



**UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001**

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**SUBJECT: ORDER SUSPENDING LICENSE AND PROHIBITING IN
LICENSED ACTIVITIES (NRC INVESTIGATION REPORT
4-2017-023)**

Dear Dr. Krahenbuhl:

This letter refers to two investigations completed on March 15, 2019, and
by the U.S. Nuclear Regulatory Commission (NRC or Commission) Office
at the Reed Research Reactor (RRR) facility located in Portland, OR. The
investigations, in part, was to determine if you, as the Director of the Reed
Reed College

Operating License (FOL) R-112.

As a result of the investigations, the NRC staff determined that you apparently
deliberately provided information to the NRC on multiple occasions that was
accurate in all material respects, contrary to Title 10 of the *Code of Federal
(10 CFR) Section 50.5(a)(2)*. The NRC staff also determined that, contrary to the
requirements of 10 CFR 50.5(a)(1), you appeared to have engaged in conduct
when you knowingly violated facility access control procedures that impeded
physical security plan, causing the licensee to violate Licensee
must maintain and fully implement all provisions of the RRR physical security

In a letter dated November 20, 2019, Agencywide Documents Access and
(ADAMS) Accession No. ML20044E056, the NRC notified you of the apparent
10 CFR 50.5, "Deliberate misconduct," which the NRC was considering
opportunity to address the apparent
which was held with you and your attorney
office in Rockville, Maryland.

OI Report 4-2016-022

The NRC's investigation documented that you, as the RRR Director, deliberately submitted inaccurate information to the NRC regarding an application, dated April 21, 2015, for a reactor operator (RO) license pursuant to 10 CFR Part 55. Specifically, on March 10, 2015, a physician

January 2017. On April 10, 2015, you removed Student #2's unescorted access to the RRR and removed the individual from the control room access list (CRAL).

Shortly thereafter, you had a conversation with Student #2 where you, in part, discussed the upcoming scheduled SRO licensing exam. During this conversation, the student disclosed potentially disqualifying medical information to you that, if provided to the NRC, would have required additional NRC review to determine if the student was qualified to take the upcoming SRO exam.

On May 7, 2015, the day before Student #2's SRO license exam at RRR, you met with an NRC license examiner. You informed the NRC examiner that Student #2 was fit to take the exam. The evidence shows that, while you had several opportunities to do so, you deliberately did not disclose to the NRC examiner the potentially disqualifying information, which would have required additional NRC review to determine if Student #2 was qualified to take the SRO license exam, or continue to hold a RO license without further evaluation. Further, you did not inform the NRC examiner that Student #2 was on medical leave at the time or that you had removed the student's RRR unescorted access. Because of your actions as described above, Student #2 was permitted to take the SRO exam on May 8, 2015, which Student #2 ultimately passed, and the NRC issued an SRO license to the individual on July 30, 2015, based on incomplete and inaccurate information. The NRC did not become aware of the incomplete and inaccurate information until February 2017, when you submitted an NRC Form 396 with updated medical information for Student #2 and indicated that it was "for information only."

Additionally, after you removed the student's RRR unescorted access on April 10, 2015, you gave Student #2 a key on May 8, 2015, to facilitate the administration of the SRO exam. The key provided unescorted access to the RRR, including to vital areas. Under License Condition 2.(C).(3), Reed College must maintain and fully implement all provisions of the RRR physical security plan, which specifies access control procedures. Contrary to the Reed procedures, you deliberately provided Student #2 unescorted access to the vital areas when you gave Student #2 a key and no escort.

Accordingly, the NRC has determined that your actions were deliberate and that you violated the requirements in 10 CFR 50.5(a)(2) when you provided information to the NRC that you knew to be incomplete or inaccurate in some respect material to the NRC. The evidence also shows that you engaged in deliberate misconduct, contrary to 10 CFR 50.5(a)(1), by deliberately violating facility access control procedures that implement the RRR physical security plan,

deliberately provided Student #2 unescorted access to the vital areas when you gave Student #2 a key and no escort.

number of the employer for your first subsequent employment in NRC-licensed activities following completion of the 3-year prohibition.

Pursuant to Section 223 of the Atomic Energy Act of 1954, as amended, any person who willfully violates, attempts to violate, or conspires to violate any provision of the enclosed Order

SUBJECT: ORDER SUSPENDING LICENSE AND PROHIBITING INVOLVEMENT IN NRC-LICENSED ACTIVITIES (NRC INVESTIGATION REPORT NOS. 4-2016-022 AND 4-2017-023)); DATED: March 16, 2020

Distribution:

for Student #1 in April 2015, Student #1 would not have been permitted to take the RO examination without further NRC evaluation.

OI Investigation No. 4-2017-023 documented that, on April 9, 2015, a second Reed College student (Student #2) who was a licensed RO at the RRR was involved in an incident that caused the student to take a medical leave of absence from Reed College. Student #2 remained on the medical leave of absence from April 9, 2015, through January 2017. On April 10, 2015, Dr. Krahenbuhl removed Student #2's unescorted access to the RRR and removed the student from the control room access list (CRAL).

Shortly after the April 9, 2015, incident, Student #2 and Dr. Krahenbuhl had a conversation where they, in part, discussed the student's ability to take the upcoming senior reactor operator (SRO) licensing exam. Student #2 testified that, during this conversation, the student disclosed certain medical information to Dr. Krahenbuhl. As the RRR Director, Dr. Krahenbuhl knew that this potentially disqualifying information would likely cause the student not to meet certain requirements of the American National Standards Institute (ANSI)/American Nuclear Society (ANS) standard. (Reed College also incorporated ANSI/ANS 15.4-1988 (R1999), "Selection and Training of Personnel for Research Reactors," in the technical specifications (Section 6.1.4) of its license.)

On May 7, 2015, the day before Student #2's SRO license exam at RRR, Dr. Krahenbuhl met with an NRC examiner. Dr. Krahenbuhl informed the NRC examiner that Student #2 was fit to take the exam. Although there were several opportunities to do so, Dr. Krahenbuhl did not disclose to the NRC examiner the potentially disqualifying information, that Student #2 was on medical leave at the time, and that Dr. Krahenbuhl had removed the

student's unescorted access to the RRR. Because of Dr. Krahenbuhl's actions as described above, Student #2 was permitted to take the SRO exam on May 8, 2015, which Student #2 ultimately passed, and the NRC issued an SRO license to the individual on July 30, 2015, based on incomplete and inaccurate information. The NRC did not become aware of the incomplete and inaccurate information until February 2017, when Dr. Krahenbuhl submitted an NRC Form 396 with updated medical information for Student #2 and indicated that it was "for information only." Had Dr. Krahenbuhl provided the NRC with complete and accurate information about Student #2 before the SRO exam, the student would not have been allowed to take the exam or continue to hold an RO license without further NRC evaluation.

After Dr. Krahenbuhl removed Student #2's unescorted access to the RRR on April 10, 2015, when the student took a leave of absence, she gave Student #2 a key to the RRR facility on May 8, 2015, to facilitate the administration of the SRO license exam. By giving Student #2 the key, Dr. Krahenbuhl provided Student #2 unescorted access to the facility, including access to vital areas, contrary to the licensee's procedures that required Student #2 to be escorted in the vital areas because Student #2 was not on the unescorted access lists for the RRR Control Room or Vital Area. These procedures implement requirements of the RRR physical security plan. Reed College Renewed FOL R-112, License Condition 2.C.(3), requires the licensee to maintain and fully implement all provisions of the physical security plan. Thus, Dr. Krahenbuhl's deliberate violation of the facility access control procedures that implement the RRR physical security plan caused the licensee to violate License Condition 2.C.(3).

During the PEC, Dr. Krahenbuhl acknowledged (through her representative) that the information regarding Student #1 and Student #2 that she provided to the NRC was not complete and accurate in all material respects; however, she stated that she did not intend to

deliberately mislead the NRC. The NRC reviewed the information provided at the PEC with the information from the investigations and determined that Dr. Krahenbuhl's assertion that her actions were not willful is not credible. A preponderance of the evidence in the record demonstrates that she, in fact, knew that the medical fitness information she provided to the NRC regarding Student #1 and Student #2 was not complete and accurate in all material respects.

Accordingly, the NRC has determined that Dr. Krahenbuhl's actions were a violation of 10 CFR 50.5, "Deliberate misconduct." The NRC considers Dr. Krahenbuhl's actions significant

All documents filed in NRC adjudicatory proceedings, including a request for hearing and petition for leave to intervene (petition), any motion or other document filed in the proceeding prior to the submission of a request for hearing or petition to intervene, and documents filed by interested governmental entities that request to participate under 10 CFR 2.315(c), must be filed in accordance with the NRC's E-Filing rule (72 FR 49139; August 28, 2007, as amended at 77 FR 46562; August 3, 2012). The E-Filing process requires participants to submit and serve all adjudicatory documents over the internet, or in some cases to mail copies on electronic storage media. Detailed guidance on making electronic submissions may be found in the Guidance for Electronic Submissions to the NRC and on the NRC Web site at <https://www.nrc.gov/site-help/e-submittals.html>. Participants may not submit paper copies of their filings unless they seek an exemption in accordance with the procedures described below.

To comply with the procedural requirements of E-Filing, at least 10 days prior to the filing deadline, the participant should contact the Office of the Secretary by e-mail at hearing.docket@nrc.gov, or by telephone at 301-415-1677, to (1) request a digital identification (ID) certificate, which allows the participant (or its counsel or representative) to digitally sign submissions and access the E-Filing system for any proceeding in which it is participating; and (2) advise the Secretary that the participant will be submitting a petition or other adjudicatory document (even in instances in which the participant, or its counsel or representative, already holds an NRC-issued digital ID certificate). Based upon this information, the Secretary will establish an electronic docket for the hearing in this proceeding if the Secretary has not already established an electronic docket.

Information about applying for a digital ID certificate is available on the NRC's public Web site at <https://www.nrc.gov/site-help/e-submittals/getting-started.html>. Once a participant

has obtained a digital ID certificate and a docket has been created, the participant can then submit adjudicatory documents. Submissions must be in Portable Document Format (PDF). Additional guidance on PDF submissions is available on the NRC's public Web site at <https://www.nrc.gov/site-help/electronic-sub-ref-mat.html>. A filing is considered complete at the time the document is submitted through the NRC's E-Filing system. To be timely, an electronic filing must be submitted to the E-Filing system no later than 11:59 p.m. Eastern Time on the due date. Upon receipt of a transmission, the E-Filing system time-stamps the document and sends the submitter an e-mail notice confirming receipt of the document. The E-Filing system also distributes an e-mail notice that provides access to the document to the NRC's Office of the General Counsel and any others who have advised the Office of the Secretary that they wish to participate in the proceeding, so that the filer need not serve the document on those participants separately. Therefore, applicants and other participants (or their counsel or representative) must apply for and receive a digital ID certificate before adjudicatory documents are filed so that they can obtain access to the documents via the E-Filing system.

A person filing electronically using the NRC's adjudicatory E-Filing system may seek assistance by contacting the NRC's Electronic Filing Help Desk through the "Contact Us" link in the NRC'

authorization to continue to submit documents in paper format. Such filings must be submitted by: (1) first class mail addressed to the Office of the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, Attention: Rulemaking and Adjudications Staff; or (2) courier, express mail, or expedited delivery service to the Office of the Secretary, 11555 Rockville Pike, Rockville, Maryland 20852, Attention: Rulemaking and Adjudications Staff. Participants filing adjudicatory documents in this manner are responsible for serving the document on all other participants. Filing is considered complete by first-class mail as of the time of deposit in the mail, or by courier, express mail, or expedited delivery service upon depositing the document with the provider of the service. A presiding officer, having granted an exemption request from using E-Filing, may require a participant or party to use E-Filing if the presiding officer subsequently determines that the reason for granting the exemption from use of E-Filing no longer exists.

Documents submitted in adjudicatory proceedings will appear in the NRC's electronic hearing docket which is available to the public at <https://adams.nrc.gov/ehd>, unless excluded pursuant to an order of the Commission or the presiding officer. If you do not have an NRC-issued digital ID certificate as described above, click "cancel" when the link requests certificates

