



December 13, 2006
Reply to a Notice of Violation

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington D.C. 20555

cc: Regional Administrator Region IV
611 Ryan Plaza Drive
Suite 400
Arlington, TX 76011

Dear Mrs. Campbell,

This letter is in response to the NRC's Inspection Report and Notice of violation dated 29-Novemeber-2006. The inspection was conducted on 23-October-2006 on the Integrated Production Services facility at 205 Industrial Trace, in Broussard Louisiana. I have included a copy of the letter in this mailing for your reference.

It is my intent to address each of the issues raised by your inspectors during their visit on an individual basis. The way I approached the review of these incidents was to interview the various employees who were involved in the cited violations, where possible, as some of these employees have left the company, and are no longer employed by Integrated Production Services. I have made every effort to identify the root cause of the violations, and implement corrective action to prevent the violations from reoccurring. I also reviewed the current procedures in place, and the programs directed at training for employees, and supervisors. I will also review in the coming month the training that the employees receive when they join our company, in an effort to determine if the training is sufficient.

The response to the individual violations is presented in the attached Document "Response to Cited Violations". In each case, I have made an attempt to address the specific violation, the findings from my investigation, and the remedial action I have taken, or will take in the near future. I have also presented an estimate of the time needed to implement the remedial actions, if they could not be completed immediately.

Integrated Production Services

205 Industrial Trace
Broussard, Louisiana 70518

Tel 337-839-0679
Fax 337-839-0004

www.ipsadvantage.com

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Response to Cited Violations

Violation (A) listed on Page-1 of Enclosure-1: Severity Level IV

Failure to confirm that the logging tool is free of contamination by either energizing the logging tool detector, or using a survey meter.

Response:

My investigation showed that we had not complied with this NRC regulation, and did not verify the logging tool was free from contamination. My investigation also revealed that the cases uncovered by your inspectors were not the only violations of this regulation, as I found other cases where the "post job survey" had not been performed. I was not able to interview the logging supervisors involved, as they are no longer employed by our company. I did however, interview the logging supervisors who are currently employed by our company, and verified that they were aware of this regulation. I also found that the management in charge at the time did not recognize the violation, and take steps to remedy the problem. The reason for this violation was due to lack of awareness by the logging supervisors, and an insufficient emphasis by management to enforce the regulations.

Remedial Action:

- 1) I have put emphasis on the Post Job review that is performed after each logging job. Management will be required to go through a Post Job checklist with the logging supervisor in each case. This checklist specifically mentions that the Pre & Post job surveys of the logging tool, work area, and wellhead have been performed. This is designed to allow management to recognize when the regulations are not being followed, and intervene to ensure the crews are complying. The Hazmat form where this information is recorded will be required to be turned in as part of the post job paperwork.
Done
- 2) I will hold a district meeting with all employees to inform them of the violations, and make sure they are aware of this requirement. Disciplinary actions up to termination will be enforced for those individuals who do not comply. **Scheduled for Completion (31-Dec-2006)**
- 3) Management will perform an annual logging supervisor's review to ensure the employees are adhering to the regulations. A form will be created, that will cover the annual review, and be recorded in their training records. **Scheduled for Completion by 15-Jan-2006**



Violation B listed on Page-1 of Enclosure-1: Severity Level IV

Failure to maintain the Radiation Survey Instrument calibration interval at 6-month or less intervals.

Response:

My investigation also showed that we were indeed in violation of this regulation. We had used a survey meter to perform a survey after the calibration had expired. The survey meters had not been maintained on strict six month calibration schedules. The company being used to perform the calibrations was slow in getting the meters finished, and returned to the district. Once again, the underlying root cause of the problem was that although the meters were being sent in for calibration, the fact that they were being used for surveys when the calibration was out of date, and that this was not discovered is a management issue. The surveys in question were well site surveys, and are normally recorded on the Hazmat form. It should have been discovered that the meters calibrations were out of date. The reason for this violation was that the lack of awareness by the logging supervisor, and insufficient emphasis by management in enforcing the regulations.

Remedial Action:

- 1) We are setting up a database for all IPS U.S. Wireline operations designed to aid the management staff in managing survey meter calibrations and other regulations with regular time interval requirements. The system will give sufficient advance notice to allow the meters to be calibrated in time. This system will also allow upper level management knowledge of survey meter calibration status at any time, allowing for management to intervene when the regulations are not being followed. **Scheduled for Completion (31-Mar-2007)**
- 2) The Post Job review form will once again be used here to ensure that the survey meters being used for the surveys are within the calibration interval required. **Done**
- 3) I will hold a district level informational meeting for all employees to inform them of the regulations that were not being followed, and to inform them of their responsibilities to do so. The calibration date of the meter used will now also be recorded on the Hazmat form. **Scheduled for Completion (31-Dec-2006)**



Violation C listed on Page-1 of Enclosure-1: Severity Level IV

Hazmat shipping papers not in accordance with DOT Regulations 49 CFR 172.203(c) requiring the letters RQ be entered on the shipping paper either before or after the basic description for the hazardous substance.

Response:

The required nomenclature (RQ – Reportable Quantity) was not part of the standard wording on our transport document after the “basic description” for the hazardous substance. According to the inspector Mr. Richard Leonardi Jr., it was acceptable to write in this required wording on the transportation document. We had not been recording this as a part of our normal routine and procedures for filling out our paperwork. It was apparent from my investigation that the majority of the employees were not aware that this was required, which brings into question our training related to radiation and transportation safety. The reason for this violation was an improperly formatted Hazardous materials form, and lack of awareness by the management team of the requirement for the Reportable Quantity (RQ) to be entered on the form.

Remedial Actions:

- 1) We are having the Hazardous Material Shipping form reprinted to include the correct nomenclature to be included on the document after the basic description of the hazardous material. **Scheduled for Completion – (15-Jan-2007)**
- 2) We have prepared a handwritten example to be used to aid the logging supervisors in filling out the shipping documents during the interim period. **Done**
- 3) In an effort to address the training issues we have, related to radiation and transportation safety, and specifically the proper completion of the shipping document, I will personally attend the training given to the logging supervisors to evaluate the training they are receiving. **Scheduled for Completion (28-Feb-2007)**

Violation D listed on Page-2 of Enclosure-1: Severity Level IV

Failure to enter the activity of each package on the shipping paper in appropriate SI units.



Response:

The investigation I performed showed that we had not been entering the activity of each package in the appropriate SI units. The units being entered on the shipping papers were in customary units of measurement (curies), rather than the appropriate SI units (Becquerel). The Hazardous Shipping papers in use in the district here in Broussard did not have this in the standard wording in the section of the document where the activity is recorded. The reason for this violation was an improperly formatted Hazardous materials transportation form, and lack of awareness by management of the requirement to have the SI units recorded on the form.

Remedial Actions:

- 1) We are having the Hazardous Material Shipping form reprinted to include the correct nomenclature to be included on the document in the section describing the activity of each package. **Scheduled for Completion – (15-Jan-2007)**
- 2) We have prepared a hand written example to be used to aid the logging supervisors in filling out the shipping documents during the interim, until the new shipping form has been finished. **Done**
- 3) In an effort to address the training issues we have, related to radiation and transportation safety, and specifically the proper completion of the shipping document, I will personally attend the training given to the logging supervisors to evaluate the training they are receiving. **Scheduled for Completion (28-Feb-2007)**

Violation E listed on Page-2 of Enclosure-1: Severity Level IV

Failure to provide an emergency response telephone number on the shipping paper that met the requirements of 49 CFR 172.604(a). The number had to be monitored at all times the hazardous material was in transportation, the number had to be to a person who was knowledgeable about the hazardous material being shipped and had comprehensive emergency response and incident mitigation procedures for the material, and lastly that the phone number was entered on the shipping document.

Response:

The number that had been being used on the form was the 24-hour phone number for the district, which was monitored by an answering service after 5:00 PM and on weekends. We had not included the number for a responsible person that had knowledge of the emergency response and incident mitigation procedures for the material in question. My investigation



again showed that the procedures in place were inadequate, and that the management was not aware that we were in violation of a regulation. This calls into question our procedures, and the training our employees receive. The reason for this violation was lack of awareness by company employees that the contact number had to be a contact to an actual responsible person, and could not be to an answering service, who could contact that person.

Remedial Actions:

- 1) The location RSOs phone number will be included on the new hazmat form we are having printed. I, (Carl Lammers), will be taking over as the new RSO for the Broussard location. In addition there will be an alternate number on the form that will ring through to an alternate responsible person if I should not be able to be reached for any reason.
Scheduled for Completion (31-Jan-2007)
- 2) A documented Emergency Response and Incident Mitigation plan will be available to the Responsible party receiving these calls. **Scheduled for Completion (31-Jan-2007)**

I hope I have addressed each of the violations to your satisfaction. It was my intention to put a plan into place that will prevent reoccurrence of these violations. In addition, it was apparent during the course of my investigation that it was necessary to have some means by which to periodically verify that we are maintaining compliance to these regulations. I intend to put a self audit system into place, which we will do periodically, to check ourselves and verify that we are maintaining compliance to the NRC's regulations. I also intend to do annual refresher training for the logging supervisors, as well as managers, to ensure they are made aware of recent changes to NRC guidelines and rules related to Radiation Safety and Security.

Sincerely,

Carl Lammers
Integrated Production Services
Wireline District Manager
205 Industrial Trace
Broussard, Louisiana 70518



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION IV
611 RYAN PLAZA DRIVE, SUITE 400
ARLINGTON, TEXAS 76011-4005

November 29, 2006

Integrated Production Services, LLC
ATTN: Carl Lammers
Wire-Line District Manager
205 Industrial Trace
Broussard, Louisiana 70518

SUBJECT: NRC INSPECTION REPORT 030-36382/2006-001 AND NOTICE OF VIOLATION

Dear Mr. Lammers:

This refers to the inspection conducted on October 23, 2006, at your facility in Broussard, Louisiana, involving licensed activities in offshore Federal waters. Preliminary inspection findings were discussed with you at the conclusion of the onsite portion of the inspection. A final exit briefing was conducted with Mr. Bill McKee, Radiation Safety Officer, telephonically, on November 2, 2006.

This inspection was an examination of activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of selected examination of procedures and representative records, observations of activities, and interviews with personnel.

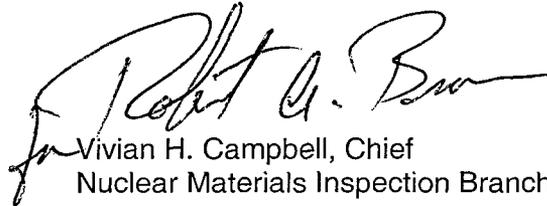
Based on the results of this inspection, the NRC has determined that five Severity Level IV violations of NRC requirements occurred. These violations were evaluated in accordance with the NRC Enforcement Policy. The current Enforcement Policy is included on the NRC's Web site at www.nrc.gov; select **What We Do, Enforcement**, then **Enforcement Policy**. The violations are cited in the enclosed Notice of Violation (Notice). The violations are being cited in the Notice because they were identified by the NRC during the inspection.

You are required to respond to this letter and should follow the instructions specified in the enclosed Notice when preparing your response. For your consideration and convenience, an excerpt from NRC Information Notice 96-28, "SUGGESTED GUIDANCE RELATING TO DEVELOPMENT AND IMPLEMENTATION OF CORRECTIVE ACTION," is enclosed. The NRC will use your response, in part, to determine whether further enforcement action is necessary to ensure compliance with regulatory requirements.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosures, and 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>. 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.

Should you have any questions concerning this inspection or the enclosed Notice of Violation, please contact Richard Leonardi at (817) 860-8187 or the undersigned at (817) 860-8287.

Sincerely,



Vivian H. Campbell, Chief
Nuclear Materials Inspection Branch

Docket No.: 030-36382
License No.: 17-27763-01

- Enclosures:
1. Notice of Violation
 2. NRC Information Notice 96-28

cc w/Enclosure 1:
Louisiana Radiation Control Program Director

ENCLOSURE 1

NOTICE OF VIOLATION

Integrated Production Services, LLC
Broussard, Louisiana

Docket No. 030-36382
License No. 17-27763-01

During an NRC inspection conducted on October 23, 2006, five violations of NRC requirements were identified. In accordance with the NRC Enforcement Policy, the violations are listed below:

- A. 10 CFR 39.67(c) requires, in part, that if the sealed source assembly is removed from the logging tool before departure from the temporary jobsite, the licensee shall confirm that the logging tool is free of contamination by energizing the logging tool detector or by using a survey meter.

Contrary to the above, on three occasions in calendar year 2005; namely, June 10, September 19, and September 20, the licensee failed to confirm that the logging tool was free of contamination by energizing the logging tool detector or by using a survey meter. Specifically, the licensee removed a sealed source assembly (americium-241 logging source) from a neutron logging tool without performing a contamination survey prior to departing from the three temporary jobsites.

This is a Severity Level IV violation (Supplement VI).

- B. 10 CFR 39.33(c)(1) requires, in part, that the license shall have each radiation survey instrument required under 39.33(a) calibrated at intervals not to exceed 6 months and after instrument servicing.

Contrary to the above, on September 19, 2005, the licensee used a radiation survey instrument that exceeded the 6-month calibration interval. Specifically, the licensee used a survey instrument that was last calibrated on January 18, 2005, a calibration interval in excess of 6 months.

This is a Severity Level IV violation (Supplement VI).

- C. 10 CFR 71.5(a) requires, in part, that each licensee who transports licensed material outside of the site of usage, as specified in the NRC license, shall comply with the applicable DOT regulations in 49 CFR Parts 107, 171 through 180, and 390 through 397.

49 CFR 177.817(a) requires that a carrier not transport a hazardous material unless it is accompanied by a shipping paper prepared in accordance with 49 CFR 172.200-203.

49 CFR 172.203(c)(2) requires that the letters "RQ" shall be entered on the shipping paper either before or after the basic description required by 49 CFR 172.202 for each hazardous substance.

49 CFR 172.101, Table 2, establishes any quantity in excess of 0.00037 TBq (10 millicuries) of americium-241 as a reportable quantity.

Contrary to the above, the licensee failed to enter the letters "RQ" on the shipping papers for a package containing 0.185 TBq (5 curies) of americium-241 required by 49 CFR 172.202 for each hazardous substance. Specifically, the licensee failed to enter the letters "RQ" on the shipping papers on three occasions in calendar year 2005; namely, June 10, September 19, and September 20.

This is a Severity Level IV violation (Supplement V).

- D. 10 CFR 71.5(a) requires, in part, that each licensee who transports licensed material outside of the site of usage, as specified in the NRC license, shall comply with the applicable DOT regulations in 49 CFR Parts 107, 171 through 180, and 390 through 397.

49 CFR 177.817(a) requires that a carrier not transport a hazardous material unless it is accompanied by a shipping paper prepared in accordance with 49 CFR 172.200-203.

49 CFR 172.203(d)(3) requires, in part, that the description for a shipment of a Class 7 (radioactive) material on the shipping paper must include the activity contained in each package of the shipment in terms of the appropriate SI units (customary units may be listed in parentheses following the SI units).

Contrary to the above, the licensee failed to enter the activity of each package on the shipping paper in the appropriate SI units. Specifically, the licensee failed to enter the appropriate SI units on shipping papers on three occasions in calendar year 2005; namely, June 10, September 19, and September 20. The licensee entered only the activities in customary units.

This is a Severity Level IV violation (Supplement V).

- E. 10 CFR 71.5(a) requires, in part, that each licensee who transports licensed material outside of the site of usage, as specified in the NRC license, shall comply with the applicable DOT regulations in 49 CFR Parts 107, 171 through 180, and 390 through 397.

49 CFR 177.817(a) requires that a carrier not transport a hazardous material unless it is accompanied by a shipping paper prepared in accordance with 49 CFR 172.200-203.

49 CFR 172.604(a) requires, in part, that a person who offers a hazardous material for transportation must provide an emergency response telephone number, including the area code, for use in the event of an emergency involving the hazardous material. The telephone number must be (1) monitored at all times the hazardous material is in transportation; (2) the number of the person who is either knowledgeable of the hazardous material being shipped and has comprehensive emergency response and incident mitigation information for that material, or has immediate access to a person who possesses such knowledge; and (3) entered on the shipping paper.

Contrary to the above, the license failed to provide an emergency response telephone number on the shipping paper for hazardous material that met the requirements in 49 CFR 172.604(a). Specifically, the licensee transported outside the confines of its facility in Federal waters packages containing 0.185 TBq (5 curies) of americium-241 on three occasions in calendar year 2005; namely, June 10, September 19, and September 20, and the emergency response telephone number on the shipping papers which accompanied the packages was not the number of a person who (1) was either knowledgeable of the hazardous material being shipped and has comprehensive emergency response and incident mitigation information for that material or (2) had immediate access to a person who possessed such knowledge. The licensee entered the phone number for Chemtrec (24-hour HAZMAT Communications Center) on their shipping papers without the licensee being registered with Chemtrec to provide emergency response contact information.

This is a Severity Level IV violation (Supplement V).

Pursuant to the provisions of 10 CFR 2.201, Integrated Production Services, LLC, is hereby required to submit a written statement or explanation **to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555**, with a copy to the Regional Administrator, Region IV, 611 Ryan Plaza Drive, Suite 400, Arlington, Texas 76011, within 30 days of the date of the letter transmitting this Notice of Violation (Notice). This reply should be clearly marked as a "Reply to a Notice of Violation and should include for each violation: (1) the reason for the violation, or, if contested, the basis for disputing the violation or severity level, (2) the corrective steps that have been taken and the results achieved, (3) the corrective steps that will be taken to avoid further violations, and (4) the date when full compliance will be achieved. Your response may reference or include previous docketed correspondence, if the correspondence adequately addresses the required response. If an adequate reply is not received within the time specified in this Notice, an order or a Demand for Information may be issued as to why the license should not be modified, suspended, or revoked, or why such other action as may be proper should not be taken. Where good cause is shown, consideration will be given to extending the response time.

Because 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>, to the extent possible, it 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, then 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 material, 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). If safeguards information is necessary to provide an acceptable response, please provide the level of protection described in 10 CFR 73.21.

In accordance with 10 CFR 19.11, you may be required to post this Notice within two working days. Dated this 29 day of November 2006

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS
WASHINGTON, D.C. 20555

May 1, 1996

NRC INFORMATION NOTICE 96-28: SUGGESTED GUIDANCE RELATING TO DEVELOPMENT
AND IMPLEMENTATION OF CORRECTIVE ACTION

Addressees

All material and fuel cycle licensees.

Purpose

The U.S. Nuclear Regulatory Commission (NRC) is issuing this information notice to provide addressees with guidance relating to development and implementation of corrective actions that should be considered after identification of violation(s) of NRC requirements. It is expected that recipients will review this information for applicability to their facilities and consider actions, as appropriate, to avoid similar problems. However, suggestions contained in this information notice are not new NRC requirements; therefore, no specific action nor written response is required.

Background

On June 30, 1995, NRC revised its Enforcement Policy (NUREG-1600)¹ 60 FR 34381, to clarify the enforcement program's focus by, in part, emphasizing the importance of identifying problems before events occur, and of taking prompt, comprehensive corrective action when problems are identified. Consistent with the revised Enforcement Policy, NRC encourages and expects identification and prompt, comprehensive correction of violations.

In many cases, licensees who identify and promptly correct non-recurring Severity Level IV violations, without NRC involvement, will not be subject to formal enforcement action. Such violations will be characterized as "non-cited" violations as provided in Section VII.B.1 of the Enforcement Policy. Minor violations are not subject to formal enforcement action. Nevertheless, the root cause(s) of minor violations must be identified and appropriate corrective action must be taken to prevent recurrence.

If violations of more than a minor concern are identified by the NRC during an inspection, licensees will be subject to a Notice of Violation and may need to provide a written response, as required by 10 CFR 2.201, addressing the causes of the violations and corrective actions taken to prevent recurrence. In some cases, such violations are documented on Form 591 (for materials licensees)

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¹Copies of NUREG-1600 can be obtained by calling the contacts listed at the end of the Information Notice.

which constitutes a notice of violation that requires corrective action but does not require a written response. If a significant violation is involved, a predecisional enforcement conference may be held to discuss those actions. The quality of a licensee's root cause analysis and plans for corrective actions may affect the NRC's decision regarding both the need to hold a predecisional enforcement conference with the licensee and the level of sanction proposed or imposed.

Discussion

Comprehensive corrective action is required for all violations. In most cases, NRC does not propose imposition of a civil penalty where the licensee promptly identifies and comprehensively corrects violations. However, a Severity Level III violation will almost always result in a civil penalty if a licensee does not take prompt and comprehensive corrective actions to address the violation.

It is important for licensees, upon identification of a violation, to take the necessary corrective action to address the noncompliant condition and to prevent recurrence of the violation and the occurrence of similar violations. Prompt comprehensive action to improve safety is not only in the public interest, but is also in the interest of licensees and their employees. In addition, it will lessen the likelihood of receiving a civil penalty. Comprehensive corrective action cannot be developed without a full understanding of the root causes of the violation.

Therefore, to assist licensees, the NRC staff has prepared the following guidance, that may be used for developing and implementing corrective action. Corrective action should be appropriately comprehensive to not only prevent recurrence of the violation at issue, but also to prevent occurrence of similar violations. The guidance should help in focusing corrective actions broadly to the general area of concern rather than narrowly to the specific violations. The actions that need to be taken are dependent on the facts and circumstances of the particular case.

The corrective action process should involve the following three steps:

1. Conduct a complete and thorough review of the circumstances that led to the violation. Typically, such reviews include:
 - Interviews with individuals who are either directly or indirectly involved in the violation, including management personnel and those responsible for training or procedure development/guidance. Particular attention should be paid to lines of communication between supervisors and workers.

- Tours and observations of the area where the violation occurred, particularly when those reviewing the incident do not have day-to-day contact with the operation under review. During the tour, individuals should look for items that may have contributed to the violation as well as those items that may result in future violations. Reenactments (without use of radiation sources, if they were involved in the original incident) may be warranted to better understand what actually occurred.
- Review of programs, procedures, audits, and records that relate directly or indirectly to the violation. The program should be reviewed to ensure that its overall objectives and requirements are clearly stated and implemented. Procedures should be reviewed to determine whether they are complete, logical, understandable, and meet their objectives (i.e., they should ensure compliance with the current requirements). Records should be reviewed to determine whether there is sufficient documentation of necessary tasks to provide an auditable record and to determine whether similar violations have occurred previously. Particular attention should be paid to training and qualification records of individuals involved with the violation.

2. Identify the root cause of the violation.

Corrective action is not comprehensive unless it addresses the root cause(s) of the violation. It is essential, therefore, that the root cause(s) of a violation be identified so that appropriate action can be taken to prevent further noncompliance in this area, as well as other potentially affected areas. Violations typically have direct and indirect cause(s). As each cause is identified, ask what other factors could have contributed to the cause. When it is no longer possible to identify other contributing factors, the root causes probably have been identified. For example, the direct cause of a violation may be a failure to follow procedures; the indirect causes may be inadequate training, lack of attention to detail, and inadequate time to carry out an activity. These factors may have been caused by a lack of staff resources that, in turn, are indicative of lack of management support. Each of these factors must be addressed before corrective action is considered to be comprehensive.

3. Take prompt and comprehensive corrective action that will address the immediate concerns and prevent recurrence of the violation.

It is important to take immediate corrective action to address the specific findings of the violation. For example, if the violation was issued because radioactive material was found in an unrestricted area, immediate corrective action must be taken to place the material under licensee control in authorized locations. After the immediate safety concerns have been addressed, timely action must be taken to prevent future recurrence of the violation. Corrective action is sufficiently comprehensive when corrective action is broad enough to reasonably prevent recurrence of the specific violation as well as prevent similar violations.

In evaluating the root causes of a violation and developing effective corrective action, consider the following:

1. Has management been informed of the violation(s)?
2. Have the programmatic implications of the cited violation(s) and the potential presence of similar weaknesses in other program areas been considered in formulating corrective actions so that both areas are adequately addressed?
3. Have precursor events been considered and factored into the corrective actions?
4. In the event of loss of radioactive material, should security of radioactive material be enhanced?
5. Has your staff been adequately trained on the applicable requirements?
6. Should personnel be re-tested to determine whether re-training should be emphasized for a given area? Is testing adequate to ensure understanding of requirements and procedures?
7. Has your staff been notified of the violation and of the applicable corrective action?
8. Are audits sufficiently detailed and frequently performed? Should the frequency of periodic audits be increased?

9. Is there a need for retaining an independent technical consultant to audit the area of concern or revise your procedures?
10. Are the procedures consistent with current NRC requirements, should they be clarified, or should new procedures be developed?
11. Is a system in place for keeping abreast of new or modified NRC requirements?
12. Does your staff appreciate the need to consider safety in approaching daily assignments?
13. Are resources adequate to perform, and maintain control over, the licensed activities? Has the radiation safety officer been provided sufficient time and resources to perform his or her oversight duties?
14. Have work hours affected the employees' ability to safely perform the job?
15. Should organizational changes be made (e.g., changing the reporting relationship of the radiation safety officer to provide increased independence)?
16. Are management and the radiation safety officer adequately involved in oversight and implementation of the licensed activities? Do supervisors adequately observe new employees and difficult, unique, or new operations?
17. Has management established a work environment that encourages employees to raise safety and compliance concerns?
18. Has management placed a premium on production over compliance and safety? Does management demonstrate a commitment to compliance and safety?
19. Has management communicated its expectations for safety and compliance?
20. Is there a published discipline policy for safety violations, and are employees aware of it? Is it being followed?

This information notice requires no specific action nor written response. If you have any questions about the information in this notice, please contact one of the technical contacts listed below.

Elizabeth Q. Ten Eyck, Director
Division of Fuel Cycle Safety
and Safeguards
Office of Nuclear Material Safety
and Safeguards

Donald A. Cool, Director
Division of Industrial
and Medical Safety
Office of Nuclear Material Safety
and Safeguards

Technical contacts: Nader L. Mamish, OE
(301) 415-2740
Internet:nlm@nrc.gov

Daniel J. Holody, RI
(610) 337-5312
Internet:djh@nrc.gov

Bruno Uryc, Jr., RII
(404) 331-5505
Internet:bxu@nrc.gov

Bruce L. Burgess, RIII
(708) 829-9666
Internet:blb@nrc.gov

Gary F. Sanborn, RIV
(817) 860-8222
Internet:gfs@nrc.gov