

## ALARA MEMORANDUM

From:

SAMPLE HOSPITAL  
ATTN: RSO  
4242 MAIN STREET  
SMALLVILLE, MA 01432

To: Donaghys, Jack Sub Account ID: 1431640

Date: 2014-06-03 Series Code: CST Page 1

Account ID: 709008 Participant number: 01077

Subject: Radiation Exposure Level Exceeded

The intent of an ALARA program ("as low as reasonably achievable") is to maintain exposure to radiation at levels that are as low as feasible. Our radiation safety program is based on the premise that radiation exposure is not risk free and therefore, exposure should be kept to levels below the limits permitted by the State, the Nuclear Regulatory Commission and other regulatory agencies. ALARA is critical to current radiation protection philosophies.

The following table lists our organization's investigational levels and shows any exposure exceeding a given limit for the period 2014-04-01 to 2014-06-30.

Exposure Type	Investigational Levels(mrem)					
	Second Quarter 2014			Cumulative for Year 2014		
	① Actual Dose	② Level	③ ALARA Dose Level	④ Actual Dose	⑤ Level	⑥ ALARA Dose Level
DDE	989	2	375	989	1	500
LDE	1004	1	375			
SDE						
TEDE				989	1	500

Your dose is above our level 2 limit and indicates a need to review work procedures for possible reduction of exposure. Reduce your exposure. Apply the basic rules of time, distance and shielding to keep your exposure as low as possible.

Page 1 - Sent for all participants who exceed an ALARA Level 1 or 2

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⑦ SAMPLE HOSPITAL  
ATTN: RSO  
4242 MAIN STREET  
SMALLVILLE, MA 01432

To: Donaghys, Jack Sub Account ID: 1431640

Date: 2014-06-03 Series Code: CST Page 2

Account ID: 709008 Participant number: 01077

Subject: Radiation Exposure Level Exceeded

We routinely investigate level 2 exposures. Employees are required to complete the applicable questions of this questionnaire. Please reply as quickly as possible so that we can evaluate any factors affecting your exposure.

Please return to the address listed above.

1. Was the badge placed or stored near radiation?
2. Did you accidentally expose yourself to a beam of radiation?
3. Did you hold a patient during radiation exposure?
4. Did you work significantly more hours or procedures during this period?
5. Were you involved in procedures requiring unusually high exposure to radiation?

Please describe any unusual incident or provide any additional information that will help explain your dose (attach extra pages if necessary):

⑧ Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
Jack Donaghys  
Participant Number: 01077

Page 2 - Generated only when participants exceed ALARA Level 2

# ALARA Memorandum

## LEGEND

1. Represents the total dose recorded for the quarter.
2. Represents the ALARA Level that was exceeded for the quarter.
3. Shows the specific dose level set by the customer or the default value for the quarter.
4. Represents the total dose recorded for the year.
5. Represents the ALARA Level that was exceeded for year.
6. Shows the specific dose level set by the customer or the default value for the year.
7. Note that the ALARA Memorandum is formatted to appear as if it is being sent from the account representative, not from Landauer.
8. Indicates where the participant who exceeded the ALARA Level 2 should sign, acknowledging they have received the ALARA Memorandum.

## GENERAL FACTS

- **Purpose:** The ALARA (As Low As Reasonable Achievable) Memorandum is a letter-style report that is generated and mailed at the same time as the Radiation Dosimetry Report for individual participants. Due to their frequency, these reports arrive before the quarterly or annual ALARA Recap.
- If ALARA Level 2 is exceeded, a second page is included with the memorandum to aid the facility in obtaining answers from their participants about why the ALARA Level was exceeded.
- The report is generated and mailed to the primary reporting address listed at the account or subaccount level.

## FREQUENTLY ASKED QUESTIONS

### Who sets the ALARA Levels?

If desired, ALARA Levels can be set by the customer. The quarterly levels must be lower than the annual levels and the ALARA Level 1 must be lower than ALARA Level 2. Landauer also offers default values.

### What do I keep receiving ALARA Memorandums?

Once an ALARA Level is exceeded for an annual dose, the ALARA Memorandum will continue to be generated throughout the remainder of the calendar year.

### What does the “1” or “2” under the Level column mean?

The number in this column shows which level has been exceeded. There are two ALARA Levels for both the quarterly and annual exposures. It is possible to exceed the quarterly ALARA Level 2 and not exceed an annual ALARA Level.

### Why does this report say “Actual Dose”?

The Actual Dose is the total assigned dose. If present, EDE calculations are applied to doses represented on the ALARA Memorandum.

### Why are only certain doses listed?

Only doses that exceed ALARA Levels are listed. For example, if a participant exceeds the Lens of the Eye Equivalent (LDE) level, but not the Deep Dose Equivalent (DDE) level, then only the LDE row would contain a dose.

### Does this report accumulate doses for participants who are active in more than one subaccount?

Yes. While the doses shown on the report will be the total for the wear period across all subaccounts, separate reports will be sent for each subaccount where the participant is active.

### Why did I only get the questionnaire page for some participants?

The questionnaire page is only sent for participants who exceed ALARA Level 2.

### Do I have to return the questionnaire to Landauer?

No. The questionnaire is for your use and contains questions that could help identify the reasons for higher than usual exposures. If there are any corrections to be made to the dose, those can be submitted to the Dosimetry Records Department at Landauer via mail, fax, or email.