

October 13, 2010

EA-10-135

Mr. Scott Ward  
Senior Vice-President and General Manager  
Analytical Bio-Chemistry Laboratories, Inc.  
7200 East ABC Lane  
Columbia, MO 65202

SUBJECT: NOTICE OF VIOLATION – ANALYTICAL BIO-CHEMISTRY LABORATORIES, INC.  
NRC INSPECTION REPORT NO. 030-05154/2010-001(DNMS)

Dear Mr. Ward:

This letter refers to the U.S. Nuclear Regulatory Commission (NRC) inspection conducted on May 19 through 20, 2010, and June 22 through 23, 2010, at the Analytical Bio-Chemistry Laboratories, Inc., (ABC Laboratories) site in Columbia, Missouri. The inspection was performed to evaluate whether the decommissioning and final status survey activities regarding release of Buildings A, B, and D for unrestricted use were being conducted in accordance with NRC regulations and license conditions. During the inspection, two apparent violations were identified. The circumstances surrounding the violations, the significance of the issues, and the need for lasting and effective corrective action were discussed with you and your staff during the inspection exit meeting on June 23, 2010. Details regarding the violations were provided in NRC Inspection Report No. 030-05154/2010-001(DNMS), dated July 23, 2010.

In the letter transmitting the inspection report, we provided you the opportunity to address the apparent violations identified in the report by either attending a Predecisional Enforcement Conference or by providing a written response before we made our final enforcement decision. In letters dated August 20 and September 9, 2010, and in an electronic mail (e-mail) message dated September 2, 2010, you responded to the apparent violations.

Based on the information developed during the inspection, the NRC has determined that two violations of NRC requirements occurred. The violations are cited in the enclosed Notice of Violation (Notice), and the circumstances surrounding them are described in detail in the subject inspection report. The violations involved your staff's failure to: (1) notify the NRC in writing within 60 days of the decision to cease operations in Buildings D and F as required by Title 10 of the Code of Federal Regulations (10 CFR) Section 30.36(d); and to (2) submit a decommissioning plan and receive NRC approval of procedures used in aggressive remediation activities as required by 10 CFR 30.36(g). The NRC determined that the root cause of the violations appeared to be your staff not being fully aware of the requirements of 10 CFR 30.36 and, therefore, not having procedures which addressed the requirements for releasing buildings and conducting decommissioning activities.

The violations are of concern to the NRC because a potential existed for personnel to have received an internal radiation dose from removable and airborne particulate caused by the remediation activities being conducted without appropriate prior evaluation. In addition, your activities impacted

the NRC's regulatory function in that the NRC was not aware of your remediation activities until the unannounced NRC inspection on May 19, 2010. Therefore, the violations have been categorized collectively, in accordance with the NRC Enforcement Policy, as a Severity Level III problem.

In accordance with the NRC Enforcement Policy, a base civil penalty in the amount of \$3500 is normally considered for a Severity Level III problem. Because your facility has not been the subject of escalated enforcement actions within the last two years, the NRC considered whether credit was warranted for *Corrective Action* in accordance with the civil penalty assessment process described in Section VI.C.2 of the Enforcement Policy.

For the first violation, your staff implemented short term corrective action by notifying the NRC of the decision to cease work in Building D and Building F. The written notifications were provided on July 14, 2010, and June 30, 2010, respectively. In addition, your staff stated that ABC Laboratories had retained a more experienced Radiation Safety Officer (RSO). This response was supplemented in an e-mail dated September 2, 2010, which stated that any decision by ABC Laboratories to undertake decommissioning efforts would only take place with the consultation and consent of the RSO and would be only undertaken within the scope of advice of that office. Additionally, ABC Laboratories committed to only undertake any future decommissioning in a manner compatible with their broad scope license and applicable NRC technical report designation (NUREG) guidance. Your staff stated that this policy would be reflected in a policy issued by the Radiation Safety Committee following the next regular meeting in November and would be approved by November 30, 2010.

For the second violation, your staff instituted short term corrective action by instructing all involved ABC employees in the policy to obtain the approval of the RSO for any non-routine work, including any form of cutting, surface abrasion or other manner of decommissioning processing potentially generating exposure to contaminated material. As a long-term corrective action, ABC Laboratories enlisted a consultant to provide additional advice and developed a work plan for the decommissioning of Building D. The work plan limited the work in Building D to the scope of the ABC Laboratories license. ABC Laboratories further stated that it did not anticipate that any further aggressive action would take place outside that approved work plan, and if such actions were necessary to complete the decontamination efforts of Building D, the work plan would be amended, with NRC staff and RSO review, to ensure adequate consideration of worker safety and contamination control.

The September 2, 2010, e-mail also noted that all work that might reasonably involve the exposure of workers to any additional radiological hazard that results from that decontamination or removal would be reviewed by the Radiation Safety Committee and the RSO, as well as any needed engineering or other expertise; and a written procedure for that work would be approved by the RSO and submitted to the NRC. After the procedures are approved by the NRC and implemented, any appropriate radiological post-assessment (e.g., bioassay) would be undertaken by the RSO. Your staff indicated that this policy would be reflected in a policy issued by the Radiation Safety Committee following the next regular meeting in November and would be approved by November 30, 2010.

By letters dated July 26 and September 9, 2010, the ABC Laboratories also requested a license amendment to allow for higher release values for unrestricted use and simple remediation cutting procedures to allow for completion of decommissioning in Buildings D and F, and potentially

additional buildings in the future, in compliance with 10 CFR 30.36(g)(3), and to avoid duplicate reviews in future decommissioning projects. Based on these corrective actions, the NRC has determined the *Corrective Action* credit is warranted.

Therefore, to encourage prompt and comprehensive correction of violations, and in recognition of the absence of previous escalated enforcement action, I have been authorized, after consultation with the Director, Office of Enforcement, not to propose a civil penalty in this case. However, significant violations in the future could result in a civil penalty. In addition, issuance of this Severity Level III violation constitutes escalated enforcement action, which may subject you to increased inspection effort.

The NRC has concluded that information regarding the reason for the problem, the corrective actions taken and planned to correct the problem and to prevent recurrence, and the date when full compliance was achieved have already been adequately addressed on the docket in Inspection Report No. 030-05154/2010-001(DNMS) and your letters dated August 20 and September 9, 2010, and your e-mail dated September 2, 2010. Therefore, you are not required to respond to this letter unless the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to provide additional information, you should follow the instructions specified in the enclosed Notice.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response, if you choose to provide one, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. The NRC also includes significant enforcement actions on its Web site at [www.nrc.gov/about-nrc/regulatory/enforcement.html](http://www.nrc.gov/about-nrc/regulatory/enforcement.html).

Sincerely,

***/RA by Steven West Acting for/***

Mark A. Satorius  
Regional Administrator

Docket No. 030-05154  
License No. 24-13365-01

Enclosure:  
Notice of Violation

cc w/encls: J. Langston, Missouri Department of Health  
and Senior Services (MDHSS)  
K. Henke, MDHSS  
B. Keck, Radiation Safety Officer

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Sincerely,  
**/RA by Steven West Acting for/**  
 Mark A. Satorius  
 Regional Administrator

Docket No. 030-05154  
 License No. 24-13365-01

Enclosure:  
 Notice of Violation

cc w/encls: J. Langston, Missouri Department of Health  
 and Senior Services (MDHSS)  
 K. Henke, MDHSS  
 B. Keck, Radiation Safety Officer

FILE NAME: G:\ORAI\IICS\ENFORCEMENT\Enforcement Cases 2010\EA-10-135 Analytical BioChemistry Laboratories (ABC)\EA-10-135 ABC Final Action.docx

Publicly Available       Non-Sensitive

OFFICE	RIII	RIII	D:OE	RIII	RIII	RIII
NAME	Lougheed	Kemker	Lipa for Reynolds	Zimmerman <sup>1</sup>	Orth	West for Satorius
DATE	10/08/10	10/08/10	10/08/10	10/06/10	10/12/10	10/13/10

**OFFICIAL RECORD COPY**

1. OE concurrence received via e-mail from K. Day on October 6, 2010.

Letter to Scott A. Ward from Mark A. Satorius dated October 13, 2010

SUBJECT: NOTICE OF VIOLATION; NRC INSPECTION REPORT NO.  
030-05154/2010-001(DNMS) – ANALYTICAL BIO-CHEMISTRY  
LABORATORIES, INC.

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Paul Pelke

Magdalena Gryglak

Patricia Buckley

Tammy Tomczak

OEMAIL

OEWEB

## NOTICE OF VIOLATION

Analytical Bio-Chemistry Laboratories, Inc.  
Columbia, Missouri

Docket No. 030-05154  
License No. 24-13365-01  
EA-10-135

During a U.S. Nuclear Regulatory Commission (NRC) inspection of Analytical Bio-Chemistry Laboratories, Inc. (ABC Laboratories), located in Columbia, Missouri, conducted on May 19 through 20, 2010, and June 22 through 23, 2010, two violations of NRC requirements were identified. In accordance with the NRC Enforcement Policy, the violations are listed below:

- A. Title 10 of the Code of Federal Regulations (10 CFR) 30.36(d)(2) requires, in part, that licensees provide notification to the NRC in writing within 60 days of the licensee deciding to permanently cease principal activities in any separate building that contains residual radioactivity such that the building is unsuitable for release in accordance with NRC requirements.

Contrary to the above, ABC Laboratories failed to provide notification to the NRC in writing within 60 days of the decision to permanently cease principal activities in buildings that contained residual radioactivity such that the buildings were unsuitable for release in accordance with NRC requirements. Specifically, ABC Laboratories decided to permanently cease principal activities in Buildings D and F as of February 2010 and the buildings contained residual radioactivity. On June 30, 2010, the licensee provided notification of the decision to cease principal activities in Building F, and on July 14, 2010, the licensee provided notification of the decision to cease principal activities in Building D. These dates exceeded 60 days from the time of the decision to cease operations.

- B. Title 10 CFR 30.36(g)(1) states that a decommissioning plan must be submitted if required by license condition or if the procedures and activities necessary to carry out decommissioning of the site or separate building or outdoor area have not been previously approved by the Commission and these procedures could increase potential health and safety impacts to workers or to the public, such as in any of the following cases:
1. Procedures would involve techniques not applied routinely during cleanup or maintenance operation;
  2. Workers would be entering areas not normally occupied when surface contamination and radiation levels are significantly higher than routinely encountered during operation;
  3. Procedures could result in significantly greater airborne concentration of radioactive materials than are present during operation; or
  4. Procedures could result in significantly greater releases of radioactive material to the environment than those associated with operation.

In addition, 10 CFR 30.36 (g)(3) requires that procedures, such as those listed in 10 CFR 30.36 (g)(1), with potential health and safety impacts, not be carried out prior to approval of the decommissioning plan.

ENCLOSURE

Contrary to the above, in June 2010, ABC Laboratories conducted decommissioning activities without prior NRC approval of a decommissioning plan. Specifically, on June 22, 2010, the licensee demolished and removed contaminated fume hoods with associated ventilation ducts and drain lines, counter-tops, and floors. These types of activities involved techniques not routinely applied during cleanup or maintenance operations such that there was the potential for health and safety impacts to the workers.

This is a Severity Level III Problem (Supplement VI).

The NRC has concluded that information regarding the reason for the violations, the corrective actions taken and planned to be taken to correct the violations and to prevent recurrence, and the date when full compliance was achieved, have already been adequately addressed on the docket in NRC Inspection Report No. 030-05154/2010-001(DNMS), dated July 23, 2010, your letters dated August 20 and September 9, 2010, and in an electronic mail dated September 2, 2010. However, you are required to submit a written statement or explanation pursuant to 10 CFR 2.201 if the description therein does not accurately reflect your corrective actions or your position. In that case, or if you choose to respond, clearly mark your response as a "Reply to a Notice of Violation EA-10-135," and send it to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738, with a copy to the Regional Administrator, U.S. Nuclear Regulatory Commission, Region III, 2443 Warrenville Road, Suite 210, Lisle, IL 60532, within 30 days of the date of the letter transmitting this Notice of Violation (Notice).

If you contest this enforcement action, you should also provide a copy of your response, with the basis for your denial, to the Director, Office of Enforcement, U.S. Nuclear Regulatory Commission, One White Flint North, 11555 Rockville Pike, Rockville, MD 20852-2738.

If you choose to respond, your response will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>. Therefore, to the extent possible, the response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days of receipt.

Dated this 13<sup>th</sup> day of October 2010