



July 2, 2002

WARNING LETTER NO. 2002-NOL-35

FEDERAL EXPRESS
OVERNIGHT DELIVERY

David L. Allen, President and CEO
Mississippi Blood Services, Inc.
1995 Lakeland Drive
Jackson, Mississippi 39216

Dear Mr. Allen:

During an inspection of your blood bank, located at 1995 Lakeland Drive, Jackson, Mississippi, on March 25 - April 2, 8, and 12, 2002, our investigator documented violations of Section 501(a)(2)(B) of the Federal Food, Drug, and Cosmetic Act (the Act) and the Current Good Manufacturing Practice (CGMP) regulations for blood and blood components and finished pharmaceuticals under Title 21, *Code of Federal Regulations*, Parts 210-211 and 600-680 [21 CFR 210-211 and 600-680].

The inspection revealed that your firm failed to perform quality control on and calibration of the refractometer used to determine the refractive index of red blood cells in the processing of deglycerolized red blood cells [21 CFR 606.60(a) and (b)]. To comply with 21 CFR 606.60(b), you must standardize the refractometer against distilled water on each day of use. Our investigator found no entry on your firm's "Refractometer Quality Control Log" for February 15, 2001, and March 20, 2001, and no log or entries for December 2001. Units [REDACTED] and [REDACTED] were processed and sold/distributed on February 15, 2001. Units [REDACTED] and [REDACTED] were processed and sold/distributed on March 20, 2001. Unit [REDACTED] was processed and sold/distributed on December 19, 2001.

Your firm failed to report the deviations from CGMPs as required by 21 CFR 606.171 for the following products:

- Deglycerolized red blood cells, units [REDACTED] and [REDACTED] which were processed and sold/distributed on February 15, 2001;
- Deglycerolized red blood cells units [REDACTED] and [REDACTED] which were processed and sold/distributed on March 20, 2001; and

- Deglycerolized red blood cells, unit [REDACTED] which was processed and sold/distributed on December 19, 2001.

Numerous deficiencies were documented related to your firm's failure follow written standard operating procedures (SOPs) [21 CFR 211.100 and 606.100].

- Your firm failed to standardize the refractometer on each day of use was not documented or reported, as required by your firm's "Variance Report" procedure for:
 - Deglycerolized red blood cells, units [REDACTED] and [REDACTED] which were processed and sold/distributed on February 15, 2001;
 - Deglycerolized red blood cells, units [REDACTED] and [REDACTED] which were processed and sold/distributed on March 20, 2001; and
 - Deglycerolized red blood cells, unit [REDACTED], which was processed and sold/distributed on December 19, 2001.
- The preparation of two units of deglycerolized red blood cells [REDACTED] and [REDACTED] was not recorded in the "Deglycerolized Red Blood Cell Log" as required by your firm's "Deglycerolization of Adult Red Blood Cells" procedure. Both units were sold/distributed on May 28, 2001.
- There is no correspondence between your firm and the receiving hospital documenting the acceptability of deglycerolized red blood cells, unit [REDACTED] which had a final volume of only 137 milliliters, as required by your firm's "Deglycerolization of Adult Red Blood Cells" procedure. According to your procedure, unit volumes below 150 milliliters require notice to the receiving hospital that the unit is underweight. The unit was sold/distributed on February 15, 2001.
- The destruction of all blood products, that failed to meet QC standards, stored in the "To Be Discarded" bin is not performed daily as required by your procedure "Destruction of Blood and Blood Components," dated January 12, 1998. Unit [REDACTED] failed QC on February 4, 2002, however, it was not destroyed until February 8, 2002. Unit [REDACTED] failed QC on September 28, 2001, however, it was not destroyed until October 3, 2001. Unit [REDACTED] failed QC on February 6, 2001, however, it was not destroyed until February 13, 2001.
- Your current procedure "Recommended Labeling of Apheresis Platelets," dated March 21, 2001, states that split products must be [REDACTED] or greater and requires that each split unit be tested to this standard. However, only one split unit was tested for units [REDACTED] and [REDACTED] [21 CFR 606.100(b)(7)].
- Your firm failed to maintain, and/or follow a written standard operating procedure to relate each unit to its final disposition, in that SOPs did not address the destruction or disposition of expired product and/or product returned due to container damage [21 CFR 606.100(b)(13)].

Your firm's written procedure "Processing Leukocyte-Reduced Plateletpheresis Units," dated October 5, 2001, incorrectly states the storage temperature range of platelets is 18-22°C. The corresponding product label, however, correctly states the storage temperature range of 20-24°C, as per 21 CFR 640.25.

Your firm failed to maintain records concurrently with the performance of each significant step in the collection, processing, compatibility testing, storage, and distribution of each unit as required by 21 CFR 606.160 and 211.188. However, there were no records documenting the deglycerolization, i.e. processing of units [REDACTED] and [REDACTED] of red blood cells, which were sold/distributed on May 28, 2001.

Your firm failed to establish scientifically sound and appropriate specifications to assure that apheresis platelets are safe, pure, potent, and effective [21 CFR 606.140(a) and 211.110] in that the three procedures currently in effect for platelets cite conflicting specifications: "Quality Control Testing for Leukoreduced Apheresis Platelets," dated December 1, 1998, requires a minimum of [REDACTED]; "Review of Failed LRS Apheresis Platelets," dated December 15, 1998, requires a minimum of [REDACTED]; while "The Batch Release," dated January 8, 2001, requires a minimum of [REDACTED]. In addition, your firm maintains an informal procedure (corrective action memorandum dated March 6, 2001) changing the minimum specification from [REDACTED] to [REDACTED].

Your firm failed to conduct and document an investigation of unacceptable quality control (QC) tests on units [REDACTED] and [REDACTED]. A documented investigation is required per your "Quality Control Testing for [REDACTED] RBC by Sterile Connection" procedure, dated December 5, 2000. Additionally, this same procedure requires all failed QC tests to be reported to the Compliance Department. Documentation of such a report was not available during the inspection [21 CFR 606.100 and 211.192].

Several deficiencies were documented in your firm's training program including associated written procedures and employee training records [21 CFR 606.20(b), 606.100(b) & 211.25(a)].

- Our investigator noted the training record checklists for two production laboratory employees did not use the defined checklists. One employee's record had three checklists, which differed from the procedure's checklist, while the other employee's record had two lists that differed. Your firm's Training Program, dated June 15, 1998, specifically defines the training record checklists to be used for training of production laboratory employees.
- There is no evidence an annual written test has been given to all laboratory personnel as required by the "Training Program" procedure for the production laboratory.
- There is no evidence that all laboratory personnel have been observed annually for performance competency as required by the "Training Program" procedure for the production laboratory and the "Training Program" procedure for the compliance department dated October 5, 1998.

The above violations are not intended to be an all-inclusive list of deficiencies at your facility. It is your responsibility to ensure that all blood and blood components produced and issued by your

blood bank are in compliance with the Act and with the CGMP regulations. You should take prompt action to correct these violations. Your failure to correct these violations may result in regulatory action being taken by FDA without further notice. Possible actions include license suspension and/or revocation, seizure, and/or injunction.

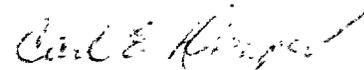
Our investigator also documented problems with your potential duplicate donor searches in that several scenarios were not considered, including donors who alternate using their first and middle name, and donors who have married and may or may not use a middle initial. In addition, your written procedure for performing this search, SOP #MS025 is deficient in that there is no criterion describing elimination of a donor as a possible match.

In addition, your firm's written procedure "Irradiating Blood Products," dated June 26, 2000, states that blood products will be irradiated by Mississippi Blood Services personnel. This conflicts with a signed agreement with [REDACTED] effective July 1, 2001 through June 30, 2004, stating that [REDACTED] will perform all irradiation procedures. There is also no evidence that employees review your facilities blood/component irradiation log.

We request that you notify this office in writing, within fifteen (15) working days of receipt of this letter, of specific steps you have taken to correct these violations, including examples of any documentation demonstrating corrective action. If you cannot complete corrections within 15 working days, state the reason for the delay and the time period within which corrections will be completed.

Your reply should be directed to Rebecca A. Asente, Compliance Officer, at the above address.

Sincerely,



Carl E. Draper
District Director
New Orleans District

Enclosure: Form FDA 483