

IMPAIRMENT OF FIRE PROTECTION AND LIFE SAFETY SYSTEMS

NIST S 7401.03

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Effective Date:¹ 04/01/2019

1. PURPOSE

The purpose of this suborder is to define the requirements and associated roles and responsibilities when performing any activity that may require the impairment (see Section 7, **DEFINITIONS**) of a fire protection and/or life safety system.

2. BACKGROUND

- a. NIST Policy (P) 7400.00: *Fire and Life Safety*, articulates NIST’s commitment to making fire and life safety an integral core value and vital part of the NIST culture, in part by complying with applicable laws, regulations, and other promulgated fire and life safety requirements.
- b. NIST Order (O) 7401.00: *Fire and Life Safety*, details the duties and powers of the NIST Authority Having Jurisdiction (AHJ)² with respect to fire protection and life safety requirements for impairments to fire protection and life safety systems.
- c. Impairment of a fire protection and/or life safety system may be necessary under specific circumstances, such as unique laboratory operations, asbestos abatement, demolition, renovation, *etc.* This type of work may produce smoke, sparks, steam, flames, fumes, dust, or similar particulates that could result in the unintended activation of one or more of these systems. Impairments may also come in the form of hampering or impeding the use of egress components such as corridors, stairwells, doorways, *etc.*, through any number of means. Impairments may be made to building systems or research-specific systems (see Section 7, **DEFINITIONS**). During these impairments, building occupants and emergency responders are exposed to a higher degree of hazard (*e.g.*, delayed notification due to fire

¹ For revision history, see Appendix A.

² As indicated in Section 10, the NIST AHJ may delegate the authority to carry out any AHJ responsibilities to other Fire Protection Engineers (FPEs) in the Office of Safety, Health, and Environment (OSHE).

36 alarm systems impairment, progressed fire development due to fire suppression system
37 impairment, slower occupant egress due to blockages in a hallway or temporary closure of a
38 stairwell, *etc.*). Further, buildings and spaces with impaired fire protection and/or life safety
39 systems are more susceptible to increased impact from a fire event (*e.g.*, greater loss of
40 equipment, room or building damage, unnecessary downtime, *etc.*). For the above reasons, it
41 is imperative that requirements and responsibilities for impairments are established and
42 implemented to minimize risk to life and property.

43 44 45 **3. APPLICABILITY**

46 The provisions of this suborder apply to all NIST activities occurring on NIST-owned and
47 operated sites that as a part of their conduct will require the impairment of a fire protection or
48 life safety system.

49 50 51 **4. REFERENCES**

- 52 a. International Building Code (IBC), 2015 edition.
- 53
- 54 b. International Fire Code (IFC), 2015 edition.
- 55
- 56 c. International Existing Building Code (IEBC), 2015 edition.
- 57
- 58 d. NFPA 13, *Standard for Installation of Sprinkler Systems*, 2013 edition.
- 59
- 60 e. NFPA 72, *National Fire Alarm and Signaling Code*, 2013 edition.
- 61
- 62 f. NFPA 101 *Life Safety Code*, 2015 edition.
- 63
- 64 g. NFPA 241, *Standard for Safeguarding Construction, Alteration, and Demolition Operations*,
- 65 2013 edition.
- 66
- 67

68 **5. APPLICABLE NIST DIRECTIVES**

- 69 a. NIST S 7101.03: [Stop Work](#)
- 70
- 71 b. NIST P 7400.00: [Fire and Life Safety](#)
- 72
- 73 c. NIST O 7401.00: [Fire and Life Safety](#)
- 74
- 75 d. NIST S 7401.01: [Fire Protection and Life Safety for Design and Construction](#)

76 e. NIST S 7401.02: *Inspection, Testing, and Maintenance of Fire Protection and Life Safety*
77 *Systems*

78

79 f. NIST S 7401.04: *Fire Prevention During Welding, Cutting, and Other Hot Work*

80

81

82 **6. REQUIREMENTS**

83 a. The following fire protection and/or life safety systems shall require approval from the NIST
84 Authority Having Jurisdiction (AHJ)³ prior to impairment:

85

86 (1) Building systems; and

87

88 (2) Research-specific systems.

89

90 b. Impairment of fire protection and/or life safety systems shall only be performed after
91 approval by the AHJ except as noted in Section 6h.

92

93 (1) Components of the means of egress shall only be impaired when it is determined by the
94 AHJ that, in their absence, the minimum requirements of IBC Chapter 10 and/or NFPA
95 101 are still met.

96

97 (2) The AHJ may issue an oral stop-work order⁴ pursuant to NIST S 7101.03 *Stop Work* for
98 activities that present an imminent danger.

99

100 c. The duration of impairment shall be minimized, to the fullest extent possible, and the
101 restoration of fire protection and/or life safety systems shall be a priority.

102

103 d. Planning for Impairments

104

105 (1) The Impairment Coordinator (see Section 7, **DEFINITIONS**) should be consulted when
106 considering a request for impairment.

107

108 (2) Work requiring impairment should be scheduled outside of normal business hours (8:30
109 a.m. to 5:00 p.m.) to limit affected occupants, whenever possible.

110

111 (3) Systems impairment should be limited, to the fullest extent possible, to the device or
112 component as opposed to the entire system.

113

³ In the context of this document, the use of the term AHJ also includes delegated AHJs.

⁴ Written stop work orders must be issued by the Contracting Officer (CO).

- 114 (a) The full system should not be rendered inoperable, whenever possible.
115
- 116 (b) A phased work plan may be necessary when multiple system components are affected
117 or the duration of impairment is deemed excessive by the AHJ.
118
- 119 e. Impairment Permitting
120
- 121 (1) Planned Impairments
122
- 123 (a) Permit requests (Please see Appendix B) shall be submitted to the Impairment
124 Coordinator at least five (5) business days prior to the impairment start date.
125
- 126 i. If requested in writing to the Impairment Coordinator, an expedited review of
127 the permit request may be available where justified.
128
- 129 (b) Permits shall be requested by:
130
- 131 i. OFPM staff members executing work orders;
132
- 133 ii. OU Group leaders for OU managed projects; and
134
- 135 iii. Contract Officer Representatives (COR) for contractor performed projects.
136
- 137 (c) The individual(s) submitting the Impairment Permit shall provide the following
138 information (see Appendix B):
139
- 140 i. Reason for the request;
141
- 142 ii. Building and room number(s) where impairment will occur;
143
- 144 iii. Extent of system impairment;
145
- 146 iv. Expected duration of impairment;
147
- 148 v. Specific devices to be impaired; and
149
- 150 vi. Interim safety measures, as required by the AHJ, to reduce hazards and risks
151 in the affected area.
152
153

154 (d) The AHJ will issue the permit within two (2) business days of the permit request.

- 155
156 i. An expedited review of the permit request may be available where justified,
157 see Section 6e(1)(a)i of this suborder.
158

159 (2) Routine Impairments (see Section 7, **DEFINITIONS**)
160

161 Annual impairment permits may be approved, where deemed necessary by the AHJ, due
162 to special circumstances in which an OU has the need to routinely or frequently impair
163 Fire Protection Systems due to normal operational needs.
164

165 (a) In lieu of the standard permitting process and requirements of this suborder, a
166 standard operating procedure (SOP) may be developed by the OU.
167

168 (b) All SOPs must be submitted to the AHJ for approval.
169

170 (c) Custody of keys or other devices used to impair Fire Protection Systems must be
171 approved by the AHJ.
172

173 (d) Renewal of annual impairment permits must be requested by the OU for AHJ
174 approval before expiration and is subject to reevaluation by the AHJ for necessity or
175 modifications to the existing SOP.
176

177 (e) The AHJ reserves the right to revoke annual impairment permits immediately if it is
178 determined that approved SOPs are not being strictly adhered to.
179

180 f. Implementation of Impairment
181

182 (1) Notification
183

184 (a) Building Systems – The Impairment Coordinator shall notify building occupants and
185 OFPM via email of impairments that affect building fire and life safety systems.
186

187 (b) Research-specific systems – The individual(s) responsible for the laboratory space
188 shall notify affected laboratory users via email of impairments that affect research-
189 specific systems.
190

191 (c) Notifications shall be sent 3 days before commencement of work and on the day of
192 work commencement.
193

194 i. In cases of expedited reviews, notifications shall be sent as soon as the
195 requester of the permit is informed of the approval.

196

197 (d) Notifications shall include the following:

198

199 i. Building areas impacted;

200

201 ii. Impaired systems;

202

203 iii. Duration of impairment;

204

205 iv. Point of Contact;

206

207 v. Interim evacuation routes, where necessary; and

208

209 vi. Any interim safety measures required by the AHJ.

210

211 (2) Postings

212

213 (a) A copy of the Impairment Permit shall be displayed in a highly visible location
214 outside of the room/space with the impairment, or as determined by the Impairment
215 Coordinator or AHJ and the COR.

216

217 (b) If required by the AHJ, additional signage, such as temporary exit or evacuation route
218 signs or signage at building lobbies or entrances, will be posted by the Impairment
219 Coordinator or AHJ.

220

221 (3) All workers, materials, equipment and tools shall be on-site and ready before any system
222 is shut down or disabled.

223

224 (4) Combustibles, hazardous processes and other sources of ignition shall be minimized or
225 eliminated in the impaired area.

226

227 (5) The individual requesting the impairment shall be required to obtain additional passive
228 fire protection systems, *e.g.*, fire extinguishers, if required by the AHJ when
229 extinguishing systems are impaired.

230

231 (6) An “Out of Service” tag or signage shall be attached on the control valve associated with
232 the impaired extinguishing system component, if applicable.

233

234 (7) All impairment activities related to the fire alarm system or components tied into the fire
235 alarm system (e.g., water flow switches, tamper switches) must be coordinated with the
236 Impairment Coordinator.

237
238 (a) The Impairment Coordinator shall:

- 239
- 240 i. Notify the Fire Protection Group (Gaithersburg) or Security Command Center
241 (Boulder) prior to impairing or disabling the device;
 - 242
 - 243 ii. Provide the Fire Protection Group (Gaithersburg) and Security Command
244 Center (Boulder) with the device type, location, and permitted impairment
245 period; and
 - 246
 - 247 iii. Keep a log of disabled devices and the impairment expiration.
 - 248

249 (8) Fire Watch

250
251 As a part of an Impairment Permit request, the AHJ may require a fire watch over the
252 building or portion thereof affected by the impairment. The requirement for a fire watch
253 will be based on the risks associated with the extent or duration of the impairment and
254 will be based on the hazards associated with the work being performed.

255
256 (a) A fire watch may be required where an impairment prevents a system from
257 functioning as required by design.

258
259 (b) A continuous fire watch shall be maintained for the duration of the impairment until
260 all Fire Protection Systems are placed back into service or as required by the AHJ.

261
262 (c) It may be necessary to assign more than one employee to fire watch duties, e.g. where
263 multiple floors or buildings may be affected.

264
265 (d) The fire watch shall:

- 266
- 267 i. Be a responsible individual trained in the use of a fire extinguisher and
268 sounding of an alarm;
 - 269
 - 270 ii. Have no other responsibilities other than to conduct the fire watch;
 - 271

- 272 iii. Perform visual survey(s) of any area(s) of the building(s) affected by the
273 impairment(s). When impairments occur over multiple areas, surveys shall be
274 performed once every hour, at a minimum;
275
- 276 iv. Verify that exits and means of egress components are unlocked, unobstructed
277 and accessible;
278
- 279 v. Have a means of communications to Emergency Services;
280
- 281 vi. Immediately report any evidence of heat, smoke or fire to Emergency Services
282 by calling x2222 (Gaithersburg) or x7777 (Boulder);
283
- 284 vii. Immediately notify building occupants upon discovery of heat, smoke, or fire
285 by activating a manual fire alarm pull station prior to attempting to extinguish
286 the fire; and
287
- 288 viii. Have fire extinguishers readily available and be trained to use them.
289
- 290 (9) Protection of sprinkler heads, smoke detectors and heat detectors for the purpose of
291 preventing unwanted alarms will be by 3 mils (0.08mm/0.003 inches) cellophane or thin
292 paper bags.
293
- 294 (a) Protective covers supplied in smoke detector packaging are not acceptable
295 alternatives to the above requirements.
296
- 297 (b) Care should be taken to ensure that settled dust and particulates are not disrupted
298 when removing covers, thereby resulting in false alarming.
299
- 300 (c) Polypropylene bags marketed as “Cello” bags are not acceptable.
301
- 302 (10) Systems should be partially or fully restored back to service during periods where work
303 is not being performed and continues for multiple days.
304
- 305 (a) Fire Protection Systems shall not be disabled overnight without prior approval by the
306 AHJ.
307
- 308 (11) The Impairment Coordinator shall contact the permit holder at the end of expected
309 impairment duration to determine if the impairment shall be put back in working order
310 or if additional impairment time is needed.
311

312 (a) Additional safety measures, such as fire watch, which were not originally required
313 with the issuing of the impairment permit, may be required if the permit duration is
314 extended.

315
316 g. Restoration

317
318 (1) The permit holder shall ensure:

- 319 (a) Any covers placed on detection or extinguishing devices are removed;
320
321 (b) Any damage to devices is promptly reported to the Impairment Coordinator;
322
323 (c) The Impairment Coordinator’s signature is obtained on the Restoration Checklist
324 (please see Appendix C); and
325
326 (d) The Impairment Permit is returned to the Impairment Coordinator upon closeout.
327
328

329 (2) The Impairment Coordinator shall ensure:

- 330 (a) All extinguishing valves are re-opened and tamper switches report “normal” status;
331
332 (b) All fire protection equipment is removed from manual mode and restored back to
333 automatic mode;
334
335 (c) All affected devices are fully functional;
336
337 (d) All “Out of Service” tags are removed; and
338
339 (e) Fire Protection Group (Gaithersburg) and Security Command Center (Boulder) are
340 notified when all systems are back in service.
341
342

343 h. Emergency and Concealed Impairments

344
345 (1) If an emergency impairment is necessary or a concealed impairment is found:
346

- 347 (a) The individual requiring the emergency impairment or discovering the concealed
348 impairment shall notify the Impairment Coordinator or the Fire Protection Group⁵ (in
349 Gaithersburg);
350
351 (b) The impairment shall be isolated from the remaining Fire Protection System where
352 possible, by the Impairment Coordinator, Fire Protection Group, OFPM Shop
353 personnel, or qualified contractor;
354
355 (c) Any hazardous operations in the area shall be discontinued and occupants within the
356 impaired areas notified; and
357
358 (d) After the impairment has been completed, the Impairment Coordinator or the Fire
359 Protection Group⁶ (in Gaithersburg) shall be notified by the individual(s) completing
360 the impairment that all systems are operational and back in service.
361

362 i. Impairments Due to Inspection, Testing, and Maintenance
363

364 (1) Impairments that are necessary as a part of routine inspection, testing, and maintenance
365 or are from work associated with an OFPM M-slip can be performed without an
366 Impairment Permit but shall be performed only after notifying the Impairment
367 Coordinator.
368

- 369 (a) The individual requiring the impairment shall notify the Impairment Coordinator or
370 the Fire Protection Group⁶ (in Gaithersburg) that an impairment is necessary;
371
372 (b) The impairment shall be isolated from the remaining Fire Protection System where
373 possible;
374
375 (c) Any hazardous operations in the area shall be discontinued and occupants within the
376 impaired areas notified; and
377
378 (d) After the impairment has been completed, the Impairment Coordinator, the Fire
379 Protection Group⁶ (in Gaithersburg), and the space owner shall be notified that all
380 systems are operational and back in service by the permit requestor.
381

⁵ In the event of an emergency or in the absence of the Impairment Coordinator, trained and authorized personnel from the NIST Fire Protection Group (Gaithersburg) or Security Command Center (Boulder) may bypass necessary components on the Fire Protection System.

⁶ In the event of an emergency or in the absence of the Impairment Coordinator, trained and authorized personnel from the NIST Fire Protection Group (Gaithersburg) or Security Command Center (Boulder) may bypass necessary components on the Fire Protection System.

- 382 j. Training
383
384 (1) Training shall be provided, documented, and recorded in accordance with the
385 requirements of NIST S7101.23: *Safety Education and Training*.
386
387 (2) NIST staff who are responsible for requesting an impairment should complete the
388 suborder training for this program.
389
390 (3) Fire Protection Group staff members (Gaithersburg) shall undergo annual training
391 provided by the Impairment Coordinator before being authorized to impair a fire
392 protection system by means of the campus fire alarm Graphical Command Center (GCC).
393
394 (3) NIST fire watch personnel shall complete OSHE training on fire watch duties and on the
395 use of fire extinguishers. Fire extinguisher training shall be completed annually.
396
397 (a) CORs shall ensure that contractors performing fire watch have received fire watch
398 and extinguisher training from their employer.
399
400

401 7. DEFINITIONS

- 402 a. Acceptable – Considered by the authority having jurisdiction (AHJ) as adequate for
403 satisfying the goals, performance objectives, and/or performance criteria.
404
405 b. Authority Having Jurisdiction – A qualified FPE⁷ in OSHE designated by the NIST CSO to
406 enforce⁸ the NIST-adopted codes and standards relevant to fire, electrical, and life safety on
407 NIST-owned and operated sites.
408
409 c. Building Fire Protection and Life Safety Systems – Any system that is required by codes and
410 standards adopted by NIST which also serves as part of the overall building fire and life
411 safety protection.
412
413 d. Concealed Impairment – A concealed impairment is an unknown impairment that may result
414 when a fire protection or life safety system is removed from service by an unauthorized
415 person or when a system is unintentionally left out of service.
416

⁷ See requirements for Office of Personnel Management [Fire Protection Engineering Series 0804](#).

⁸ Nature of enforcement is dependent upon the severity of the violation, e.g. stop work, revoke permit, denial of use and occupancy, etc.

- 417 e. Fire Alarm System – A system or portion of a combination system that consists of
418 components and circuits arranged to monitor and annunciate the status of fire alarm or
419 supervisory signal-initiating devices and to initiate the appropriate response to those signals.
420
- 421 f. Fire Extinguishing System – An approved system of devices and equipment which
422 discharges an approved fire extinguishing agent or water onto or in the area of a fire.
423
- 424 g. Fire Protection System – Approved devices, equipment and systems or combinations of
425 systems used to detect a fire, activate an alarm, extinguish or control a fire, control or
426 manage smoke and products of a fire, or any combination thereof.
427
- 428 h. Fire Watch – The assignment of a person or persons to an area for the express purpose of
429 notifying the fire department, the building occupants, or both of an emergency; preventing a
430 fire from occurring; extinguishing small fires; or protecting the public from fire or life safety
431 dangers.
432
- 433 i. Impairment – Temporary shutdown (in whole or in part) of a Fire Protection System where
434 the system is damaged, disabled or out of order. The resulting condition is that the Fire
435 Protection System does not function as intended in the event of a fire or other emergency.
436
- 437 (1) Planned – A scheduled impairment that is typically a modification to an existing system
438 for the purposes of improvement or to minimize unwanted activation due to operational
439 needs in an area. All NIST work orders and NIST contracts that require system
440 impairment will be classified under this category and follow the requirements in Section
441 6b.
442
- 443 (2) Routine – Impairments to a specific system that requires routine or frequent need of
444 impairment as a result of work. An example is beam detectors located in areas where a
445 crane is operated.
446
- 447 (3) Emergency – A condition where a Fire Protection System or portion thereof is out of
448 order due to an unexpected occurrence.
449
- 450 (4) Concealed – A previously unknown or undocumented impairment that is newly
451 discovered.
452
- 453 j. Impairment Coordinator – A term referring to the Fire Alarm System Administrator in
454 Gaithersburg or the Fire Alarm Contractor under OFPM Safety Fire Protection Engineering

455 Specialist in Boulder.

456

457 k. Interim Safety Measures – Temporary safety measures put in place to protect the safety of
458 occupants, visitors, staff and emergency responders. These may include but are not limited
459 to temporary Fire Protection Systems, signage, supervision and/or fire watch.

460

461 l. Life Safety Systems – Those systems that enhance or facilitate evacuation, smoke control,
462 compartmentalization, and/or isolation.

463

464 m. Research-Specific Fire Protection and Life Safety Systems – Any system required due to a
465 hazard created by a research task and which is not part of the overall building fire and life
466 safety protection.

467

468

469 **8. ACRONYMS**

470 a. AHJ – Authority Having Jurisdiction

471

472 b. COR – Contracting Officer’s Representative

473

474 c. FPG – Fire Protection Group

475

476 d. GCC – Graphical Command Center

477

478 e. IBC – International Building Code

479

480 f. NFPA – National Fire Protection Association

481

482 g. OSHE – NIST Office of Safety, Health, and Environmental

483

484

485 **9. RESPONSIBILITIES**

486 a. OU Directors and Line Supervisors are responsible for:

487

488 (1) Ensuring that the *Impairment of Fire Protection and Life Safety Systems Suborder* is
489 adopted and used in their spaces;

490

491 (2) Providing adequate notice to the Impairment Coordinator of impairment via an
492 Impairment Permit request;

493

- 494 (3) Providing notification via email to laboratory users of research-specific system
495 impairments;
496
- 497 (4) Posting the Impairment Permit; and
498
- 499 (5) Coordinating with the Impairment Coordinator for “Out of Service” tagging, rendering
500 the system impaired, and restoration.
501
- 502 b. OFPM is responsible for:
503
- 504 (1) Ensuring that the *Impairment of Fire Protection and Life Safety Systems Suborder* is
505 adopted and used in their spaces;
506
- 507 (2) Providing adequate notice to the Impairment Coordinator of impairment via an
508 Impairment Permit request, when required (see Section 6h for exclusions related to
509 routine inspection, testing, and maintenance of systems or work associated with M-slips);
510
- 511 (3) Posting the Impairment Permit; and
512
- 513 (4) Coordinating with the Impairment Coordinator for “Out of Service” tagging, rendering
514 the system impaired, and restoration.
515
- 516 c. The NIST AHJ or (Delegated AHJ) is responsible for:
517
- 518 (1) Authorizing all NIST planned impairments and maintaining all permit requests for a
519 period of one (1) year;
520
- 521 (2) Ensuring access control to the fire alarm and fire suppression systems on NIST
522 Gaithersburg and Boulder campuses; and
523
- 524 (3) Determining the requirements and training for fire watch.
525
- 526 d. Impairment Coordinator is responsible for:
527
- 528 (1) Routing Impairment Permits to AHJ for approval;
529
- 530 (2) Posting additional signage, as required by the AHJ;
531
- 532 (3) Providing notice to building occupants via email three (3) days prior to system
533 impairment and after system restoration;

- 534 (4) Notifying the Fire Protection Group (Gaithersburg) or Security Command Center
535 (Boulder) at commencement of planned impairment and restoration of systems;
536
- 537 (5) Maintaining contact with impairment permit holders and ensuring restoration of systems
538 upon completion of work;
539
- 540 (6) Notifying the AHJ when impairments exceed their permitted duration; and
541
- 542 (7) Signing the permit holder’s Restoration Checklist upon verification of operability.
543
- 544 e. CORs are responsible for:
- 545
- 546 (1) Providing adequate notice to the Impairment Coordinator of impairment via an
547 Impairment Permit request;
548
- 549 (2) Ensuring that the requirements established by the Impairment Coordinator or AHJ are
550 incorporated into the contractor safety plan;
551
- 552 (3) Posting the Impairment Permit as required by the AHJ;
553
- 554 (4) Coordinating with the Impairment Coordinator for “Out of Service” tagging, rendering
555 the system impaired, and restoration; and
556
- 557 (5) Providing trained personnel (or contractors) for the capacity of fire watch (see Section
558 9g) when required by the AHJ.
559
- 560 f. Fire Protection Group (Gaithersburg only) is responsible for:
- 561
- 562 (1) Notifying the Impairment Coordinator of any emergency or concealed impairments as
563 soon as they have been reported;
564
- 565 (2) Providing fire watch personnel in applicable situations;
566
- 567 (3) Completing annual training provided by the Impairment Coordinator before being
568 authorized for Fire Alarm System access control;
569
- 570 (4) Providing trained personnel for the capacity of fire watch (see Section 9g) when required

571 by the AHJ; and

572

573 (5) Maintaining constant and continuous monitoring of campus fire alarm GCC.

574

575 g. Fire Watch Personnel (when required) are responsible for:

576

577 (1) Completing the training provided by OSHE on the duties of fire watch personnel;

578

579 (2) Completing annual training provided or approved by OSHE on the use of required fire
580 extinguishers;

581

582 (3) Knowing and understanding the work site and work hazards;

583

584 (4) Ensuring that safe conditions are maintained during the work operations;

585

586 (5) Having fire extinguishment equipment (minimum is a 2A:40B:C extinguisher) readily
587 available;

588

589 (6) Knowing how to summon emergency help and call for emergency help when necessary;

590

591 (7) Watching for fires in all exposed areas and trying to extinguish them when the fires are
592 obviously within the capacity of the equipment available; and

593

594 (8) Visually surveying the area of the building that is affected by the impairment each hour
595 to ensure safe conditions and availability of egress.

596

597

598 **10. AUTHORITIES**

599 The NIST Authority Having Jurisdiction may delegate the authority to carry out any AHJ
600 responsibilities to FPEs in the Office of Safety, Health, and Environment.

601

602

603 **11. DIRECTIVE OWNER**

604 Chief Safety Officer

605

606

607 **12. APPENDICES**

608 A. Revision History

609 B. Impairment Permit Form

610 C. Restoration Checklist

611

612
613

Appendix A. Revision History

Revision No.	Approval Date	Effective Date	Brief Description of Change; Rationale
0	03/23/2018	04/01/2019	<ul style="list-style-type: none">• None – Initial document
1	02/06/2022	TBD	<ul style="list-style-type: none">• Section 6.j(2) added to indicate NIST staff who are responsible for requesting an impairment should complete the suborder training for this program.

614
615

Appendix B. Impairment Permit

NIST-XXX	U.S. DEPARTMENT OF COMMERCE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY					
<h2 style="margin: 0;">IMPAIRMENT PERMIT</h2> <h3 style="margin: 0;">OSHE-FFSG</h3>						
A. Request Information						
Requestor	Requestor's Phone #	Requestor's Email Address			Campus being Impaired <input type="checkbox"/> Gaithersburg <input type="checkbox"/> Boulder	
Impairment Duration Mon Tue Wed Thu Fri Sat Sun Date: _____ Start: _____ End: _____				Buildings Impacted	Rooms/Areas Impacted	
B. DESCRIPTION OF WORK						
C. SYSTEMS BEING IMPAIRED						
Fire Alarm <input type="checkbox"/> Smoke or Heat Detectors [Number of Devices: _____] <input type="checkbox"/> Beam Detectors [Number of Devices: _____] <input type="checkbox"/> VESDA Systems <input type="checkbox"/> Notification Devices (Speakers, Strobes, etc.) [Number of Devices: _____] <input type="checkbox"/> Tamper Switches [Number of Devices: _____] <input type="checkbox"/> Other: _____						
Suppression Systems <input type="checkbox"/> Sprinkler Systems <input type="checkbox"/> Flow Switches [Number of Switches: _____] <input type="checkbox"/> Valves [Number of Valves: _____] <input type="checkbox"/> Clean Agent Systems <input type="checkbox"/> Fire Pumps <input type="checkbox"/> Specialized Systems: _____						
Life Safety / Egress Systems <input type="checkbox"/> Doors [Number of Doors: _____] <input type="checkbox"/> Corridors <input type="checkbox"/> Stairs <input type="checkbox"/> Generators <input type="checkbox"/> Other: _____						
D. SPECIAL PROVISIONS (Completed by AHJ)						
<input type="checkbox"/> Additional Fire Extinguishers <input type="checkbox"/> Additional Impairment Signage <input type="checkbox"/> Temporary Evacuation/Egress Routes <input type="checkbox"/> Fire Watch <input type="checkbox"/> Other: _____						
E. OU Group Lead OR COTR						

Signature of OU Group Lead or COTR:	Name (Print) of OU Group Lead or COR:	Phone Number:
F. AUTHORIZATION		
Signature of Authority Having Jurisdiction (AHJ):	Name (Print) of AHJ:	Phone Number:

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Appendix C. Restoration Checklist

NIST-XXX	U.S. DEPARTMENT OF COMMERCE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY	
IMPAIRMENT RESTORATION CHECKLIST OSHE-FFSG		
A. Impairment Permit Information		
Impairment Permit #	Completion Date / Time	Did Impairment exceed expected duration? <input type="checkbox"/> Yes, Reason: _____ _____ <input type="checkbox"/> No
B. Systems Restored to Original State and Verified Operational		
<p>Fire Alarm</p> <ul style="list-style-type: none"> <input type="checkbox"/> Smoke or Heat Detectors [Number of Devices: _____] <input type="checkbox"/> Beam Detectors [Number of Devices: _____] <input type="checkbox"/> VESDA Systems <input type="checkbox"/> Notification Devices (Speakers, Strobes, etc.) [Number of Devices: _____] <input type="checkbox"/> Tamper Switches [Number of Devices: _____] <input type="checkbox"/> Other: _____ <p>Suppression Systems</p> <ul style="list-style-type: none"> <input type="checkbox"/> Sprinkler Systems <input type="checkbox"/> Flow Switches [Number of Switches: _____] <input type="checkbox"/> Valves [Number of Valves: _____] <input type="checkbox"/> Clean Agent Systems <input type="checkbox"/> Fire Pumps <input type="checkbox"/> Specialized Systems: _____ <p>Life Safety / Egress Systems</p> <ul style="list-style-type: none"> <input type="checkbox"/> Doors [Number of Doors: _____] <input type="checkbox"/> Corridors <input type="checkbox"/> Stairs <input type="checkbox"/> Generators <input type="checkbox"/> Other: _____ <p>Temporary Impairment Requirements</p> <ul style="list-style-type: none"> <input type="checkbox"/> Remove all Impairment Signage <input type="checkbox"/> Remove all Evacuation / Egress Signage <input type="checkbox"/> Remove and Return Additional Fire Extinguishers <input type="checkbox"/> Other: _____ 		
C. OU Group Lead OR COTR		
Signature of OU Group Lead or COTR:	Name (Print) of OU Group Lead or COR:	Phone Number:
D. Verification		
Signature of Impairment Coordinator:	Name (Print) of Impairment Coordinator:	Phone Number: