure conversion chart to establish appropriate fill of containers. Oxygen cylinders were being filled to 2000 psi gauge regardless of the settled temperature of the cylinders.

Because internal pressures of cylinders change (rise) with the temperature, a cylinder filled at a safe pressure at room temperature could rise to a dangerously high level at higher temperatures. For It is therefore necessary that a temperature-pressure chart be used to assure that the maximum service pressure not be exceeded at 70°F. For this reason, the desired container fill pressure should be adjusted up or down, using the temperature-pressure chart, based upon the pressure and temperature reading at the time the cylinder has reached a settled temperature (that is after the temperature has settled back to room temperature). The actual pressure and temperature readings should be recorded on the fill record and these procedures should be explained in your written operating procedures.

- (8) Failure to document the "heat of compression" check on filling records. The filling log used by your firm does not include an entry point for this check.

During the filling operation, the filler is required to perform a heat of compression check by lightly touching the exterior of each cylinder. A warm cylinder indicates the cylinder is filling properly. However, if a cylinder is cool or cold to the touch, the cylinder is not filling properly and should be removed from service and quarantined until repaired. This check should be explained in your written operating procedures and documented in your filling records. These requirements are described further in the attached document "FRESH AIR '96" - A LOOK AT FDA'S MEDICAL GAS REQUIREMENTS".

The above described violations are not intended to be an all-inclusive list of deficiencies at your facility. It is your responsibility to assure that you adhere to all current regulations applicable to your operations. Until these violations are corrected, Federal agencies will be informed that FDA recommends against award of contracts for affected products.

You should take prompt action to correct these violations. Failure to achieve prompt correction may result in regulatory action without further notice. These include seizure and/or injunction.

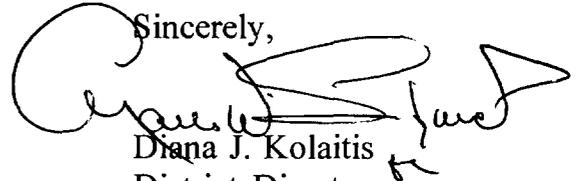
Please advise us in writing within fifteen (15) working days of receipt of this letter of the specific actions you are taking to correct these violations. Your response should explain each step you have taken to correct the noted violations, including steps taken to prevent recurrence of similar violations. Include any documentation showing these corrections. If corrective action cannot be completed within 15 working days, state the reason for the delay and the time within which the corrections will be completed.

For your information, I have enclosed copies of the FDA "Compressed Medical Gases Guideline" and the FDA speech "FRESH AIR '96" - A LOOK AT FDA'S MEDICAL GAS REQUIREMENTS", which describes current FDA requirements and policy on medical gases.

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Your reply should be sent to the U.S. Food and Drug Administration, 1141 Central Parkway, Cincinnati, Ohio 45202-1097, to the attention of Charles S. Price, Compliance Officer. Any questions regarding this letter may be directed to Mr. Price at telephone (513) 684-3501.

Sincerely,



Diana J. Kolaitis
District Director
Cincinnati District

Enclosures:

- (1) Compressed Medical Gases Guideline
- (2) FRESH AIR "96"- A LOOK AT FDA'S MEDICAL GAS REQUIREMENTS