October 21, 2010

EA-10-077

David E. Wallace Chief Executive Officer Superior Well Services, Ltd. 1380 Route 286 East, Suite 121 Indiana, PA 15701

SUBJECT: NOTICE OF VIOLATION AND IMPOSITION OF PROPOSED CIVIL PENALTY -

\$34,000 - NRC Inspection Report No. 03034542/2009001, and NRC Office of

Investigation Report No. 1-2009-035

Dear Mr. Wallace:

This letter provides you the U.S. Nuclear Regulatory Commission's (NRC's) enforcement decision for the apparent violations identified during the NRC investigation and inspection conducted between July 23, 2009, and July 22, 2010, at the Superior Well Services (SWS) facilities in Buckhannon, West Virginia (WV); Sophia, WV; and Gaylord, Michigan. The inspection consisted of an examination of SWS' licensed activities as they relate to radiation safety and to compliance with NRC regulations, and to the conditions of the SWS license. The inspection also included a review of the circumstances surrounding a loss of radioactive material event that occurred on September 20, 2008. The investigation, conducted by the NRC Office of Investigations (OI), involved an evaluation of whether SWS personnel deliberately failed to report to the NRC the loss of radioactive material and falsified radiation survey records. The NRC discussed its findings during a telephonic exit meeting with Mr. Lewis Cessna of your staff on July 22, 2010. The findings were also described in the NRC inspection report and OI factual summary issued on August 3, 2010.

On September 2, 2010, the NRC conducted a predecisional enforcement conference (PEC) with SWS at the NRC's Region I Office to discuss the apparent violations, their significance, their root causes, and SWS' corrective actions. During the PEC, SWS provided additional information about how the violations occurred and the corrective actions implemented and/or planned to prevent recurrence. Based on the information developed during the inspection and the information that SWS provided during the PEC, the NRC has determined that five violations of NRC requirements occurred. These 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 NRC's evaluation of the information provided by SWS at the PEC is provided in Enclosure 2.

The first three violations are set forth in Section I of the Notice and relate to the event that occurred on September 20, 2008, when two well-logging sealed sources (a cesium-137 source and an americium-241 source), each greater than 1000 times the quantity specified in Appendix C to Part 20 of Title 10 of the Code of Federal Regulations (10 CFR), fell off of a company truck during transport. One violation involved the failure to secure the packages containing the licensed material from shifting during transport. As a result, on

September 20, 2008, when the truck transporting these sources reportedly hit a large pothole, the weld securing the source plate to the truck broke, and the sources fell off of the truck and remained unattended by the side of a public highway. The second violation involved the failure to control and maintain constant surveillance of the sources while they were on the highway (an unrestricted area). Since SWS did not recognize that the sources had fallen out of the truck until the truck reached its destination at the SWS facility in Buckhannon, WV, the sources remained unattended for approximately ninety minutes until SWS personnel located and retrieved the sources. The third violation involved the failure to immediately report this occurrence by telephone to the NRC Operations Center. The involved SWS employees, including the site Radiation Safety Officer for the associated SWS facility, did not recognize the need to report this event to the NRC. As a result, SWS did not provide the required immediate telephone notification of this event (which occurred on September 20, 2008) to the NRC Operations Center until July 23, 2009 (Event No. 45225), after an NRC inspector informed SWS of the reportability requirement while conducting a routine inspection.

Although the sources remained inside their locked, shielded transport containers, and no members of the public appeared to have been exposed to radiation from these sources during the ninety minutes they were unattended on the highway, the potential existed for significant exposure or a malevolent use to occur if an unauthorized individual had retrieved the sources and breached the containers. In addition, SWS' failure to notify the NRC of this loss of radioactive material prevented the NRC from responding to and evaluating the significance of this event when it occurred. Given the significance of leaving material unattended in the public domain, the violation involving the failure to properly secure the sources resulted in the violation involving the sources being unsecured in the public domain, and the failure to promptly report this occurrence when identified, the NRC has categorized these three violations collectively as a Severity Level (SL) III problem.

In accordance with the NRC Enforcement Policy, a base civil penalty in the amount of \$27,000 is considered for a SL III problem involving the loss of a sealed source or device with total activity greater than one curie. For escalated violations or problems involving the loss of a sealed source or device, the NRC typically exercises discretion to propose imposition of a civil penalty of at least the base amount, in accordance with Section 2.3.4 of the Enforcement Policy. Therefore, to emphasize the importance of maintaining security and control of sealed sources and devices, I have been authorized, after consultation with the Director, Office of Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalty (Notice) in the base amount of \$27,000 for this SL III problem. In addition, issuance of this Notice constitutes escalated enforcement action that may subject you to increased inspection effort.

The other two violations that the NRC is citing are described in Section II of the Notice. The violations involve the failure to conduct required radiological surveys of vehicles before transporting licensed material and the deliberate falsification of survey records for these vehicles. Specifically, former SWS employees informed the NRC inspector and investigator that on numerous occasions, they did not perform the surveys and they instead completed the survey forms by copying data from previously completed forms. SWS' failure to perform the required radiological surveys of vehicles prevented SWS from assuring that the dose rates inside and outside the trucks did not exceed limits set by the NRC and the U.S. Department of Transportation. The falsification of radiological survey records is of particular concern to the NRC, because the actions of the employees were deliberate. The employees who admitted to the NRC that they had falsified survey records indicated that they did so because they did not

know how to use the survey instruments. This indicated to the NRC the need for SWS to improve management oversight of the radiation safety program. Given that the failure to conduct the surveys and the falsification of the survey records are related violations, the NRC has also categorized these violations collectively as a Severity Level (SL) III problem.

In accordance with the NRC Enforcement Policy, a base civil penalty in the amount of \$7,000 is considered for a SL III problem involving large material users for violations that are not associated with lost sources. Because the violations involved willfulness, the NRC considered whether credit was warranted for *Identification* and *Corrective Action* in accordance with the civil penalty assessment process in Section 2.3.4 of the Enforcement Policy. Credit is not warranted for *Identification*, because the NRC identified this issue during the course of its inspection and investigation. Regarding *Corrective Action*, credit is warranted, because SWS' actions were prompt and comprehensive. These included increased focus on vehicle radiological surveys during initial and annual employee training, enhanced documentation of the completion of this training, random audits and observations of vehicle radiation surveys by SWS management, and the development of job aids for SWS employees on the use of radiation survey meters.

Therefore, to emphasize the importance of conducting radiological surveys when required, and maintaining accurate record of these surveys, I have been authorized, after consultation with the Director, Office of Enforcement, to issue the enclosed Notice of Violation and Proposed Imposition of Civil Penalties (Notice) in the base amount of \$7,000 for this Severity Level III problem.

Pursuant to 10 CFR 2.201, you are required to provide a response to the enclosed Notice and Proposed Imposition of Civil Penalty identifying whether you admit or deny the violations, as well as to provide appropriate payment of the Civil Penalty. Please follow the instructions in the attached Notice when preparing your response. The NRC has concluded that information regarding the reason for the violations, the corrective actions taken and planned to correct the violations and prevent recurrence, and the date when full compliance was achieved, is already adequately addressed on the docket in Inspection Report No. 03034542/2009001, in the information presented by SWS at the PEC (ML102670571), and in the SWS email dated October 12, 2010. Therefore, you are not required to provide that information in your civil penalty response, unless the descriptions in the aforementioned correspondence do not accurately reflect your position.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosures, as well as your response, will be made available electronically for public inspection in the NRC Public Document Room or from the NRC's document 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 http://www.nrc.gov/reading-rm/doc-collections/enforcement/actions/. To the extent possible, your response should not include any personal privacy, proprietary, or safeguards information so that it can be made available to the public without redaction. If personal privacy or proprietary information is necessary to provide an acceptable response, please provide a bracketed copy of your response that identifies the information that should be protected and a redacted copy of your response that deletes such information. If you request withholding of such information, you must specifically identify the portions of your response that you seek to have withheld and provide in detail the bases for your claim of withholding (e.g., explain why the disclosure of information will create an

unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information).

Alternatively, you may request Alternative Dispute Resolution (ADR) with the NRC in an attempt to resolve any issues you have with this proposed action. If you request ADR, you will need to contact the Institute on Conflict Resolution (ICR) at 877-733-9415 within 10 days of the date of this letter. ADR is a general term encompassing various techniques for resolving conflict outside of court using a neutral third party. The technique that the NRC has decided to employ is mediation. Additional information concerning NRC's program is described in the brochure (NUREG/BR-0317) that is attached to this letter, and can be obtained at http://www.nrc.gov/about-nrc/regulatory/enforcement/adr.html. The ICR at Cornell University has agreed to facilitate the NRC's program as an intake neutral.

Sincerely,

/RA/ Original Signed by Marc L. Dapas for

William M. Dean Regional Administrator

Docket No. 03034542 License No. 37-30412-01

Enclosures: 1. Notice of Violation and Proposed

Imposition of Civil Penalties

2. NRC Evaluation of Reponses to the Apparent Violations Provided by Superior Well Services at the Predecisional Enforcement Conference

3. NUREG/BR-0254 Payment Methods

unwarranted invasion of personal privacy or provide the information required by 10 CFR 2.390(b) to support a request for withholding confidential commercial or financial information).

Alternatively, you may request Alternative Dispute Resolution (ADR) with the NRC in an attempt to resolve any issues you have with this proposed action. If you request ADR, you will need to contact the Institute on Conflict Resolution (ICR) at 877-733-9415 within 10 days of the date of this letter. ADR is a general term encompassing various techniques for resolving conflict outside of court using a neutral third party. The technique that the NRC has decided to employ is mediation. Additional information concerning NRC's program is described in the brochure (NUREG/BR-0317) that is attached to this letter, and can be obtained at http://www.nrc.gov/about-nrc/regulatory/enforcement/adr.html. The ICR at Cornell University has agreed to facilitate the NRC's program as an intake neutral.

Sincerely,

/RA/ Original Signed by Marc L. Dapas for

William M. Dean Regional Administrator

Docket No. 03034542 License No. 37-30412-01

Enclosures:

1. Notice of Violation and Proposed Imposition of Civil Penalties

- 2. NRC Evaluation of Reponses to the Apparent Violations Provided by Superior Well Services at the Predecisional Enforcement Conference
- 3. NUREG/BR-0254 Payment Methods

Distribution: see next page

SUNSI Review Complete: MMM (Reviewer's Initials)

DOCUMENT NAME:S:\Enf-allg\Enforcement\Proposed-Actions\Region1\EA-10-077 SWS LSP NOV-III CP FINAL.doc
After declaring this document "An Official Agency Record" it <u>will be</u> released to the Public. ADAMS Accession No.: ML102950007
To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	RI/ORA		RI/DNMS		RI/DNMS		RI/ORA		RI/ORA	
NAME	MMcLaughlin / MMM*		MMiller/ S Lodhi for*		JKinneman/ JDK*		KFarrar / KLF*		DHolody / MMM for*	
DATE	9/17/2010		9/17/2010		9/21/2010		9 /22/2010		9 /30/2010	
OFFICE	OI		HQ/ FSME		OGC		HQ/ OE		RI/ORA	
NAME	E Wilson / M Mullen for*	1	G Villamar		CSafford		NHilton/R Summers for	5	WDean/MLD for	
DATE	9/24/2010		10 / 06/2010		10 /04/2010		10 /15/2010		10 /20/2010	

^{*} See concurrence on previous page OFFICIAL RECORD COPY

Distribution w/encl:

ADAMS (PARS)

SECY

CA

OEMAIL

OEWEB

WBorchardt, EDO

LTrocine OEDO

MWeber, DEDMRT

RZimmerman, OE

ACampbell, OE

NHilton, OE

LSreenivas, OE

NRiddick, OE

NHasan, OE

CScott, OGC

CSafford, OGC

CMiller, FSME

CCarpenter, FSME

RLewis, FSME

JLuehman, FSME

MBurgess, FSME

GVillamar, FSME

DWhite, FSME

Enforcement Coordinators

RII, RIII, RIV (CEvans; SOrth; WJones)

EHayden, OPA

HBell, OIG

CMcCrary, OI

STitherington-Buda, OCFO

MWilliams, OCFO

WDean, RA, RI

MDapas, DRA, RI

DLew, DRP, RI

DScrenci, PAO-RI / NSheehan, PAO-RI

JKinneman, DNMS, RI

PHenderson, DNMS, RI

MMiller, DNMS, RI

SLodhi, DNMS, RI

DJanda, SAO-RI

KFarrar, RI

DHolody, RI

MMcLaughlin, RI

ADeFrancisco, RI

CODaniell, RI

SVillar, RI

R1DNMSMailResource

NOTICE OF VIOLATION AND PROPOSED IMPOSITION OF CIVIL PENALTIES

Superior Well Services, Ltd. (SWS) Indiana, PA

Docket No. 03034542 License No. 37-30412-01 EA-10-077

During an NRC inspection and investigation conducted between July 23, 2009 and May 19, 2010, violations of NRC requirements were identified. In accordance with the NRC Enforcement Policy, the violations are listed below:

- VIOLATIONS ASSOCIATED WITH TEMPORARY LOSS OF LICENSED MATERIAL
 - A. 10 CFR 71.5(a) requires, in part, that each licensee who transports licensed material where transport is on public highways, shall comply with the applicable requirements of the Department of Transportation regulations in 49 CFR Parts 107, 171 through 180, and 390 through 397, appropriate to the mode of transport.
 - 49 CFR 173.448(a) requires that each shipment of Class 7 (radioactive) materials must be secured to prevent shifting during normal transportation conditions.
 - Contrary to the above, on September 20, 2008, while transporting licensed material on a public highway, SWS did not secure a shipment of radioactive materials (sealed well-logging sources, consisting of a cesium-137 source and an americium-241 source, each greater than 1000 times the quantity specified in Appendix C to Part 20) to prevent shifting during normal transportation conditions.
 - B. 10 CFR 20.1802 requires that the licensee shall control and maintain constant surveillance of licensed material that is in a controlled or unrestricted area and that is not in storage
 - Contrary to the above, on September 20, 2008, licensed materials fell out of a transport truck and onto a public highway (an unrestricted area) where SWS failed to control and maintain constant surveillance of the licensed material for at least ninety minutes, until SWS located and retrieved the sources.
 - C. 10 CFR 20.2201(a) requires, in part, that each licensee shall make a report by telephone to the NRC Operations Center immediately after its occurrence becomes known to the licensee, any missing licensed material in an aggregate quantity equal to or greater than 1000 times the quantity specified in Appendix C to Part 20 under such circumstances that it appears to the licensee that an exposure could result to persons in unrestricted areas.

Contrary to the above, on September 20, 2008, when it became known to SWS that licensed material was missing and that an exposure could result to persons in unrestricted areas, SWS did not immediately make a report by telephone to the NRC Operations Center. Specifically, SWS failed to notify the NRC Operations Center of the missing licensed material until July 23, 2009, ten months after identifying the event.

These three violations are categorized collectively as a Severity Level III problem (Section 6.7).

II. OTHER VIOLATIONS OF NRC REQUIREMENTS

A. 10 CFR 39.67 requires, in part, that before transporting licensed materials, the licensee shall make a radiation survey of the position occupied by each individual in the vehicle and of the exterior of the vehicle used to transport the licensed materials. The results of the surveys must be recorded, and the licensee shall retain records of surveys for inspection by the Commission for three years after they are made.

Contrary to the above, on an unspecified number of occasions prior to July 22, 2010, before transporting licensed materials, SWS did not make radiation surveys of the position occupied by each individual in the vehicle and of the exterior of the vehicle used to transport the licensed materials.

B. 10 CFR 30.9(a) requires, in part, that information required by the Commission's regulations to be maintained by the licensee shall be complete and accurate in all material respects.

Contrary to the above, on an unspecified number of occasions prior to July 22, 2010, SWS did not ensure that information required by the Commission's regulations to be maintained was complete and accurate in all material respects. Specifically, SWS recorded survey results that were obtained by copying from previous survey records.

These violations are categorized collectively as one Severity Level III problem (Section 6.9).

Civil Penalty - \$7,000

SWS is required to respond to this Notice by submitting a statement indicating when and by what method payment was made. Alternately, SWS may protest imposition of the civil penalty in whole or in part, by a written answer in accordance with 10 CFR 2.205 protesting the civil penalty. Such answer may request remission or mitigation of the penalty, and should be clearly marked as an "Answer to a Notice of Violation (EA-10-077)" and may: (1) deny the violations listed in this Notice, in whole or in part; (2) demonstrate extenuating circumstances; (3) show error in this Notice; or, (4) show other reasons why the penalty should not be imposed.

The NRC has concluded that information regarding the reason for the violations, the actions taken and planned to correct the violations and prevent recurrence, and the date when full compliance was achieved, is already adequately addressed on the docket in the letter transmitting this Notice, in Inspection Report No. 03034542/2009001, in the information presented by SWS at the PEC (ML 102670571), and in the SWS email dated October 12, 2010. Therefore, SWS' civil penalty response need not address these subjects. However, if the description therein does not accurately reflect your position or your corrective actions, you are required to submit a written statement or explanation under 10 CFR 2.201. In that case, or if you choose to respond, clearly mark this response as a "Reply to a Notice of Violation (EA-10-077)."

The responses noted above, i.e., Statement as to payment of civil penalty, Answer to a Notice of Violation, and Reply to Notice of Violation, should be addressed to: 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 I, 475 Allendale Road, King of Prussia, PA 19406.

Should SWS fail to answer within 30 days of the date of this Notice, the NRC will issue an order imposing the civil penalty. In requesting mitigation of the proposed penalty, the response

should address the factors listed in Section 2.3.4, "Civil Penalty Assessment," of the Enforcement Policy. Any written answer addressing these factors pursuant to 10 CFR 2.205, should be set forth separately from the statement or explanation provided pursuant to 10 CFR 2.201, but may incorporate parts of the 10 CFR 2.201 reply by specific reference (e.g., citing page and paragraph numbers) to avoid repetition. The attention of the licensee is directed to the other provisions of 10 CFR 2.205, regarding the procedure for imposing a civil penalty.

Alternatively, you may request Alternative Dispute Resolution (ADR) with the NRC in an attempt to resolve any issues you have with this proposed action. If you request ADR, you will need to contact the Institute on Conflict Resolution (ICR) at 877-733-9415 within 10 days of the date of this letter. ADR is a general term encompassing various techniques for resolving conflict outside of court using a neutral third party. The technique that the NRC has decided to employ is mediation. Additional information concerning NRC's program is described in the brochure (NUREG/BR-0317) that is attached to the letter transmitting this Notice, and can be obtained at http://www.nrc.gov/about-nrc/regulatory/enforcement/adr.html. The ICR at Cornell University has agreed to facilitate the NRC's program as an intake neutral.

Upon failure to pay any civil penalty which subsequently has been determined in accordance with the applicable provisions of 10 CFR 2.205 to be due, this matter may be referred to the Attorney General, and the penalty, unless compromised, remitted, or mitigated, may be collected by civil action pursuant to Section 234c of the Act, 42 U.S.C. 2282c.

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

Dated this 21st day of October 2010

Enclosure 2: NRC Evaluation of Reponses to the Apparent Violations Provided by Superior Well Services at the Predecisional Enforcement Conference

On September 2, 2010, the U.S. Nuclear Regulatory Commission (NRC) conducted a closed Predecisional Enforcement Conference (PEC) with representatives of Superior Well Services, Ltd. (SWS), to discuss the apparent violations identified by the NRC during an NRC inspection and investigation conducted between July 23, 2009, and May 19, 2010.

The apparent violations involved SWS' failures to:

- 1. Survey vehicles before transporting licensed materials (10 CFR 39.67)
- 2. Maintain materially complete and accurate information that is required by NRC regulations (10 CFR 30.9)
- 3. Control and maintain constant surveillance of licensed material in an unrestricted area that is not in storage (10 CFR 20.1802)
- 4. Immediately report by telephone missing licensed material to the NRC Operations Center (10 CFR 20.2201)
- 5. Provide materially complete and accurate information to the NRC (10 CFR 30.9)
- 6. Secure a shipment of radioactive materials to prevent shifting during normal transport conditions (10 CFR 71.5 and 49 CFR 173.448)
- 7. Maintain record of a radiation protection program audit (10 CFR 20.2102)

At the PEC, SWS contested Apparent Violations 1, 2, and 7, and presented information to support its positions. The NRC evaluated this additional information in conjunction with the information gathered during the NRC inspection and investigation, and agreed that Apparent Violation 7 did not occur. Additionally, based on further review of the available information, the NRC determined to not cite Apparent Violation 5 (which had not been formally contested by SWS).

The NRC's evaluation of, and response to, SWS' positions on Apparent Violations 1, 2, and 7, and the basis for the NRC's determination that Apparent Violation 7 did not occur is provided below.

Apparent Violation 1 (Contested)

The NRC identified an apparent violation of 10 CFR 39.67 for SWS' failure to make radiation surveys of the vehicle that was used to transport licensed materials.

SUMMARY OF SWS' POSITION

SWS contested this violation by asserting that its staff did perform radiological surveys of the vehicle before transporting licensed material. SWS presented copies of the surveys conducted on September 15, 19, and 20, 2008 (the dates of three survey records reviewed by the NRC inspector and investigator and referenced in the NRC Inspection Report). SWS also reviewed the individual requirements specified in 10 CFR 39.67 (such as the requirement to include the date of the survey and the instrument used, etc.), and highlighted where, for these three surveys, the relevant information was provided. SWS explained that the surveys contained similar radiological information because they involved the same sources placed in the same location, with dose rates measured at the same distances. SWS stated that the reason the dose rate at the side of the truck opposite of the radiological source storage compartment was higher than the dose rate at the side of the truck closest to the storage compartment for these three surveys, was most likely that the sources had been placed in the truck so that they faced the opposite side of the truck.

Additionally, SWS informed the NRC that it had recently significantly reduced its workforce and offered that the ex-employees who told the NRC inspector and investigator that they had not conducted the radiological surveys and had, instead, copied the results of past surveys, were likely disgruntled because they had lost their jobs. SWS stated that it had previously investigated rumors that surveys were not being conducted, and that all of the employees questioned indicated they were performing the surveys, as required.

NRC EVALUATION OF SWS' POSITION

The NRC concluded that SWS did not provide compelling evidence to support a conclusion that the NRC's original determination regarding the existence of a violation, based on the information gathered during the NRC inspection and investigation, was incorrect. The NRC does not agree that the existence of, and information contained in, the physical survey records proves the surveys were completed. As discussed under "Apparent Violation 2," the NRC maintains that the survey records were deliberately falsified to indicate that surveys had been performed when they, in fact, had not.

The primary basis for the NRC's conclusion that this violation occurred is that former SWS employees informed the NRC inspector and investigator that they had, on occasion, not performed the radiological surveys and had, instead, filled out the survey forms by copying data from previously-conducted surveys. The NRC does not accept SWS' explanation that the employees likely provided this information because they were disgruntled about having lost their jobs. The NRC inspector and investigator interviewed each employee separately. The first employee interviewed raised this issue on his/her own and the other individuals who were interviewed provided supporting information based upon questions by the NRC. Additionally, all of the former employees provided this information under oath.

In summary, the NRC concludes that SWS, on an unspecified number of occasions, failed to conduct vehicle radiation surveys before transporting licensed materials.

Apparent Violation 2 (Contested)

The NRC identified an apparent violation of 10 CFR 30.9 for SWS' deliberate failure to maintain a complete and accurate record of the radiation surveys required by 10 CFR 39.67. Two former SWS employees informed the NRC inspector and investigator that on numerous occasions, they did not perform the surveys. The employees stated that instead, they filled out the survey forms by copying data from previously completed forms.

SUMMARY OF SWS POSITION

SWS contested the apparent violation that there was a deliberate failure to maintain a complete and accurate record of radiation surveys. In addition to SWS' argument that it believed the radiological surveys were being conducted, at the PEC, SWS provided a chart comparing survey data from September 15, 19, and 20, 2008, as well as data from September 16 and 21, 2008. SWS asserted that the results appeared to be consistent and reasonable, and were sufficiently different so as to contradict the assertion that dose rate numbers were being copied from previous surveys.

NRC EVALUATION OF SWS' POSITION

The NRC determined that SWS did not provide sufficient evidence to support a conclusion that the NRC's original determination regarding the existence of a violation, based on the information gathered during the NRC inspection and investigation, was incorrect. As with Apparent Violation 1, the primary basis for the NRC concluding that this violation occurred is the testimony of the former SWS employees. Those employees informed the NRC inspector and investigator, under oath, that they had not performed actual surveys on numerous occasions

Enclosure 2 3

and had instead, on those occasions, copied dose rate information from previously-conducted surveys. Additionally, for the reasons provided in the NRC's Evaluation of SWS' position for Apparent Violation 1, the NRC does not accept SWS' explanation that the employees likely provided this information because they were disgruntled about having lost their jobs.

In summary, the NRC concluded that SWS, on an unspecified number of occasions, recorded survey results that were obtained by copying from previous survey records.

Apparent Violation 3

SWS did not contest this violation.

Apparent Violation 4

SWS did not contest this violation.

Apparent Violation 5

The NRC identified an apparent violation of 10 CFR 30.9 for an SWS engineer's failure to provide complete and accurate information to the NRC inspector. The inaccurate information related to the circumstances of the event on September 20, 2008, when the SWS well-logging sources fell out of the transport truck and remained on the side of a public highway for approximately 90 minutes. Specifically, on July 23, 2009, the engineer informed the NRC inspector that (s)he was the first person to find the sources, and that this had occurred approximately 30 minutes after the sources had fallen from the truck. The engineer later (on February 22, 2010) informed the NRC inspector and investigator that the sources had been found by two other SWS employees. The NRC inspector and investigator determined that the sources had been found in a different location than where the engineer had told them they were found, and that the sources had remained unattended in an unrestricted area for approximately 90 minutes.

SUMMARY OF SWS POSITION

Although SWS did not contest Apparent Violation 5, during the PEC, the SWS representatives stated that the SWS engineer had not intentionally provided inaccurate information to the NRC inspector. They stated that the event had occurred ten months prior to when the engineer spoke to the inspector, and that the engineer believed (s)he was providing accurate information, based on his/her recollection of the event circumstances.

NRC EVALUATION OF SWS' POSITION

The NRC did not find that the SWS engineer provided the inaccurate information deliberately. Upon further evaluation of this issue and the information provided by SWS, the NRC will not cite this violation. The NRC considered that the inaccurate information did not significantly impact the NRC's ability to inspect the circumstances and safety impact of the event. Although, as a result of the information provided, the NRC was not able to promptly speak with the actual SWS employees who had located the sources or to ascertain the correct location at which the sources had been found for an additional six months (a total of 16 months after the event had occurred), there was little consequence from this delay. In addition, the explanation offered by SWS for the inaccurate information is reasonable.

In summary, the NRC will not cite this violation of 10 CFR 30.9.

Apparent Violation 6

SWS did not contest this violation

Apparent Violation 7 (Contested)

The NRC identified an apparent violation of 10 CFR 20.2102 for failure to maintain record of an annual audit of the radiation safety program. Specifically, the NRC inspector reviewed SWS' program for the conduct of annual audits and identified that SWS had audited its Buckhannon, WV office on July 11, 2008. However, SWS could not provide the audit report.

SUMMARY OF SWS POSITION

SWS contested the violation associated with the failure to maintain record of an annual audit of its radiation safety program. At the PEC, SWS provided a copy of the 2008 Annual Program Audit report for its Sophia, West Virginia (WV) office. Both the Buckhannon and Sophia facilities are locations at which the activities authorized under NRC License No. 37-30412-01 are conducted. Since both facilities implement the same radiation safety program, the report for the Sophia, WV facility meets the requirement of 10 CFR 20.2102.

NRC EVALUATION OF SWS' POSITION

The NRC determined that the 2008 radiation safety program audit report for the Sophia, WV facility documented a review of the radiation safety program that is applicable to NRC License No. 37-30412-01. 10 CFR 20.1101 does not require licensees to audit each location of use, only the overall program (and then document that audit). As such, the NRC determined that SWS did not violate 10 CFR 20.2102.

The NRC acknowledges that SWS incorporated corrective actions related to its audit process in order to strengthen its implementation of the overall radiation safety program. The corrective actions included having the Local Radiation Safety Officer (RSO) at each SWS facility conduct and document two audits per year. The SWS Corporate RSO will conduct an annual audit of each facility, the report of which will be reviewed by SWS management.