

On-site Evaluation Report
of the
Bishop Paiute Environmental Management Office
Drinking Water Analysis Laboratory
For Microbiology

By

Andrew Lincoff
Laboratory Certification Officer
U.S. Environmental Protection Agency
Region 9
1337 South 46th Street, Bldg. 201
Richmond, California 94804

Signed: _____



Date: _____

8/22/06

Introduction

On July 26, 2006, Andrew Lincoff, EPA Region 9 Laboratory Certification Officer (LCO), conducted an on-site evaluation of the Drinking Water Analysis Laboratory in the Bishop Paiute Environmental Management Office, for the purpose of renewing certification for analyzing drinking water samples under the U.S. Environmental Protection Agency's Safe Drinking Water Program. Criteria for certification are set forth in the Manual for the Certification of Laboratories Analyzing Drinking Water, Fifth Edition.

The staff members present for the audit were Mr. Brian Adkins, Environmental Management Office Supervisor, and Ms. Juliette Nabahe, analyst. Ms. Nabahe has been analyzing drinking water microbiology samples for the past year. Prior to that, Mr. Adkins was the analyst. Since the last audit, the lab also changed microbiology consultants from Mr. Marvin Moskowitz to Ms. Katherine Barton. The staff changes were made without notification to EPA.

Minor deviations were found during the audit from the requirements for laboratories analyzing drinking water compliance samples.

Laboratory Facilities

The Bishop Paiute Environmental Management Office is located on the Bishop Paiute Reservation in Bishop, California. The Drinking Water Analysis Laboratory is clean, well organized, and well equipped. The laboratory analyses roughly 50 drinking water and 170 surface water samples per year using the Colilert system. Wastes generated by the Laboratory are disposed of onsite by autoclave.

Proficiency Testing

The lab has consistently passed the required annual Proficiency Testing studies. The most recent set was analyzed by Ms. Nabahe.

Findings

Record Keeping and Quality Assurance

The Bishop Paiute Environmental Management Office Drinking Water Analysis Laboratory records are neat and well organized. Positive results trigger appropriate notification and resampling. However there were gaps in the lab's equipment control records.

Thermometer calibration – The calibration of working thermometers, such as the incubator thermometer, must be checked annually using the lab's reference thermometer. This had not been done since the last audit. The calibration of the incubator thermometer was checked during the audit by placing the thermometer and reference thermometer in a water-filled cooler

near 35 °C. The results were entered in the lab's records.

Incubator Temperature Record – The incubator temperature must be recorded to the nearest 0.5 °C, not the nearest whole degree.

Autoclave – The lab has a manually controlled Tuttnauer 2340M Autoclave. The Quality Control records for the autoclave were missing monthly sterility checks and quarterly timer checks. The autoclave was not in use because it had been damaged in transit after repair. During the audit it was determined that the autoclave will run although is not level and its case is dented.

The lab's QA Plan and SOP need to be revised to describe autoclave operation. If the current manual autoclave is retained, it must be demonstrated that the 50 minute setting normally used results in the autoclave chamber temperature reaching and holding 15 psi or more for 30 minutes or more. Once every 3 months, the system must be checked with a watch or timer to determine the actual time that the autoclave maintains 15 psi before the timer cycle ends. The quarterly timer checks must be recorded.

The autoclave has been run using tap water instead of distilled water as specified by its manufacturer. Distilled water should be purchased and used to prevent fouling critical parts. If a new autoclave is purchased, I recommend one with electronic instead of manual control.

Comments

Quality Control Documentation – Quality control documentation obtained from manufacturers is acceptable if it contains all of the information required for QC checks performed by the lab. For example, media QC documentation must include lot number, test organisms and results, date of analysis and analyst's name.

Microbiology Training

Ms. Nabahe should be encouraged to complete a college-level microbiology course. Given her Bachelor's degree with emphasis in biology, she would then be qualified to serve as both analyst and supervisor of the lab.

Certification Status

I recommend that the Bishop Paiute Environmental Management Office be granted full recertification for microbiological analyses of drinking water to determine compliance with requirements of the Safe Drinking Water Act and the National Primary Drinking Water Regulations using the Colilert system. Certification will remain in effect for three years,

provided that the Laboratory satisfactorily analyzes annual unknown performance evaluation samples and notifies Region 9 of any significant changes in personnel, equipment, or location within 30 days of such change.

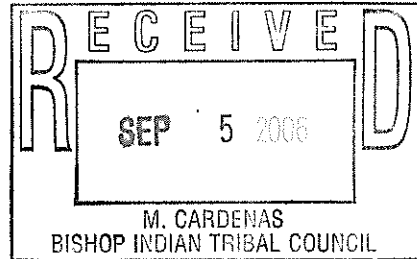


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

Juliette

AUG 30 2006

Lee Watterson, Tribal Chairman
Bishop Paiute Tribe
50 Tu Su Lane
Bishop, CA 93514



Dear Mr. Watterson:

On July 26, 2006, Andrew Lincoff, Laboratory Certification Officer, conducted an evaluation of the Bishop Paiute Environmental Management Office Drinking Water Analysis Laboratory for the purpose of certification of the laboratory for analyzing drinking water samples under the U.S. Environmental Protection Agency's Safe Drinking Water Program. Mr. Lincoff's evaluation report is enclosed.

It is with pleasure that I hereby grant the Bishop Paiute Environmental Management Office full certification for the analysis of total coliforms and *E. coli* by the Colilert procedure. Full certification will remain until December 1, 2009, provided that the laboratory satisfactorily analyzes the required performance evaluation samples and notifies Region 9 of any significant change in personnel, equipment, or laboratory location within 30 days of such change.

If you have any questions concerning this matter, please call Mr. Lincoff at (510) 412-2330. I appreciate the courtesy extended to Mr. Lincoff by Mr. Brain Adkins and Ms. Juliette Nabahe during his visit to the Drinking Water Laboratory.

Sincerely,

Jane Diamond
Assistant Regional Administrator
For Policy and Management

Enclosure

cc: Mr. Brian Adkins