

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

8. External sufficient standard citation

49 CFR 392.14 (Hazardous conditions; extreme caution - not required onsite)

9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?

YES NO

If no continue; otherwise skip to 12.

10. Is an internal standard required to attain a level of risk consistent with management performance goals?

YES NO

11. Describe nature and status of internal sufficient standard.

12. Describe how the levels of risk and cost are consistent with management performance goals.

Past adherence to the external standard in #8 has resulted in levels of ES&H and cost performance that are consistent with management goals including the use of industrial standards for industrial issues.

13. Pick the basic implementing assumption from the list.

Major positive impact Minor negative impact
 Minor positive impact Major negative impact
 No net impact

14. Describe the nature and status of implementation including cost-effectiveness.

For "onsite" transportation issues, it is assumed that access is restricted in a way which removes site roads from being considered "in commerce" per DOT. If not, the standards for the analogous "offsite" issue should be applied. Fermilab has its own Roads & Grounds Department. They perform road maintenance as needed, and will continue to do so. Experience has demonstrated that this program is both successful and cost-effective.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

1. Issue(s) Issue origin Hazard analysis Identification Team

076A. HazMat transport - emergency response and spill clean up / offsite
081A. HazMat transport - spills and chemical releases /offsite

Focus group Emergency Management Fire Protection Occupational Safety
 Environmental Protection Management & Oversight Radiation Protection

2. Is there a necessary standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 6.

3. Necessary standard(s)

49 CFR 172.600G (Emergency response information)
49 CFR 171.15 (Immediate notice of certain hazardous material incidents)
40 CFR 112 (Oil pollution prevention)
40 CFR 761 (PCB spill cleanup policy)
40 CFR 302 (Designation, reportable quantities & notification)
40 CFR 355 (Emergency planning & notification)

4. Are there any aspects of these necessary standard(s) which do not add value? YES NO
If yes, continue; otherwise skip to 6.

5. Description of non-value added aspects of necessary standard(s).

6. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with applicable necessary standards? YES NO
If no continue; otherwise skip to 12.

7. Is there a non-required external standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 10.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

8. External sufficient standard citation

9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?

YES NO

If no continue; otherwise skip to 12.

10. Is an internal standard required to attain a level of risk consistent with management performance goals?

YES NO

11. Describe nature and status of internal sufficient standard.

12. Describe how the levels of risk and cost are consistent with management performance goals.

Past adherence to the statutory requirements in #3 has resulted in levels of ES&H and cost performance that are consistent with management goals including the use of industrial standards for industrial issues.

13. Pick the basic implementing assumption from the list.

Major positive impact Minor negative impact
 Minor positive impact Major negative impact
 No net impact

14. Describe the nature and status of implementation including cost-effectiveness.

Experience has demonstrated that this program is both successful and cost-effective.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

1. Issue(s) Issue origin Hazard analysis Identification Team

076B. HazMat transport - emergency response and spill cleanup / onsite
081B. HazMat transport - spills and chemical Releases / onsite

Focus group Emergency Management Fire Protection Occupational Safety
 Environmental Protection Management & Oversight Radiation Protection

2. Is there a necessary standard which applies to this issue? YES NO

If yes, continue; otherwise skip to 6.

3. Necessary standard(s)

29 CFR 1910.120 (Hazardous waste operations & emergency response)
40 CFR 112 (Oil pollution prevention)
40CFR 761 (PCB spill cleanup policy)
40 CFR 302 (Designation, reportable quantities & notification)
40 CFR 355 (Emergency planning & notification)

4. Are there any aspects of these necessary standard(s) which do not add value? YES NO

If yes, continue; otherwise skip to 6.

5. Description of non-value added aspects of necessary standard(s).

6. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with applicable necessary standards? YES NO

If no continue; otherwise skip to 12.

7. Is there a non-required external standard which applies to this issue? YES NO

If yes, continue; otherwise skip to 10.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

8. External sufficient standard citation

9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?

YES NO

If no continue; otherwise skip to 12.

10. Is an internal standard required to attain a level of risk consistent with management performance goals?

YES NO

11. Describe nature and status of internal sufficient standard.

12. Describe how the levels of risk and cost are consistent with management performance goals.

Past adherence to the requirement in #3 above has resulted in levels of ES&H and cost performance that are consistent with management goals including the use of industrial standards for industrial issues.

13. Pick the basic implementing assumption from the list.

Major positive impact Minor negative impact
 Minor positive impact Major negative impact
 No net impact

14. Describe the nature and status of implementation including cost-effectiveness.

For "onsite" transportation issues, it is assumed that access is restricted in a way which removes site roads from being considered "in commerce" per DOT requirements. If not, the standards for the analogous "offsite" issue should be applied. Experience has demonstrated that this program is both successful and cost-effective.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

Issue origin Hazard analysis Identification Team

1. Issue(s)

077A. HazMat transport - fire and explosion / offsite

Focus group Emergency Management Fire Protection Occupational Safety
 Environmental Protection Management & Oversight Radiation Protection

2. Is there a necessary standard which applies to this issue?

YES NO

If yes, continue; otherwise skip to 6.

3. Necessary standard(s)

49 CFR 171.15 (Immediate notification of certain hazardous materials incidents)
49 CFR 172.600G (Emergency response information)

4. Are there any aspects of these necessary standard(s) which do not add value?

YES NO

If yes, continue; otherwise skip to 6.

5. Description of non-value added aspects of necessary standard(s).

6. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with applicable necessary standards?

YES NO

If no continue; otherwise skip to 12.

7. Is there a non-required external standard which applies to this issue?

YES NO

If yes, continue; otherwise skip to 10.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

8. External sufficient standard citation

9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?

YES NO

If no continue; otherwise skip to 12.

10. Is an internal standard required to attain a level of risk consistent with management performance goals?

YES NO

11. Describe nature and status of internal sufficient standard.

12. Describe how the levels of risk and cost are consistent with management performance goals.

Past adherence to the statutory requirements in #3 has resulted in levels of ES&H and cost performance that are consistent with management goals including the use of industrial standards for industrial issues.

13. Pick the basic implementing assumption from the list.

Major positive impact Minor negative impact
 Minor positive impact Major negative impact
 No net impact

14. Describe the nature and status of implementation including cost-effectiveness.

Experience has demonstrated that this program is both successful and cost-effective.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

1. Issue(s) Issue origin Hazard analysis Identification Team

078A. HazMat transport - loading and unloading / offsite

Focus group Emergency Management Fire Protection Occupational Safety
 Environmental Protection Management & Oversight Radiation Protection

2. Is there a necessary standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 6.

3. Necessary standard(s)

49 CFR 177.834B (Loading & unloading)
29 CFR 1910.176 (Handling materials - general)
29 CFR 1910.178 (Powered industrial trucks)

4. Are there any aspects of these necessary standard(s) which do not add value? YES NO
If yes, continue; otherwise skip to 6.

5. Description of non-value added aspects of necessary standard(s).

6. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with applicable necessary standards? YES NO
If no continue; otherwise skip to 12.

7. Is there a non-required external standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 10.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

8. External sufficient standard citation

9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?

YES NO

If no continue; otherwise skip to 12.

10. Is an internal standard required to attain a level of risk consistent with management performance goals?

YES NO

11. Describe nature and status of internal sufficient standard.

12. Describe how the levels of risk and cost are consistent with management performance goals.

Past adherence to the statutory requirements in #3 has resulted in levels of ES&H and cost performance that are consistent with management goals including the use of industrial standards for industrial issues.

13. Pick the basic implementing assumption from the list.

Major positive impact Minor negative impact
 Minor positive impact Major negative impact
 No net impact

14. Describe the nature and status of implementation including cost-effectiveness.

Experience has demonstrated that this program is both successful and cost-effective.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

1. Issue(s) **Issue origin** Hazard analysis Identification Team

078B. HazMat transport - loading and unloading / onsite
095B. Material handling - transportation / onsite

Focus group Emergency Management Fire Protection Occupational Safety
 Environmental Protection Management & Oversight Radiation Protection

2. Is there a necessary standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 6.

3. Necessary standard(s)

29 CFR 1910.176 (Handling materials - general)
29 CFR 1910.178 (Powered industrial trucks)

4. Are there any aspects of these necessary standard(s) which do not add value? YES NO
If yes, continue; otherwise skip to 6.

5. Description of non-value added aspects of necessary standard(s).

6. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with applicable necessary standards? YES NO
If no continue; otherwise skip to 12.

7. Is there a non-required external standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 10.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

8. External sufficient standard citation

49 CFR 177.848C (Segregation table for hazardous materials - not required onsite)

9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?

YES NO

If no continue; otherwise skip to 12.

10. Is an internal standard required to attain a level of risk consistent with management performance goals?

YES NO

11. Describe nature and status of internal sufficient standard.

12. Describe how the levels of risk and cost are consistent with management performance goals.

The requirements cited in #3 above adequately address the mechanical aspects of handling materials. However, the portion of the standard cited in #8 above is necessary to control chemical incompatibilities. Past adherence to the requirements in #3 and the internal standard in #8 has resulted in levels of ES&H and cost performance that are consistent with management goals including the use of industrial standards for industrial issues.

13. Pick the basic implementing assumption from the list.

Major positive impact Minor negative impact
 Minor positive impact Major negative impact
 No net impact

14. Describe the nature and status of implementation including cost-effectiveness.

For "onsite" transportation issues, it is assumed that access is restricted in a way which removes site roads from being considered "in commerce" per DOT requirements. If not, the standards for the analogous "offsite" issue should be applied. Experience has demonstrated that this program is both successful and cost-effective.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

1. Issue(s) Issue origin Hazard analysis Identification Team

079A. HazMat transport - packaging hazardous materials / offsite

Focus group Emergency Management Fire Protection Occupational Safety
 Environmental Protection Management & Oversight Radiation Protection

2. Is there a necessary standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 6.

3. Necessary standard(s)
49 CFR 178.500L Subchapter C (Specifications for packagings)

4. Are there any aspects of these necessary standard(s) which do not add value? YES NO
If yes, continue; otherwise skip to 6.

5. Description of non-value added aspects of necessary standard(s).

6. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with applicable necessary standards? YES NO
If no continue; otherwise skip to 12.

7. Is there a non-required external standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 10.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

8. External sufficient standard citation

9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?

YES NO

If no continue; otherwise skip to 12.

10. Is an internal standard required to attain a level of risk consistent with management performance goals?

YES NO

11. Describe nature and status of internal sufficient standard.

12. Describe how the levels of risk and cost are consistent with management performance goals.

Past adherence to the statutory requirements in #3 has resulted in levels of ES&H and cost performance that are consistent with management goals including the use of industrial standards for industrial issues.

13. Pick the basic implementing assumption from the list.

Major positive impact Minor negative impact
 Minor positive impact Major negative impact
 No net impact

14. Describe the nature and status of implementation including cost-effectiveness.

Experience has demonstrated that this program is both successful and cost-effective.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

1. Issue(s) Issue origin Hazard analysis Identification Team

079B. HazMat transport - packaging hazardous materials / onsite

Focus group Emergency Management Fire Protection Occupational Safety
 Environmental Protection Management & Oversight Radiation Protection

2. Is there a necessary standard which applies to this issue? YES NO

If yes, continue; otherwise skip to 6.

3. Necessary standard(s)

4. Are there any aspects of these necessary standard(s) which do not add value? YES NO

If yes, continue; otherwise skip to 6.

5. Description of non-value added aspects of necessary standard(s).

6. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with applicable necessary standards? YES NO

If no continue; otherwise skip to 12.

7. Is there a non-required external standard which applies to this issue? YES NO

If yes, continue; otherwise skip to 10.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

8. External sufficient standard citation

49 CFR 173.24(e)(1-2) (Chemical compatibility for single packagings - onsite)
49 CFR 173.24(e)(4)(i-111) (Chemical compatibility for multiple packagings - onsite)
49 CFR 173.24a (a)(1) (Positioning of inner receptacles - onsite)
49 CFR 173.24a (a)(3-4) (Packing for inner receptacles - onsite)
49 CFR 177.848C (Segregation table for hazardous materials - onsite)
49 CFR 178.500L Subchapter C (Segregation table for hazardous materials - onsite)

9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?

YES NO

If no continue; otherwise skip to 12.

10. Is an internal standard required to attain a level of risk consistent with management performance goals?

YES NO

11. Describe nature and status of internal sufficient standard.

12. Describe how the levels of risk and cost are consistent with management performance goals.

Past adherence to the external standards in #8 has resulted in levels of ES&H and cost performance that are consistent with management goals including the use of industrial standards for industrial issues.

13. Pick the basic implementing assumption from the list.

Major positive impact Minor negative impact
 Minor positive impact Major negative impact
 No net impact

14. Describe the nature and status of implementation including cost-effectiveness.

For "onsite" transportation issues, it is assumed that access is restricted in a way which removes site roads from being considered "in commerce" per DOT requirements. If not, the standards for the analogous "offsite" issue should be applied. Experience has demonstrated that this program is both successful and cost-effective.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

1. Issue(s) Issue origin Hazard analysis Identification Team

079C. HazMat transport - transportation of radioactive materials

Focus group Emergency Management Fire Protection Occupational Safety
 Environmental Protection Management & Oversight Radiation Protection

2. Is there a necessary standard which applies to this issue? YES NO

If yes, continue; otherwise skip to 6.

3. Necessary standard(s)

49 CFR 100-199 and references

4. Are there any aspects of these necessary standard(s) which do not add value? YES NO

If yes, continue; otherwise skip to 6.

5. Description of non-value added aspects of necessary standard(s).

6. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with applicable necessary standards? YES NO

If no continue; otherwise skip to 12.

7. Is there a non-required external standard which applies to this issue? YES NO

If yes, continue; otherwise skip to 10.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

8. External sufficient standard citation

9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?

YES NO

If no continue; otherwise skip to 12.

10. Is an internal standard required to attain a level of risk consistent with management performance goals?

YES NO

11. Describe nature and status of internal sufficient standard.

12. Describe how the levels of risk and cost are consistent with management performance goals.

Due to the requirements of 49 CFR 100-199, Fermilab plans on having restricted access to the site in order to relieve the need to certify and document onsite shipment of radioactive materials and eliminate a major training commitment. The level of risk is consistent with management performance goals because management expects to use industrial solutions for industrial issues. This is an industrial issue and the solution chosen is an industrial solution.

13. Pick the basic implementing assumption from the list.

Major positive impact Minor negative impact
 Minor positive impact Major negative impact
 No net impact

14. Describe the nature and status of implementation including cost-effectiveness.

The Fermilab Low Level Waste Certification Plan already exists and serves as implementation of 49 CFR 100-199 concerning the specifics of the transport of radioactive materials. The program as implemented coupled with the restriction of site access will be cost-effective and meet management performance goals and regulatory requirements.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

1. Issue(s) Issue origin Hazard analysis Identification Team

080A. HazMat transport - prolonged periods of driving / offsite

Focus group Emergency Management Fire Protection Occupational Safety
 Environmental Protection Management & Oversight Radiation Protection

2. Is there a necessary standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 6.

3. Necessary standard(s)

49 CFR 395 (Maximum driving and on-duty time)

4. Are there any aspects of these necessary standard(s) which do not add value? YES NO
If yes, continue; otherwise skip to 6.

5. Description of non-value added aspects of necessary standard(s).

6. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with applicable necessary standards? YES NO
If no continue; otherwise skip to 12.

7. Is there a non-required external standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 10.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

8. External sufficient standard citation

9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?

YES NO

If no continue; otherwise skip to 12.

10. Is an internal standard required to attain a level of risk consistent with management performance goals?

YES NO

11. Describe nature and status of internal sufficient standard.

12. Describe how the levels of risk and cost are consistent with management performance goals.

Past adherence to the statutory requirements in #3 has resulted in levels of ES&H and cost performance that are consistent with management goals including the use of industrial standards for industrial issues.

13. Pick the basic implementing assumption from the list.

Major positive impact Minor negative impact
 Minor positive impact Major negative impact
 No net impact

14. Describe the nature and status of implementation including cost-effectiveness.

Experience has demonstrated that this program is both successful and cost-effective.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

1. Issue(s) Issue origin Hazard analysis Identification Team

080B. HazMat transport - prolonged periods of driving / onsite

Focus group Emergency Management Fire Protection Occupational Safety
 Environmental Protection Management & Oversight Radiation Protection

2. Is there a necessary standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 6.

3. Necessary standard(s)

4. Are there any aspects of these necessary standard(s) which do not add value? YES NO
If yes, continue; otherwise skip to 6.

5. Description of non-value added aspects of necessary standard(s).

6. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with applicable necessary standards? YES NO
If no continue; otherwise skip to 12.

7. Is there a non-required external standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 10.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

8. External sufficient standard citation

49 CFR 395.3 (Maximum driving & on-duty time - not required onsite)

9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?

YES NO

If no continue; otherwise skip to 12.

10. Is an internal standard required to attain a level of risk consistent with management performance goals?

YES NO

11. Describe nature and status of internal sufficient standard.

12. Describe how the levels of risk and cost are consistent with management performance goals.

Past adherence to the internal standard in #11 has resulted in levels of ES&H and cost performance that are consistent with management goals including the use of industrial standards for industrial issues.

13. Pick the basic implementing assumption from the list.

Major positive impact Minor negative impact
 Minor positive impact Major negative impact
 No net impact

14. Describe the nature and status of implementation including cost-effectiveness.

For "onsite" transportation issues, it is assumed that access is restricted in a way which removes site roads from being considered "in commerce" per DOT requirements. If not, the standards for the analogous "offsite" issue should be applied.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

1. Issue(s) Issue origin Hazard analysis Identification Team

081C. Hazardous material transport - spills and chemical releases

Focus group Emergency Management Fire Protection Occupational Safety
 Environmental Protection Management & Oversight Radiation Protection

2. Is there a necessary standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 6.

3. Necessary standard(s)

CERCLA/SARA 42 USC 6901 et seq.
40 CFR 116 - 117
40 CFR 300
40 CFR 302
40 CFR 311
40 CFR 355
49 CFR 172 Subpart G
35 IAC Subchapter H, Subpart D
35 IAC 808- 809

4. Are there any aspects of these necessary standard(s) which do not add value? YES NO
If yes, continue; otherwise skip to 6.

5. Description of non-value added aspects of necessary standard(s).

6. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with applicable necessary standards? YES NO
If no continue; otherwise skip to 12.

7. Is there a non-required external standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 10.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

8. External sufficient standard citation

9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?

YES NO

If no continue; otherwise skip to 12.

10. Is an internal standard required to attain a level of risk consistent with management performance goals?

YES NO

11. Describe nature and status of internal sufficient standard.

12. Describe how the levels of risk and cost are consistent with management performance goals.

Continuation of the current program will provide an appropriate level of protection at an acceptable cost. Compliance with above laws and regulations through the current program will ensure high level of protection of the environment. The level of risk is consistent with management performance goals because management expects to use industrial solutions for industrial issues. This is an industrial issue and the solution chosen is an industrial solution.

13. Pick the basic implementing assumption from the list.

Major positive impact Minor negative impact
 Minor positive impact Major negative impact
 No net impact

14. Describe the nature and status of implementation including cost-effectiveness.

The requirements identified in #3 have proven to be both successful and cost-effective.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

Issue origin Hazard analysis Identification Team

1. Issue(s)

082. Magnetic fields - bioelectric implants
083. Magnetic fields - fringe fields
084. Magnetic fields - high magnetic fields

Focus group Emergency Management Fire Protection Occupational Safety
 Environmental Protection Management & Oversight Radiation Protection

2. Is there a necessary standard which applies to this issue? YES NO

If yes, continue; otherwise skip to 6.

3. Necessary standard(s)

4. Are there any aspects of these necessary standard(s) which do not add value? YES NO

If yes, continue; otherwise skip to 6.

5. Description of non-value added aspects of necessary standard(s).

6. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with applicable necessary standards? YES NO

If no continue; otherwise skip to 12.

7. Is there a non-required external standard which applies to this issue? YES NO

If yes, continue; otherwise skip to 10.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

8. External sufficient standard citation

ACGIH TLV for static magnetic fields

9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?

YES NO

If no continue; otherwise skip to 12.

10. Is an internal standard required to attain a level of risk consistent with management performance goals?

YES NO

11. Describe nature and status of internal sufficient standard.

12. Describe how the levels of risk and cost are consistent with management performance goals.

Past adherence to the standard in #8 has resulted in levels of ES&H and cost performance that are consistent with management goals including the use of industrial standards for industrial issues. The limit regarding cardiac pacemakers is appropriate. By coincidence, it appears that the whole body exposure limit is useful to control rotational forces on ferromagnetic tools. Although the limits for direct biological action are clearly overly-conservative, Fermilab has the potential for some of the highest personnel exposures of any industry and #8 represents the only generally-accepted consensus standard for static magnetic magnetic fields.

13. Pick the basic implementing assumption from the list.

Major positive impact Minor negative impact
 Minor positive impact Major negative impact
 No net impact

14. Describe the nature and status of implementation including cost-effectiveness.

Fermilab currently complies with #8 above as implemented by ES&H Manual Chapter 5062.2. Given the lack of evidence regarding direct biological effects, it is assumed that the associated exposure limits can be used as guides rather than absolute limits. In fact, the cited standard indicates that the values should be used as guides and not regarded as a fine line between safe and dangerous levels. Experience has demonstrated that this program is both successful and cost-effective.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

1. Issue(s) Issue origin Hazard analysis Identification Team

086. Material handling - chemical spills

Focus group Emergency Management Fire Protection Occupational Safety
 Environmental Protection Management & Oversight Radiation Protection

2. Is there a necessary standard which applies to this issue? YES NO

If yes, continue; otherwise skip to 6.

3. Necessary standard(s)

29 CFR 1910.120
29 CFR 1910.1200
29 CFR 1910.176

4. Are there any aspects of these necessary standard(s) which do not add value? YES NO

If yes, continue; otherwise skip to 6.

5. Description of non-value added aspects of necessary standard(s).

6. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with applicable necessary standards? YES NO

If no continue; otherwise skip to 12.

7. Is there a non-required external standard which applies to this issue? YES NO

If yes, continue; otherwise skip to 10.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

8. External sufficient standard citation

9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?

YES NO

If no continue; otherwise skip to 12.

10. Is an internal standard required to attain a level of risk consistent with management performance goals?

YES NO

11. Describe nature and status of internal sufficient standard.

12. Describe how the levels of risk and cost are consistent with management performance goals.

Past adherence to the statutory requirements in #3 has resulted in levels of ES&H and cost performance that are consistent with management goals including the use of industrial standards for industrial issues.

13. Pick the basic implementing assumption from the list.

Major positive impact Minor negative impact
 Minor positive impact Major negative impact
 No net impact

14. Describe the nature and status of implementation including cost-effectiveness.

Experience has demonstrated that this program is both successful and cost-effective.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

Issue origin Hazard analysis Identification Team

1. Issue(s)

087. Material handling - cranes and hoists

Focus group Emergency Management Fire Protection Occupational Safety
 Environmental Protection Management & Oversight Radiation Protection

2. Is there a necessary standard which applies to this issue?

YES NO

If yes, continue; otherwise skip to 6.

3. Necessary standard(s)

29 CFR 1910.179 (Overhead and gantry cranes)
29 CFR 1910.180 (Crawler locomotive and truck cranes)

4. Are there any aspects of these necessary standard(s) which do not add value?

YES NO

If yes, continue; otherwise skip to 6.

5. Description of non-value added aspects of necessary standard(s).

6. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with applicable necessary standards?

YES NO

If no continue; otherwise skip to 12.

7. Is there a non-required external standard which applies to this issue?

YES NO

If yes, continue; otherwise skip to 10.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

8. External sufficient standard citation

ANSI B30.20 - 1990 (Overhead and gantry cranes)
ANSI B30.5 - 1989 (Mobile and locomotive cranes)

9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?

YES NO

If no continue; otherwise skip to 12.

10. Is an internal standard required to attain a level of risk consistent with management performance goals?

YES NO

11. Describe nature and status of internal sufficient standard.

12. Describe how the levels of risk and cost are consistent with management performance goals.

Past adherence to the statutory requirement in #3 and the external standards in #8 has resulted in levels of ES&H and cost performance that are consistent with management goals including the use of industrial standards for industrial issues. The external standards provide guidance which is more complete and current than the associated statutory requirements in 29 CFR 1910.

13. Pick the basic implementing assumption from the list.

Major positive impact Minor negative impact
 Minor positive impact Major negative impact
 No net impact

14. Describe the nature and status of implementation including cost-effectiveness.

Experience has demonstrated that this program is both successful and cost-effective.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

1. Issue(s) Issue origin Hazard analysis Identification Team

088. Material handling - elevators used for hazardous material

Focus group Emergency Management Fire Protection Occupational Safety
 Environmental Protection Management & Oversight Radiation Protection

2. Is there a necessary standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 6.

3. Necessary standard(s)

4. Are there any aspects of these necessary standard(s) which do not add value? YES NO
If yes, continue; otherwise skip to 6.

5. Description of non-value added aspects of necessary standard(s).

6. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with applicable necessary standards? YES NO
If no continue; otherwise skip to 12.

7. Is there a non-required external standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 10.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

8. External sufficient standard citation

9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?

YES NO

If no continue; otherwise skip to 12.

10. Is an internal standard required to attain a level of risk consistent with management performance goals?

YES NO

11. Describe nature and status of internal sufficient standard.

Fermilab ES&H Manual chapter 5032.3, Transporting Gases in Building Elevators, has been written and in force for several years. It was written to specifically address the hazards associated with transporting cryogenic dewars and room temperature gas cylinders in Wilson Hall elevators and to minimize the potential risks.

12. Describe how the levels of risk and cost are consistent with management performance goals.

Past adherence to the internal standard in #11 has resulted in levels of ES&H and cost performance that are consistent with management goals including the use of industrial standards for industrial issues.

13. Pick the basic implementing assumption from the list.

Major positive impact Minor negative impact
 Minor positive impact Major negative impact
 No net impact

14. Describe the nature and status of implementation including cost-effectiveness.

The internal standards identified in #11 have proven to be both successful and cost-effective.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

1. Issue(s) Issue origin Hazard analysis Identification Team

089. Material handling - falling objects

Focus group Emergency Management Fire Protection Occupational Safety
 Environmental Protection Management & Oversight Radiation Protection

2. Is there a necessary standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 6.

3. Necessary standard(s)

29 CFR 1910 Subpart I (PPE)
29 CFR 1910 Subpart N (Materials Handling and Storage)

4. Are there any aspects of these necessary standard(s) which do not add value? YES NO
If yes, continue; otherwise skip to 6.

5. Description of non-value added aspects of necessary standard(s).

6. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with applicable necessary standards? YES NO
If no continue; otherwise skip to 12.

7. Is there a non-required external standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 10.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

8. External sufficient standard citation

9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?

YES NO

If no continue; otherwise skip to 12.

10. Is an internal standard required to attain a level of risk consistent with management performance goals?

YES NO

11. Describe nature and status of internal sufficient standard.

12. Describe how the levels of risk and cost are consistent with management performance goals.

Past adherence to the statutory requirements in #3 has resulted in levels of ES&H and cost performance that are consistent with management goals including the use of industrial standards for industrial issues.

13. Pick the basic implementing assumption from the list.

Major positive impact Minor negative impact
 Minor positive impact Major negative impact
 No net impact

14. Describe the nature and status of implementation including cost-effectiveness.

Experience has demonstrated that this program is both successful and cost-effective.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

1. Issue(s) Issue origin Hazard analysis Identification Team

090. Material handling - forklift operation

Focus group Emergency Management Fire Protection Occupational Safety
 Environmental Protection Management & Oversight Radiation Protection

2. Is there a necessary standard which applies to this issue? YES NO

If yes, continue; otherwise skip to 6.

3. Necessary standard(s)

29 CFR 1910.178

4. Are there any aspects of these necessary standard(s) which do not add value? YES NO

If yes, continue; otherwise skip to 6.

5. Description of non-value added aspects of necessary standard(s).

6. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with applicable necessary standards? YES NO

If no continue; otherwise skip to 12.

7. Is there a non-required external standard which applies to this issue? YES NO

If yes, continue; otherwise skip to 10.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

8. External sufficient standard citation

9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?

YES NO

If no continue; otherwise skip to 12.

10. Is an internal standard required to attain a level of risk consistent with management performance goals?

YES NO

11. Describe nature and status of internal sufficient standard.

12. Describe how the levels of risk and cost are consistent with management performance goals.

Past adherence to the statutory requirement in #3 has resulted in levels of ES&H and cost performance that are consistent with management goals including the use of industrial standards for industrial issues.

13. Pick the basic implementing assumption from the list.

Major positive impact Minor negative impact
 Minor positive impact Major negative impact
 No net impact

14. Describe the nature and status of implementation including cost-effectiveness.

Experience has demonstrated that this program is both successful and cost-effective.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

1. Issue(s) Issue origin Hazard analysis Identification Team

091. Material handling - hazardous tools equipment and machinery

Focus group Emergency Management Fire Protection Occupational Safety
 Environmental Protection Management & Oversight Radiation Protection

2. Is there a necessary standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 6.

3. Necessary standard(s)

29 CFR 1910.94
29 CFR 1910.106
29 CFR 1910.108
29 CFR 1910.215
29 CFR 1910.231
29 CFR 1910.242-244

4. Are there any aspects of these necessary standard(s) which do not add value? YES NO
If yes, continue; otherwise skip to 6.

5. Description of non-value added aspects of necessary standard(s).

6. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with applicable necessary standards? YES NO
If no continue; otherwise skip to 12.

7. Is there a non-required external standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 10.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

8. External sufficient standard citation

9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?

YES NO

If no continue; otherwise skip to 12.

10. Is an internal standard required to attain a level of risk consistent with management performance goals?

YES NO

11. Describe nature and status of internal sufficient standard.

12. Describe how the levels of risk and cost are consistent with management performance goals.

Past adherence to the statutory requirements in #3 has resulted in levels of ES&H and cost performance that are consistent with management goals including the use of industrial standards for industrial issues.

13. Pick the basic implementing assumption from the list.

Major positive impact Minor negative impact
 Minor positive impact Major negative impact
 No net impact

14. Describe the nature and status of implementation including cost-effectiveness.

Hazards associated with hazardous tools, equipment, and machinery are known and associated risk are being handled through an on-going inspection program. Experience has demonstrated that this program is both successful and cost-effective.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

1. Issue(s) Issue origin Hazard analysis Identification Team

092. Material handling - lifting objects

Focus group Emergency Management Fire Protection Occupational Safety
 Environmental Protection Management & Oversight Radiation Protection

2. Is there a necessary standard which applies to this issue? YES NO

If yes, continue; otherwise skip to 6.

3. Necessary standard(s)

29 CFR 1910.184 (Slings)

4. Are there any aspects of these necessary standard(s) which do not add value? YES NO

If yes, continue; otherwise skip to 6.

5. Description of non-value added aspects of necessary standard(s).

6. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with applicable necessary standards? YES NO

If no continue; otherwise skip to 12.

7. Is there a non-required external standard which applies to this issue? YES NO

If yes, continue; otherwise skip to 10.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

8. External sufficient standard citation

ASME B30.20 - 1993 (Below the hook lifting devices)
ANSI B30.9 - 1990 (Slings)
ANSI B30.10 - 1993 (Hooks)

9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?

YES NO

If no continue; otherwise skip to 12.

10. Is an internal standard required to attain a level of risk consistent with management performance goals?

YES NO

11. Describe nature and status of internal sufficient standard.

12. Describe how the levels of risk and cost are consistent with management performance goals.

Past adherence to the statutory requirement in #3 and the standard in #8 has resulted in levels of ES&H and cost performance that are consistent with management goals including the use of industrial standards for industrial issues. The requirement in #3 makes no mention of "below the hook lifting devices" which are widely constructed and used at the Lab. ASME B30.20 in #8 is the generally-accepted industry standard for lifting fixtures and it adequately covers all types. The guidance provided in the other external standards is more complete and current than the associated statutory requirements in 29 CFR 1910.

13. Pick the basic implementing assumption from the list.

Major positive impact Minor negative impact
 Minor positive impact Major negative impact
 No net impact

14. Describe the nature and status of implementation including cost-effectiveness.

Experience has demonstrated that this program is both successful and cost-effective.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

1. Issue(s)

Issue origin Hazard analysis Identification Team

093. Material handling - moving objects

Focus group Emergency Management Fire Protection Occupational Safety
 Environmental Protection Management & Oversight Radiation Protection

2. Is there a necessary standard which applies to this issue?

YES NO

If yes, continue; otherwise skip to 6.

3. Necessary standard(s)

29 CFR 1910 Subpart N (Materials Handling and Storage)

4. Are there any aspects of these necessary standard(s) which do not add value?

YES NO

If yes, continue; otherwise skip to 6.

5. Description of non-value added aspects of necessary standard(s).

6. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with applicable necessary standards?

YES NO

If no continue; otherwise skip to 12.

7. Is there a non-required external standard which applies to this issue?

YES NO

If yes, continue; otherwise skip to 10.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

8. External sufficient standard citation

9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?

YES NO

If no continue; otherwise skip to 12.

10. Is an internal standard required to attain a level of risk consistent with management performance goals?

YES NO

11. Describe nature and status of internal sufficient standard.

12. Describe how the levels of risk and cost are consistent with management performance goals.

Past adherence to the statutory requirement in #3 has resulted in levels of ES&H and cost performance that are consistent with management goals including the use of industrial standards for industrial issues.

13. Pick the basic implementing assumption from the list.

Major positive impact Minor negative impact
 Minor positive impact Major negative impact
 No net impact

14. Describe the nature and status of implementation including cost-effectiveness.

Experience has demonstrated that this program is both successful and cost-effective.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

1. Issue(s) Issue origin Hazard analysis Identification Team

094. Material handling - storage and handling of toxic materials.

Focus group Emergency Management Fire Protection Occupational Safety
 Environmental Protection Management & Oversight Radiation Protection

2. Is there a necessary standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 6.

3. Necessary standard(s)

29 CFR 1910.176
29 CFR 1910.1200

4. Are there any aspects of these necessary standard(s) which do not add value? YES NO
If yes, continue; otherwise skip to 6.

5. Description of non-value added aspects of necessary standard(s).

6. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with applicable necessary standards? YES NO
If no continue; otherwise skip to 12.

7. Is there a non-required external standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 10.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

8. External sufficient standard citation

9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?

YES NO

If no continue; otherwise skip to 12.

10. Is an internal standard required to attain a level of risk consistent with management performance goals?

YES NO

11. Describe nature and status of internal sufficient standard.

12. Describe how the levels of risk and cost are consistent with management performance goals.

Past adherence to the statutory requirements in #3 has resulted in levels of ES&H and cost performance that are consistent with management goals including the use of industrial standards for industrial issues.

13. Pick the basic implementing assumption from the list.

Major positive impact Minor negative impact
 Minor positive impact Major negative impact
 No net impact

14. Describe the nature and status of implementation including cost-effectiveness.

Experience has demonstrated that this program is both successful and cost-effective.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

1. **Issue(s)** Issue origin Hazard analysis Identification Team

095A. Material handling - transportation / offsite

Focus group Emergency Management Fire Protection Occupational Safety
 Environmental Protection Management & Oversight Radiation Protection

2. **Is there a necessary standard which applies to this issue?** YES NO
If yes, continue; otherwise skip to 6.

3. **Necessary standard(s)**

49 CFR 177.834 Subpart B
29 CFR 1910.176
29 CFR 1910.178

4. **Are there any aspects of these necessary standard(s) which do not add value?** YES NO
If yes, continue; otherwise skip to 6.

5. **Description of non-value added aspects of necessary standard(s).**

6. **Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with applicable necessary standards?** YES NO
If no continue; otherwise skip to 12.

7. **Is there a non-required external standard which applies to this issue?** YES NO
If yes, continue; otherwise skip to 10.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

8. External sufficient standard citation

9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?

YES NO

If no continue; otherwise skip to 12.

10. Is an internal standard required to attain a level of risk consistent with management performance goals?

YES NO

11. Describe nature and status of internal sufficient standard.

12. Describe how the levels of risk and cost are consistent with management performance goals.

Past adherence to the statutory requirements in #3 has resulted in levels of ES&H and cost performance that are consistent with management goals including the use of industrial standards for industrial issues.

13. Pick the basic implementing assumption from the list.

Major positive impact Minor negative impact
 Minor positive impact Major negative impact
 No net impact

14. Describe the nature and status of implementation including cost-effectiveness.

Experience has demonstrated that this program is both successful and cost-effective.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

1. Issue(s) Issue origin Hazard analysis Identification Team

096. NIR - intense light sources

Focus group Emergency Management Fire Protection Occupational Safety
 Environmental Protection Management & Oversight Radiation Protection

2. Is there a necessary standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 6.

3. Necessary standard(s)

29 CFR 1910.133
29 CFR 1926.102 (Eye and face protection)

4. Are there any aspects of these necessary standard(s) which do not add value? YES NO
If yes, continue; otherwise skip to 6.

5. Description of non-value added aspects of necessary standard(s).

6. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with applicable necessary standards? YES NO
If no continue; otherwise skip to 12.

7. Is there a non-required external standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 10.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

8. External sufficient standard citation

9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?

YES NO

If no continue; otherwise skip to 12.

10. Is an internal standard required to attain a level of risk consistent with management performance goals?

YES NO

11. Describe nature and status of internal sufficient standard.

12. Describe how the levels of risk and cost are consistent with management performance goals.

It is assumed that incoherent (i.e., non-laser) sources are to be considered here. The primary source of intense light at Fermilab is sunlight and the major associated concern is glare. This is well addressed by the two OSHA eye and face protection standards noted in #3 above. Fermilab has had a compliant and effective eye protection program in place for many years which includes provision of occupationally-required lens tinting. Incidents associated with intense light sources have been virtually non-existent except, perhaps, from glare associated with motor vehicle operation (and these have not been frequent or costly). Therefore, the ongoing level of risk associated with this issue is judged to fall within management performance goals including the use of industrial standards for industrial issues.

13. Pick the basic implementing assumption from the list.

Major positive impact Minor negative impact
 Minor positive impact Major negative impact
 No net impact

14. Describe the nature and status of implementation including cost-effectiveness.

As noted above, Fermilab has a long-standing eye protection program which includes provision of occupationally-required lens tinting. This program is described in Fermilab ES&H Manual Chapter 5102. Eye protection competitively procured and is provided only when occupationally-indicated. Experience has demonstrated that this program is both successful and cost-effective.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

1. Issue(s) Issue origin Hazard analysis Identification Team

097. NIR - lasers

Focus group Emergency Management Fire Protection Occupational Safety
 Environmental Protection Management & Oversight Radiation Protection

2. Is there a necessary standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 6.

3. Necessary standard(s)

29 CFR 1926.54 (Nonionizing radiation)
29 CFR 1910.269(w)(8) (Electric power...)

4. Are there any aspects of these necessary standard(s) which do not add value? YES NO
If yes, continue; otherwise skip to 6.

5. Description of non-value added aspects of necessary standard(s).

29CFR1926.54 (Nonionizing radiation) was apparently written for visible wavelength lasers. As such, it limits exposures to harmless intensities at longer wavelengths. For example, direct staring is prohibited where intensities may exceed 1 microwatt per cm² and incidental viewing is prohibited above 1 milliwatt per cm². This includes hazard class 1 lasers for wavelengths exceeding 0.55 micrometers for the former and 1.18 micrometers for the latter. Hazard class 1 lasers are not capable of causing eye injury within 3E4 seconds (8 hours) of CONTINUOUS EXPOSURE. Although OSHA standard interpretations acknowledge this shortcoming, the Agency has noted they will continue to cite the standard, but as a de minimis violation. 29CFR1910.269(w)(8) invokes the use of 29CFR1926.54.

6. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with applicable necessary standards? YES NO
If no continue; otherwise skip to 12.

7. Is there a non-required external standard which applies to this issue? YES NO
If yes, continue; otherwise skip to 10.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

8. External sufficient standard citation

ANSI Z136.1-1993 (Lasers)

9. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with the above (non-statutory) external standard?

YES NO

If no continue; otherwise skip to 12.

10. Is an internal standard required to attain a level of risk consistent with management performance goals?

YES NO

11. Describe nature and status of internal sufficient standard.

12. Describe how the levels of risk and cost are consistent with management performance goals.

The requirement cited in #3 above applies only to construction industries and apparently does not address non-visible wavelengths or repetively-pulsed exposures. The standard cited in #8 provides exposure limits to which it is believed that nearly all workers can be repeately exposed without adverse effect. This standard also addresses non-visible wavelengths and repetitively-pulsed exposures. Past adherence to this standard has resulted in levels of ES&H and cost performance that are consistent with management goals including the use of industrial standards for industrial issues.

13. Pick the basic implementing assumption from the list.

Major positive impact Minor negative impact
 Minor positive impact Major negative impact
 No net impact

14. Describe the nature and status of implementation including cost-effectiveness.

The current Fermilab laser safety policy is contained in ES&H Manual Chapter 5062.1 which is based on the external standard in #8. Experience has demonstrated that this program is both successful and cost-effective.

FERMILAB IDENTIFICATION TEAM DOCUMENTATION

Issue origin Hazard analysis Identification Team

1. Issue(s)

098. NIR - radiofrequency radiation

Focus group Emergency Management Fire Protection Occupational Safety
 Environmental Protection Management & Oversight Radiation Protection

2. Is there a necessary standard which applies to this issue?

YES NO

If yes, continue; otherwise skip to 6.

3. Necessary standard(s)

29 CFR 1910.97 (Nonionizing radiation)
29 CFR 1926.54 (Nonionizing radiation)
29 CFR 1910.268(p) (Telecommunications)
29 CFR 1910.269(s) (Electric power...)

4. Are there any aspects of these necessary standard(s) which do not add value?

YES NO

If yes, continue; otherwise skip to 6.

5. Description of non-value added aspects of necessary standard(s).

6. Is the level of risk associated with the issue(s) consistent with management performance goals assuming compliance with applicable necessary standards?

YES NO

If no continue; otherwise skip to 12.

7. Is there a non-required external standard which applies to this issue?

YES NO

If yes, continue; otherwise skip to 10.