

3 Environmental Management System

4
5 NIST S 7301.01

6 Approval Date: 01/12/2021

7 Effective Date:¹ 10/07/2016
8
9

10 1. PURPOSE

11 The purpose of this suborder is to delineate the requirements and procedures for implementing
12 the Environmental Management System (EMS) at the National Institute of Standards and
13 Technology (NIST).
14
15

16 2. BACKGROUND

17 An EMS is implemented to achieve specific environmental goals and targets and to continually
18 improve an organization's environmental performance. An EMS has been implemented at NIST
19 since 2005. Implementation of the current NIST EMS is based on the following:
20

- 21 a. Executive Order 13148, issued April 21, 2000, requiring all appropriate federal agencies to
22 have an EMS in place by December 2005
23
- 24 b. Executive Order 13423, issued January 24, 2007, requiring Federal facilities to implement
25 environmental management systems at all appropriate organizational levels.
26
- 27 c. Executive Order 13514, issued on October 5, 2009, emphasizing continuing implementation
28 of formal environmental management systems at all appropriate organizational levels.
29
- 30 d. Executive Order 13693, issued March 25, 2015 and revoking Executive Orders 13423 and
31 13514, instructing federal agencies to continue implementation of formal EMSs where those
32 systems have proven effective and deploy new EMSs where appropriate.
33
- 34 e. The Department of Commerce (DOC) issued Administrative Order 217-16 and the Energy
35 and Environmental Management Manual (September 2012), requiring DOC Bureaus to
36 implement an EMS based on the ISO 14001:2004(E) standard.
37

¹ For revision history, see Appendix A.

38 **3. APPLICABILITY**

39 This suborder is applicable to all activities conducted at NIST’s Gaithersburg, MD; Boulder, CO;
40 and Fort Collins, CO sites.

41
42

43 **4. REFERENCES**

- 44 a. Executive Order 13693, Planning for Federal Sustainability in the Next Decade, March 25,
45 2015
- 46
- 47 b. DOC Administrative Order 217-16
- 48
- 49 c. DOC Energy and Environmental Management Manual, September 2012
- 50
- 51 d. NIST Policy (P) 7300.00, Environmental Management
- 52
- 53 e. NIST Order (O) 7301.00, Environmental Management
- 54
- 55 f. ISO 14001:2015(E), Environmental Management Systems – Requirements and Guidance for
56 Use, September 15, 2015

57
58

59 **5. APPLICABLE NIST DIRECTIVES**

- 60 a. NIST S 7101.23: [*Safety Education and Training*](#)

61
62

63 **6. REQUIREMENTS**

64 The NIST EMS must identify and manage the environmental aspects of NIST operations in a
65 manner that is consistent with NIST P 7300.00, Environmental Management and NIST O
66 7301.00, Environmental Management. The EMS includes requirements and procedures for
67 planning, managing, auditing, implementing corrective actions, and conducting management
68 reviews. The following paragraphs describe the basic elements of the EMS and Appendix B
69 provides the EMS procedures.

70
71

- 71 a. Environmental Aspects

72 NIST shall identify the environmental aspects of all activities over which it has control or
73 influence, and shall document those aspects that can have a significant impact on the
74 environment. This includes the evaluation of existing activities, and the evaluation of
75 planned, new or changing activities prior to implementation.

76

77 NIST EMS Procedure 1.0, *Significant Environmental Aspects* in Appendix B shall be used to
78 identify and evaluate environmental aspects.

79
80 b. Legal and Other Requirements

81 NIST P 7300.00, Environmental Management includes a commitment to comply with legal
82 requirements which are applicable to NIST environmental aspects. The NIST Environmental
83 Management Group (EMG) shall maintain a process to identify and access applicable legal
84 requirements. This includes maintenance of a baseline set of requirements and the ongoing
85 identification of new requirements that become applicable due to regulatory changes or
86 changes at NIST.

87
88 NIST EMS Procedure 2.0, *Legal and Other Requirements* in Appendix B shall be used to
89 identify, evaluate and document applicable legal and other requirements.

90
91 c. EMS Objectives and Targets

92 NIST shall establish and maintain environmental objectives and targets consistent with the
93 NIST P 7300.00, Environmental Management, and in consideration of its significant
94 environmental aspects. The objectives and targets shall be established to ensure the continual
95 improvement of NIST's environmental performance.

96
97 A standard EMS Objective, continuously in place at NIST, shall be to comply with all
98 applicable legal requirements.

99
100 NIST EMS Procedure 3.0, *EMS Objectives and Targets* in Appendix B shall be used to
101 identify EMS objectives and targets.

102
103 NIST EMS Objectives and Targets shall be documented in Environmental Management
104 Plans (EMPs). NIST EMS Procedure 4.0, *Environmental Management Plans* in Appendix B
105 shall be used to develop, document and implement EMPs. EMPs shall be developed to
106 document the planned actions, responsibilities, schedule, and resources that are necessary for
107 accomplishing each EMS Objective.

108
109 d. EMS Roles and Responsibilities

110 General EMS roles and responsibilities are outlined in NIST P 7300.00, Environmental
111 Management and NIST Order 7301.00, Environmental Management.

112
113 Two individuals are primarily responsible for the EMS at NIST; the Environmental Manager
114 and the Environmental Officer. The Environmental Manager has operational jurisdiction
115 over the EMS. This role is filled by the NIST Chief Safety Officer. The Environmental
116 Officer is an individual designated by the Environmental Manager to implement and

117 maintain the EMS. Currently, this role is filled by the Environmental Management Group
118 Leader.

119
120 Other specific EMS roles and responsibilities are defined in Environmental Suborders
121 (Section 6i) or Procedures (Appendix B).

122
123 e. Training, and Awareness
124 All NIST employees shall receive basic EMS Awareness training which is included in the
125 NIST General Safety Training Course. Specific environmental training needs are defined
126 and documented in other Environmental Suborders (Section 6i). NIST line management
127 shall ensure that personnel whose work may create a significant impact on the environment
128 or affect compliance with environmental regulatory requirements have received appropriate
129 training.

130
131 NIST EMS Procedure 5.0, *Training and Awareness* in Appendix B and NIST S 7101.23,
132 *Safety Education and Training* are used to identify and implement EMS training
133 requirements.

134
135 f. Communications
136 NIST shall maintain procedures for internal and external communication of information
137 related to the EMS.

138
139 (1) NIST EMS Procedure 6.0, *Internal Communications* in Appendix B shall be used for
140 internal EMS communications between the various levels and functions of the
141 organization.

142
143 (2) NIST EMS Procedure 7.0, *Responding to External Interested Parties* in Appendix B shall
144 be used for external EMS communications with interested parties.

145
146 (3) NIST EMS Procedure 10.0, *Communicating with Suppliers and Contractors* in Appendix
147 B shall be used to communicate EMS procedures and information to suppliers and
148 contractors.

149
150 g. EMS Documentation
151 EMS documentation shall include:

152
153 (1) NIST P 7300.00, Environmental Management, NIST O 7301.00, Environmental
154 Management and this suborder;

155
156 (2) A description of the scope of the EMS;

157 (3) A description of the main elements of the EMS, their interaction and references to related
158 documents; and

159
160 (4) Any documents, including records, determined by NIST to be necessary to ensure the
161 effective planning, operation and control of processes that relate to its significant
162 environmental aspects.

163
164 h. Document Control

165 EMS Documents shall be controlled to ensure that the following requirements are met:

- 166
167 (1) EMS Documentation can be located;
- 168
169 (2) EMS Documents are periodically reviewed, revised as necessary, and approved by
170 appropriate persons;
- 171
172 (3) EMS Documents are current and available at all locations where they are needed;
- 173
174 (4) EMS Documents are legible, dated, readily identifiable, and maintained in an orderly
175 fashion.
- 176
177 (5) Obsolete EMS Documents retained for any purpose shall be suitably identified to prevent
178 their unintended use.

179
180 NIST EMS Procedure 8.0, *Document Control* in Appendix B shall be used to control EMS
181 documentation.

182
183 i. Operational Controls

184 NIST shall identify and manage operations that are associated with significant environmental
185 aspects to ensure that documented procedures are established, implemented, and maintained,
186 to:

- 187
- 188 • Control situations where their absence could lead to deviations from NIST P 7300.00,
189 Environmental Management or EMS Objectives and Targets,
 - 190
191 • Stipulate operating criteria where appropriate, and
 - 192
193 • As necessary, control goods and services that are received from external sources by
194 NIST.

195
196 NIST shall implement and maintain Environmental Suborders for:

- 197
198 (1) Air Emissions Management (Boulder), (Gaithersburg);
199
200 (2) Drinking Water (Boulder), (Gaithersburg);
201
202 (3) Hazardous Waste Accumulation (Boulder), (Gaithersburg);
203
204 (4) Oil Storage and Handling (Boulder), (Gaithersburg);
205
206 (5) Stormwater Management (Boulder), (Gaithersburg);
207
208 (6) Wastewater Management (Boulder), (Gaithersburg); and
209
210 (7) National Environmental Policy Act.

211
212 NIST EMS Procedure 9.0, *Operational Controls* in Appendix B shall be used to implement
213 operational controls.

214
215 j. Communication with Contractors and Suppliers

216 The NIST EMS Procedure 10.0, *Communication with Contractors and Suppliers* in Appendix
217 B shall be used to ensure that appropriate environmental information is communicated to
218 NIST contractors and suppliers

219
220 k. Emergency Preparedness and Response

221 The NIST EMS Procedure 11.0, *Emergency Preparedness and Response* in Appendix B shall
222 be used to identify the potential for environmental emergency incidents and provide guidance
223 for implementing, reviewing, and testing the associated response plans.

224
225 l. Monitoring and Measurement

226 The Environmental Officer shall identify key parameters of NIST operations that could have
227 a significant impact on the environment. These characteristics shall be documented,
228 monitored and measured using NIST EMS Procedure 12.0, *Tracking Environmental*
229 *Performance* in Appendix B.

230
231 Equipment used for monitoring and measurement shall be properly maintained and
232 calibrated. These calibrations shall be carried out in accordance with NIST EMS Procedure
233 13.0, *Calibration of Monitoring and Measurement Equipment* in Appendix B.

234
235
236

- 237 m. Evaluation of Compliance
238 The NIST Environmental Officer shall conduct compliance evaluations of each
239 Environmental Suborder on at least an annual basis based on standard evaluation checklists
240 that shall be maintained for each Environmental Suborder.
241
242 Results of compliance evaluations shall be documented and records maintained as EMS
243 Records per EMS Procedure 15.0, *Records Management* in Appendix B.
244
245 Significant findings from compliance evaluations shall be addressed using NIST EMS
246 Procedure 14.0, *Corrective and Preventive Action for Non-Conformance* in Appendix B.
247
- 248 n. Corrective and Preventive Action for Non-Conformance
249 NIST shall use a systematic procedure for identifying and responding to EMS non-
250 conformances. This system assigns responsibilities and provides for the investigation, and
251 mitigation of impacts of non-conformances and the completion of corrective and preventive
252 actions.
253
254 NIST EMS Procedure 14.0, *Corrective and Preventive Action for Non-Conformance* in
255 Appendix B shall be used to identify and respond to non-conformances in the EMS.
256
- 257 o. Control of Records
258 NIST shall maintain EMS records as necessary to demonstrate conformity to the
259 requirements of the EMS and the results achieved.
260
261 NIST EMS Procedure 15.0, *Records Management* in Appendix B shall be used to ensure
262 proper identification, storage, protection, retrieval, retention, and disposal of records.
263
- 264 p. Audits
265 The NIST EMG shall conduct EMS audits at planned intervals to verify that the EMS
266 conforms to this suborder and is properly implemented and maintained.
267
268 NIST EMS Procedure 16.0, *EMS Audits* in Appendix B shall be used to conduct and
269 document EMS audits.
270
- 271 q. Management Review
272 Top management shall review the NIST EMS on at least an annual basis to ensure its
273 continued suitability, adequacy, and effectiveness.
274
275 NIST EMS Procedure 17.0, *Management Review* in Appendix B shall be used to conduct the
276 EMS Management Review.

277 **7. DEFINITIONS**

278 Definitions common to all NIST Environmental Suborders can be found in the Definitions
279 Section of NIST O 7301.00, Environmental Management. The definitions specific to this
280 suborder are as follows:

- 281
- 282 a. Calibrate – To check, adjust, or systematically standardize the graduations of a quantitative
283 measuring instrument.
- 284
- 285 b. Competence Training – Training that is provided to ensure that employees have the
286 knowledge required to perform their jobs effectively, safely and in a way that minimizes
287 environmental impacts.
- 288
- 289 c. Continual Improvement – Recurring process of enhancing an environmental management
290 system to achieve improvements in overall environmental performance consistent with the
291 organization’s environmental policy.
- 292
- 293 d. Corrective Action – Action taken to eliminate the cause of a detected non-conformity
294
- 295 e. Document Control – Process for approving documents for adequacy prior to issue;
296 reviewing, updating, and re-approving documents as necessary; ensuring the revision status
297 of documents are identified; ensuring availability of relevant versions of documents at the
298 point of use; ensuring documents remain legible and identifiable; ensuring outdated
299 document versions are removed from use and circulation; ensuring that only the latest,
300 authorized document versions are in circulation; and ensuring that documents of external
301 origin that are necessary for the EMS are properly identified and their distribution controlled.
302
- 303 f. Environment – surroundings in which an organization operates, including air, water, land
304 natural resources, fauna, flora, humans, and their interrelation.
- 305
- 306 g. Environmental Aspect – Element of an organization’s activities, products or services that can
307 interact with the environment.
- 308
- 309 h. Environmental Awareness Training – General training that is provided to all NIST
310 employees and that is designed to provide a basic understanding of the NIST EMS and what
311 it means to them.
- 312
- 313 i. Environmental Impact – any change to the environment, whether adverse or beneficial,
314 wholly or partially resulting from an organization’s environmental aspects.
315

- 316 j. Environmental Manager – The Chief Safety Officer, who has operational jurisdiction over
317 the EMS.
318
- 319 k. Environmental Management Plan (EMP) – A specific plan that identifies the actions,
320 responsibilities, resources, and schedule for achieving the organization's environmental
321 objectives and targets. EMPs are the backbone of the EMS, and many of the requirements in
322 the EMS are logically incorporated in EMPs.
323
- 324 l. NIST Environmental Management Committee (NEMC) – Committee chaired by the
325 Environmental Manager and facilitated by the Environmental Officer that oversees the EMS.
326 Committee members include representatives from OUs that have significant environmental
327 aspects being addressed through the EMS (e.g. the Office of Facilities and Property
328 Management, Office of Safety, Health and Environment, and Office of Acquisitions
329 Management).
330
- 331 m. Environmental Objective – Overall environmental goal arising from the environmental policy
332 that an organization sets to achieve and which is quantified where practicable.
333
- 334 n. Environmental Officer – An individual designated by the Environmental Manager to
335 implement and maintain the EMS.
336
- 337 o. Environmental Performance – Measurable results related to the control of NIST
338 environmental aspects, and objectives and targets established in the EMS.
339
- 340 p. Environmental Policy – overall intentions of an organization related to its environmental
341 performance as formally expressed by top management.
342
- 343 q. Environmental Target – Detailed environmental performance requirement, quantified where
344 practicable, applicable to the organization or parts thereof, that arises from the environmental
345 objectives, and needs to be set and met to meet those objectives.
346
- 347 r. External Interested Party – Individual or group, external to NIST, concerned with or affected
348 by, the environmental performance of NIST.
349
- 350 s. Incident – An accident or unexpected event that negatively impacts the environment or has
351 the potential for negatively impacting the environment.
352
- 353 t. Internal EMS Communication – Communication that is intended for managers and
354 employees to further the EMS goals at NIST, or to provide feedback on or request
355 information about the EMS. Internal EMS communication does not include communications

356 to the Department of Commerce (DOC), other DOC agencies (e.g., NOAA), or parties
357 external to NIST.

358

359 u. Legal Requirements – Environmental regulations and ordinances promulgated by Federal,
360 State, and local authorities. Other requirements include those issued by the DOC and NIST
361 Line Managers/Supervisors, those to which NIST voluntarily subscribes to, and those from
362 other authorities that NIST has agreed to comply with.

363

364 v. Non-Conformance – Any deviation from an established requirement in an EMS directive,
365 e.g., NIST O 7301.00, Environmental Management or an EMS suborder. Findings of non-
366 conformance may be identified through internal or external EMS audits, internal
367 environmental program audits, regulatory inspections, or other EMS system monitoring
368 activities.

369

370 w. Operational Controls – Broadly defined to include technological (e.g., containment systems,
371 alarms, automatic shut-off valves) and administrative (e.g., procedures, training
372 requirements, signage) controls. Operational Controls are required to assure that activities,
373 associated with significant environmental aspects are conducted in a manner that controls or
374 reduces adverse environmental impacts.

375

376 x. Preventive Action – Action to eliminate the cause of a potential nonconformity

377

378 y. Records – Books, papers, maps, photographs, research notebooks/technical journals, data,
379 electronic records, or other documentary materials, regardless of physical form or
380 characteristics, preserved or appropriate for preservation as evidence of the organization,
381 functions, policies, decisions, procedures, operations, or other EMS activities because of the
382 informational value of data in them.

383

384 z. Significant Environmental Aspect – An environmental aspect that can have a significant
385 impact on the environment, the organization, or to the mission of the organization

386

387 aa. Suppliers and Contractors – Non-NIST entities that provide supplies, materials, services, or
388 other tangible goods to NIST.

389

390

391 **8. ACRONYMS**

392 Acronyms common to all NIST Environmental Suborders can be found in the Acronyms Section
393 of NIST O 7301.00, Environmental Management. The acronyms specific to this suborder are as
394 follows:

395

- 396 a. DOC – Department of Commerce
- 397
- 398 b. EMG – Environmental Management Group
- 399
- 400 c. EMP – Environmental Management Plan
- 401
- 402 d. EMS – Environmental Management System
- 403
- 404 e. ISO – International Organization for Standardization
- 405
- 406

407 **9. RESPONSIBILITIES**

408 EMS responsibilities are defined in NIST O 7301.00, Environmental Management.

409

410

411 **10. AUTHORITIES**

412 There are no authorities specific to this suborder alone. For authorities applicable to all NIST
413 Environmental Suborders, see the Authorities Section of NIST O 7301.00, Environmental
414 Management.

415

416

417 **11. DIRECTIVE OWNER**

418 Chief Safety Officer

419

420 **12. APPENDICES**

421 A. Revision History

422

423 B. NIST EMS Procedures

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Appendix A. Revision History

Revision No.	Approval Date	Responsible Person	Brief Description of Changes; Rationale
0	10/07/16	10/07/16	<ul style="list-style-type: none">• None – Initial document
1	1/12/21	April Camenisch	<ul style="list-style-type: none">• Updated NIST suborder links.

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429
430

431 **Appendix B: EMS Procedures**

432

433 **1.0 Significant Environmental Aspects**

434 **2.0 Legal and Other Requirements**

435 **3.0 Objectives and Targets**

436 **4.0 Environmental Management Plans**

437 **5.0 Training and Awareness**

438 **6.0 Internal EMS Communications**

439 **7.0 Responding to External Interested Parties**

440 **8.0 EMS Document Control**

441 **9.0 Operational Controls**

442 **10.0 Communicating with Contractors and Suppliers**

443 **11.0 Emergency Preparedness and Response**

444 **12.0 Tracking Environmental Performance**

445 **13.0 Calibration of Monitoring and Measurement Equipment**

446 **14.0 Corrective and Preventive Action for Non-Conformance**

447 **15.0 Records Management**

448 **16.0 EMS Audits**

449 **17.0 Management Review**

450

451

452 **EMS Procedure 1.0**
453 **Significant Environmental Aspects**

454
455
456 **PURPOSE**

457 The purpose of this procedure is to identify and assess the significant environmental aspects of
458 NIST activities.

459
460
461 **APPLICABILITY**

462 This procedure is component of the NIST EMS, and its applicability is consistent with the EMS.
463

464
465 **REFERENCES**

466 References are included in Section 4 of the EMS Suborder.
467

468
469 **RESPONSIBILITIES**

470 The NIST Environmental Officer is responsible for maintaining this procedure.
471

472
473 **PROCEDURES**

474 **1. Identification of NIST's Activities**

475 The breadth of NIST's activities is considerable. The NIST Environmental Officer shall
476 periodically review NIST operations to identify a list of all the activities associated with
477 NIST. This process shall include interviews with individuals who are knowledgeable in
478 different areas of the organization to ensure that all activities are accounted for.

479 Examples of activities include:

- 480
- 481 ▪ Research
 - 482 ▪ Standards development and distribution
 - 483 ▪ Facilities maintenance
 - 484 ▪ Acquisitions and contracting
 - 485 ▪ Administrative actions
- 486

487 **2. Determination of Environmental Aspects**

488 Once a thorough list of activities has been compiled, the environmental aspects associated
489 with each shall be identified and recorded by the Environmental Officer.

490 Examples of environmental aspects include:
491

- 492 ▪ Storage/use of hazardous materials;
- 493 ▪ Solid/hazardous waste generation; and
- 494 ▪ Consumption of fossil fuels.

495

496 3. **Evaluating the potential environmental impact of each environmental aspect**

497 The potential environmental impact of each environmental aspect shall be identified. The
498 Environmental Officer shall determine the potential environmental impact in consultation
499 with the activity experts.

500

501 Examples of potential environmental impacts include:

502

- 503 ▪ Solid/hazardous waste disposal
- 504 ▪ Degradation of air quality;
- 505 ▪ Degradation of surface water or ground water.

506

507 4. **Requirements associated with NIST activities or environmental aspects**

508 The NIST EMS Procedure 2.0 *Legal and Other Requirements* in Appendix B contains the
509 process for identifying requirements. Legal and other requirements shall be considered in
510 evaluating environmental aspects. Examples of legal or other requirements:

511

- 512 ▪ Federal, State, and local regulations;
- 513 ▪ Executive Orders; and
- 514 ▪ Department of Commerce (DoC) and NIST Standards and Policies.

515

516 5. **Ranking Environmental Aspects**

517 Environmental Aspects are ranked by the following procedure:

518

- 519 ▪ Assess the severity of the consequences of an event (“Severity”)

520 The severity categories below provide qualitative measures of the consequences of the
521 worst credible event associated with an identified aspect. The severity categories and
522 numeric scores that shall be used are:

523

524 CATASTROPHIC: Death or permanent disability; system or facility loss; major property
525 damage, lasting environmental or public-health impact, high regulatory impact (Notice of
526 Violation (NOV) and fine) = 4.

527

528 SEVERE: Serious injury; temporary total disability; subsystem loss or significant
529 facility/property damage, temporary environmental or public-health impact, high
530 regulatory impact = 3.

531 MODERATE: Medical treatment beyond first aid; lost work days; more than slight
532 facility/property damage; external reporting requirements; more than routine clean-up,
533 moderate regulatory impact (no NOV or fine) = 2.

534

535 MINOR: First aid or minor medical treatment; negligible or slight facility/property
536 damage; no external reporting requirements, routine cleanup = 1.

537

538 ■ Assess the likelihood of an event (“Likelihood”)

539 The likelihood categories below provide estimates of the probability that an event
540 involving an identified hazard shall occur in carrying out an activity. The likelihood
541 categories and numeric scores that shall be used are:

542

543 FREQUENT: Likely to occur frequently or repeatedly = 4.

544

545 PROBABLE: Likely to occur multiple but infrequent times = 3.

546

547 OCCASIONAL: Likely to occur at some time = 2.

548

549 REMOTE: Possible, but not likely to occur = 1 .

550

551 IMPROBABLE: Very unlikely: can reasonably be assumed not to occur = 0.

552

553 To the extent practical, likelihood should be assigned based on research, analysis, experience,
554 or evaluation of historical safety data from work with similar hazards.

555 The Aspect Scoring shall equal the Severity Score + Likelihood Score.

556

557 6. Designation of Significant Environmental Aspects

558 Any environmental aspect with the potential for a Catastrophic or Severe event, with high
559 regulatory impact shall be considered significant by default. For other environmental
560 aspects, any Aspect Score of 6 or greater shall be considered a significant aspect.

561

562

563 RECORDS

564 The following records shall be created by this Procedure and shall be made available on the
565 NIST EMS web site (as appropriate):

566

567 ■ A list of NIST activities and their associated environmental aspects (All aspects are to be
568 grouped together with each of the activities that they are associated with);

569

570 ▪ Documentation of the method used to ascertain which aspects are significant environmental
571 aspects;

572

573 All NIST EMS records shall be managed in accordance with the requirements of the NIST EMS
574 Procedure 15.0, *Records Management* in Appendix B.

575

576

577

578

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580

581 **EMS Procedure 2.0**
582 **Legal and Other Requirements**

583
584
585 **PURPOSE**

586 The purpose of this procedure is to ensure that NIST maintains knowledge of, and has access to,
587 the legal and other requirements that are applicable to the environmental aspects of its activities.
588

589
590 **APPLICABILITY**

591 This procedure is a component of the NIST EMS and applicability is consistent with the EMS.
592

593
594 **REFERENCES**

595 References are included in Section 4 of the EMS Suborder.
596
597

598 **RESPONSIBILITIES**

599 The NIST Environmental Officer is responsible for maintaining this procedure.
600
601

602 **PROCEDURES**

603
604 **1. General**

605 NIST shall employ this procedure to ensure that environmental legal or other requirements
606 applicable to NIST are identified on a timely basis and incorporated into the EMS.
607

608 **2. Baseline Requirements**

609 A baseline of legal and other requirements was established at NIST by subjecting the initial
610 listing of environmental aspects to regulatory review by NIST Environmental Professionals.
611 These requirements are documented in the EMS Legal Requirements Database. The current
612 list of requirements shall be posted on the NIST EMS web site in accordance with the EMS
613 Document Control Procedure (Appendix B-8). Hard copy records of the list of requirements
614 shall be kept in a central file located in the Environmental Officer's office in Building 223
615 (room A317).
616

617 The NIST Environmental Officer shall establish and maintain a Regulatory Calendar to
618 document the schedule for major environmental regulatory deadlines, such as due dates for
619 regulatory report submittals, data calls, certifications, and internal audits. The Environmental
620 Officer shall retain and update as necessary the Regulatory Calendar.

621 **3. Maintenance**

622 The Environmental Officer ensures that the EMS Legal Requirements Database remains
623 current through the regular review by environmental professionals at the NIST Gaithersburg
624 and Boulder Sites. Other methods used to identify regulatory requirements that may be
625 relevant or applicable include:

- 626
- 627 ▪ Subscribing to commercial environmental compliance services, e.g.:
 - 628
 - 629 ○ Business and Legal Review, enviro.blr.com;
 - 630 ○ RegScan Notifications notices@regscan.com;
 - 631 ○ Environmental Daily Advisor EnvironmentalDailyAdvisor@nl.blr-news.com; and
 - 632 ○ Environmental Resource Center, Reg. of the Day,
633 environmentalresourcecenter@care.ercweb.com;
 - 634
- 635 ▪ FedCenter Daily Newsletter- emailed daily to the Environmental Management Group;
- 636
- 637 ▪ Monitoring proposed Federal, State, and local rulemaking that may affect NIST
638 operations;
- 639
- 640 ▪ Periodic contact with state and local regulatory officials;
- 641
- 642 ▪ Consulting with environmental professionals that provide services to the NIST;
- 643
- 644 ▪ Periodic attendance of environmental training courses that include regulatory updates and
645 compliance issues; and
- 646
- 647 ▪ Identifying local requirements through locally mandated permits.
- 648

649 When appropriate for a specific requirement, a regulatory applicability review shall be
650 documented. (This is particularly important when a requirement has been determined to be
651 not applicable.)

652

653 Applicable legal requirements are incorporated into the EMS through Environmental
654 Programs designed to manage the requirements through a combination of operational
655 controls, training, monitoring, recordkeeping, and objectives and targets at all relevant levels
656 and functions of the organization.

657

658 **4. Novel Aspects**

659 New or revised activities, products, or services shall be evaluated by the Environmental
660 Officer to ascertain the existence of any regulatory requirements that may apply to them.

661 Those that have regulatory significance are then incorporated into the EMS as significant
662 environmental aspects.

663

664

665 **RECORDS**

666 The following records shall be generated and maintained as part of this EMS Procedure:

667

668 ▪ The EMS Legal Requirements Database;

669

670 ▪ Regulatory Applicability Reviews; and

671

672 ▪ The Regulatory Calendar.

673

674 All NIST EMS records shall be managed in accordance with the requirements of the NIST EMS
675 Procedure 15.0, *Records Management* in Appendix B.

676 **EMS Procedure 3.0**
677 **Objectives and Targets**

678
679
680 **PURPOSE**

681 The purpose of this procedure is to provide guidance for setting objectives and targets for the
682 NIST EMS.

683
684
685 **APPLICABILITY**

686 This procedure is a component of the NIST EMS and applicability is consistent with the EMS.
687

688
689 **REFERENCES**

690 References are included in the Section 4 of EMS Suborder.
691

692
693 **RESPONSIBILITIES**

694 The NIST Environmental Officer is responsible for maintaining this procedure.
695

696
697 **PROCEDURES**

698 Objectives and targets shall be established as needs are identified by NIST Environmental
699 Officer or the NIST Environmental Management Committee (NEMC). The objectives and
700 targets extend to all levels and functions of NIST where they are applicable.
701

702 **1. General**

- 703 ▪ NIST shall establish and maintain written objectives and targets consistent with NIST P
704 7300.00, Environmental Management and designed to ensure the continuous
705 improvement of NIST's environmental performance.
706
- 707 ▪ Objectives and targets shall be documented in NIST's Environmental Management Plans
708 (EMPs) (Appendix B, EMS Procedure 4.0)
709
- 710 ▪ Progress toward existing Environmental Objectives and Targets shall be reviewed at
711 NEMC Meetings and Management Review.
712

713 **2. Establishing Objectives**

714 The Environmental Officer shall identify measurable Environmental Objectives consistent
715 with NIST P 7300.00, Environmental Management, in consultation with the NEMC.

716 Objectives shall be reviewed and approved in NEMC meetings and EMS Management
717 Reviews. Environmental Objectives take into account legal requirements, significant
718 environmental aspects, and Executive Order (EO) directives (e.g. EO 13693). In addition,
719 when setting environmental objectives, NIST shall consider:

720

721 ▪ Current compliance with applicable regulations and other requirements;

722

723 ▪ The prevention of pollution;

724

725 ▪ The achievement of continual improvement;

726

727 ▪ Technological options;

728

729 ▪ Stakeholder concerns; and

730

731 ▪ Financial, operational and organizational requirements.

732

733 Whenever possible, objectives and targets shall be measurable and set in quantitative terms
734 with specific time frames for accomplishment.

735

736 NIST shall at all times maintain a standard objective to comply with all applicable
737 environmental regulatory requirements.

738

739 3. **Establishing Targets**

740 The Environmental Officer, in consultation with the NEMC, shall identify Environmental
741 Targets focused on each Environmental Objective. Where appropriate, targets shall be set for
742 each objective that further define the incremental steps necessary to achieve objectives.
743 Targets shall also include dates by which they will be achieved.

744

745 NIST Environmental Targets shall be identified in the EMP that is developed for the relevant
746 Environmental Objective.

747

748 4. **Resources Required to Meet Objectives and Targets**

749 In setting objectives and targets, the additional resources needed to achieve the objectives are
750 estimated and this information presented to the applicable OU Director or the NIST
751 Director's Office.

752

753 5. **Measuring Progress**

754 Efforts shall be made towards achieving the objectives and targets in accordance with the
755 timeline specified in the EMP.

756 **RECORDS**

757 NIST shall create and maintain records that pertain to the setting of objectives and targets for the
758 EMS. These records shall include:

759

760 ▪ A list of objectives and targets and the associated EMPs.

761

762 ▪ Minutes of all meetings where EMS Objectives and Targets are identified, reviewed, and
763 approved or disapproved.

764

765 All NIST EMS records shall be managed in accordance with the requirements of the NIST EMS
766 Procedure 15.0, *Records Management* in Appendix B.

767 **EMS Procedure 4.0**
768 **Environmental Management Plans**

771 **PURPOSE**

772 The purpose of this procedure is to provide guidance for preparing Environmental Management
773 Plans (EMPs). An EMP provides the planned actions, responsibilities, schedule, and references
774 that are necessary for accomplishing an objective that has been set for the NIST EMS.

777 **APPLICABILITY**

778 This procedure is a component of the NIST EMS and applicability is consistent with the EMS.

781 **REFERENCES**

782 References are included in Section 4 of the EMS Suborder.

785 **RESPONSIBILITIES**

786 The NIST Environmental Officer is responsible for maintaining this procedure.

789 **PROCEDURES**

790 **1. Defining the Scope of the EMP**

791 In general, a single EMP is developed to meet each NIST objective. Each objective
792 corresponds to a significant environmental aspect NIST. (Note: An EMP is not used to
793 manage the standing objective of continuous compliance with applicable regulatory
794 requirements. This objective is managed using Environmental Suborders (e.g. Air Emissions
795 Management) and Procedures.

797 **2. Assigning Roles and Responsibilities**

798 For each NIST EMP a manager is assigned by the Environmental Officer. The EMP
799 Manager is responsible for implementing and tracking the EMP to ensure that the targets are
800 met in the time frame specified. Other responsibilities are assigned as needed in the EMP for
801 identified actions/tasks.

803 **3. EMP Implementation Planning**

804 NIST EMPs shall describe:
805

- 806 ▪ The background and significance of the environmental aspect, and the impacts associated
807 with the aspect;
- 808
- 809 ▪ The objectives and targets for that aspect;
- 810
- 811 ▪ The roles and responsibilities of individuals responsible for tasks;
- 812
- 813 ▪ The actions that are needed to achieve the objectives and targets and milestone dates;
- 814
- 815 ▪ Required training;
- 816
- 817 ▪ The means for monitoring progress towards achieving the objectives and targets;
- 818
- 819 ▪ Resources required to implement the EMP;
- 820
- 821 ▪ The schedule for implementing the EMP actions and for reviewing progress;
- 822
- 823 ▪ The revision history of the EMP; and
- 824
- 825 ▪ Background documents associated with the EMP.
- 826

827 4. **Approval Process**

828 Each EMP shall be reviewed and approved by the NIST Environmental Management
829 Committee prior to implementation. Additionally, EMPs shall part of the annual EMS
830 Management Review.

831

832

833 **RECORDS**

834 Records shall be maintained of all current and completed EMPs.

835

836 All NIST EMS records shall be managed in accordance with the requirements of the NIST EMS
837 Procedure 15.0, *Records Management* in Appendix B.

838
839

840 **EMS Procedure 5.0**
841 **Training and Awareness**

842
843
844 **PURPOSE**

845 The purpose of this procedure is to ensure that NIST Employees and Associates are appropriately
846 trained and aware of the potential environmental impacts of their work, the required controls and
847 good work practices. Training is focused for individuals who, due to the nature of their work,
848 have the potential to cause significant environmental impacts.

849
850
851 **APPLICABILITY**

852 This procedure is a component of the NIST EMS and applicability is consistent with the EMS.

853
854
855 **REFERENCES**

856 References are included in Section 4 of the EMS Suborder.

857
858
859 **RESPONSIBILITIES**

860 The NIST Environmental Officer is responsible for maintaining this procedure.

861
862
863 **PROCEDURES**

864 **1. EMS General Awareness Training**

865 All NIST employees shall receive EMS general awareness training regarding:

- 866
- 867 ▪ NIST P 7300.00, Environmental Management and the NIST EMS, and
 - 868
 - 869 ▪ Their personal roles and responsibilities in regard to NIST P 7300.00, Environmental
 - 870 Management, environmental programs, and the requirements of the NIST EMS.

871

872 New employees shall receive environmental awareness training as part of the General Safety
873 Training required for all new employees.

874
875 **2. Competence Training**

876 Employees who perform work that could have significant environmental impacts shall
877 receive job-specific training to ensure they are competent in their work assignments with
878 respect to relevant environmental aspect(s). Competence training may include any training
879 that is required to maintain regulatory compliance and may also include training

880 requirements established as part of an Environmental Program. Competence training may
881 also include any training mandated by environmental permits held by NIST. Requirements
882 to attend competence training shall be identified and documented in the relevant
883 Environmental Suborder document (e.g. NIST Spill Prevention and Control). Competence
884 training requirements may be satisfied by either taking approved externally supplied courses
885 or, when allowed by regulations, courses developed by the Environmental Program.

886

887 General requirements and responsibilities for training at NIST are specified in NIST S
888 7101.23, *Safety Education and Training*.

889

890 3. **Development of Environmental Training Materials**

891 The Environmental Officer shall develop training materials (as necessary) for each
892 Environmental Program.

893

894 Competence training shall be designed to ensure that employees understand:

895

896 ▪ The environmental impacts, actual or potential, of their work and the environmental
897 benefits of improved personal performance;

898

899 ▪ Their roles and responsibilities in complying with the NIST environmental programs,
900 including emergency preparedness and response requirements;

901

902 ▪ The potential consequences of departure from specified requirements and procedures; and

903

904 ▪ Their daily roles and responsibilities with respect to any significant environmental
905 aspects related to their tasks.

906

907

908 **RECORDS**

909 Training records are maintained through the OSHE Safety Training and Education. A
910 Certification of Completion shall be included for each training course completed. The following
911 records shall be available at NIST:

912

913 ▪ EMS employee awareness training records (date and attendance);

914

915 ▪ Contents of the awareness training;

916

917 ▪ Records of competence training (date and attendance) including test results if applicable;
918 and

919

920 ▪ Contents of the competence training.

921

922 All NIST EMS records shall be managed in accordance with the requirements of the NIST EMS

923 Procedure 15.0, *Records Management* in Appendix B.

924

925 **EMS Procedure 6.0**
926 **Internal EMS Communications**

927
928
929 **PURPOSE**

930 The purpose of this procedure is to identify lines of communication between levels and functions
931 within the NIST organizational structure and to ensure internal EMS communications are
932 conducted effectively.

933
934
935 **APPLICABILITY**

936 This procedure is a component of the NIST EMS and applicability is consistent with the EMS.

937
938
939 **REFERENCES**

940 References are included in Section 4 of the EMS Suborder.

941
942
943 **RESPONSIBILITIES**

944 The NIST Environmental Officer is responsible for maintaining this procedure.

945
946
947 **PROCEDURES**

948 1. The Environmental Officer and his/her designee shall utilize existing lines of
949 communications whenever possible to facilitate the efficient flow of internal EMS
950 communications. Examples of existing NIST lines of communication include:

- 951
- 952 ▪ On-the-spot consultation with employees and/or associates;
 - 953
 - 954 ▪ OU Safety meetings;
 - 955
 - 956 ▪ OSHE developed training;
 - 957
 - 958 ▪ Division/Group Staff meetings;
 - 959
 - 960 ▪ Email notices;
 - 961
 - 962 ▪ NIST Administrative Calendar postings;
 - 963
 - 964 ▪ NIST Homepage postings;

- 965 ▪ Internal memoranda;
- 966
- 967 ▪ NIST publications (*e.g.*, NIST Connections);
- 968
- 969 ▪ Environmental Management Committee Meetings; and
- 970
- 971 ▪ EMS Management Review
- 972
- 973 2. The Environmental Officer or his/her designee shall:
- 974
- 975 ▪ Establish the lines of communications necessary to gather pertinent data required for the
- 976 EMS (*e.g.*, energy use data from OFPM);
- 977
- 978 ▪ Communicate environmental requirements to NIST Line Managers/Supervisors and
- 979 appropriate staff;
- 980
- 981 ▪ Ensure the communication of NIST P 7300.00, Environmental Management, NIST O
- 982 7301.00, Environmental Management and Environmental Suborders to NIST employees;
- 983
- 984 ▪ Arrange for EMS awareness training of all employees; and
- 985
- 986 ▪ Solicit employee feedback on the NIST Environmental Programs and the EMS
- 987
- 988

989 **RECORDS**

990 The following records relating to EMS internal communications shall be maintained at NIST:

- 991
- 992 ▪ Records of feedback from internal sources on Environmental Programs and the EMS;
- 993
- 994 ▪ Environmental Management Committee Meeting and EMS Management Review
- 995 Meeting minutes; and
- 996
- 997 ▪ Copies of postings, memorandums, Emails, management bulletins, or other materials that
- 998 cover EMS topics.
- 999

1000 All NIST EMS records shall be managed in accordance with the requirements of the NIST EMS
1001 Procedure 15.0, *Records Management* in Appendix B.

1002 **EMS Procedure 7.0**
1003 **Responding to External Interested Parties**
1004

1005
1006 **PURPOSE**

1007 The purpose of this procedure is to establish a process for receiving, documenting, and
1008 responding to communications from external interested parties regarding environmental issues.
1009

1010
1011 **APPLICABILITY**

1012 This procedure is a component of the NIST EMS and applicability is consistent with the EMS.
1013

1014
1015 **REFERENCES**

1016 References are included in Section 4 of the EMS Suborder.
1017

1018
1019 **RESPONSIBILITIES**

1020 The NIST Environmental Officer is responsible for maintaining this procedure.
1021

1022
1023 **PROCEDURES**

1024 1. All written or verbal input or information requests from external parties concerning
1025 environmental performance at NIST or environmental issues related to NIST shall be handled
1026 in accordance with:

- 1027
- 1028 ▪ Department of Commerce Department Administrative Order (DAO) 219-1 Public
1029 Communications;
- 1030
- 1031 ▪ NIST O 1074.00 Public Communications;
- 1032
- 1033 ▪ NIST AM Section 4.05 Correspondence Procedure; and
- 1034
- 1035 ▪ Freedom of Information Act (FOIA) requirements found on the Department of
1036 Commerce FOIA Web site (<http://www.osec.doc.gov/omo/FOIA/FOIAWEBSITE.htm>).
- 1037

1038 2. All information requests from external parties shall be coordinated with the NIST Public
1039 Affairs Office. Any environmental communications with the public, press or that pertain to
1040 an emergency situation shall be routed through the NIST Public Affairs Office.

- 1041 3. Requests for environmental performance information from external parties shall be directed
1042 to the Environmental Manager and Environmental Officer. They shall confer with
1043 appropriate NIST staff and management representatives to evaluate the substance of the
1044 external communication, and determine the appropriate response to be provided to the Public
1045 Affairs Office.
1046
- 1047 4. Routine communications with environmental regulatory authorities shall be conducted by the
1048 Environmental Officer.
1049
- 1050 5. The Environmental Officer shall assess whether communications pertain to an existing
1051 significant environmental aspect, or one that needs to be added into the EMS.
1052
- 1053 6. The Environmental Officer shall consider all external communications received when
1054 establishing and reviewing environmental objectives and targets for the EMS, and shall
1055 initiate any necessary changes to the EMS.
1056
1057

1058 **RECORDS**

1059 The Environmental Officer shall document external communication regarding environmental
1060 issues in the External EMS Communication Log. The Log shall be maintained in accordance
1061 with the NIST AM Section 2.06 Records Management. Information recorded shall include:
1062

- 1063 ▪ Name a Title of requesting Individual;
1064
- 1065 ▪ Name of Organization to which the individual belongs;
1066
- 1067 ▪ Date of request;
1068
- 1069 ▪ Information requested;
1070
- 1071 ▪ Date of response; and
1072
- 1073 ▪ Information provided to the requester.
1074

1075 Correspondence with regulatory authorities shall be documented in accordance with NIST
1076 Administrative Manual Section 2.06, Records Management, and NIST EMS Procedure 15.0,
1077 *Records Management* in Appendix B. Records shall also be maintained with the relevant
1078 regulatory program files (e.g. Air Permit Records, Hazardous Waste Program) maintained by the
1079 Environmental Officer.

1080 **EMS Procedure 8.0**
1081 **EMS Document Control**

1082
1083
1084 **PURPOSE**

1085 The purpose of this procedure is to ensure that only the most current and authorized versions of
1086 EMS documents are in use by NIST personnel, and that obsolete versions of NIST EMS
1087 documents are promptly removed from use and archived.
1088

1089
1090 **APPLICABILITY**

1091 This procedure is a component of the NIST EMS and applicability is consistent with the EMS.
1092

1093
1094 **REFERENCES**

1095 References are included in Section 4 of the EMS Suborder.
1096

1097
1098 **RESPONSIBILITIES**

1099 The NIST Environmental Officer is responsible for maintaining this procedure.
1100

1101
1102 **PROCEDURES**

1103 **1. New Documents**

1104 All internally generated NIST EMS documents shall be:
1105

- 1106 **▪ Legible:** NIST EMS documents should be prepared using standard word processing
1107 software and saved in a format that can easily be viewed by others who will be
1108 using/viewing the documents; and
- 1109 **▪ Dated and Identified:** All NIST EMS documents shall include: A Revision Date,
1110 Version Number, and Author.
1111

1112
1113 The Environmental Officer shall coordinate review of new EMS documents. All parties who
1114 have assigned responsibilities within the document shall be afforded the opportunity to
1115 comment on the document. The Environmental Officer shall assign a Document Owner.
1116

1117 After all comments are addressed through the review process the document shall be
1118 published. A revision number and date shall be assigned at that time.
1119

1120 **2. Distribution**

1121 To effectively maintain EMS document control at NIST, the distribution of EMS
1122 documentation shall be facilitated through the use of the NIST EMS Intranet web site and the
1123 NIST Safety Programs web site.

1124
1125 To ensure that NIST EMS documents can be located by the personnel that need them, the
1126 NIST Environmental Officer or designee shall post and maintain the EMS documents on the
1127 NIST EMS web site. All documents to be posted on the NIST EMS web site require the
1128 approval of the Environmental Officer (or designee) prior to being posted.

1129
1130 NIST EMS documents posted on the EMS web site shall immediately supersede previous
1131 versions of the same documents, and are the only versions approved by NIST management
1132 for posting. To ensure that obsolete or outdated hard copy document versions are not being
1133 used, all hard copy documents should be compared to those versions posted on the EMS web
1134 site. All hard copies shall have a footer or watermark stating:

1135
1136 **" Uncontrolled Copy in Print "**

1137
1138 The Environmental Officer shall be responsible for archiving obsolete documents. Outdated
1139 or obsolete NIST EMS documents shall be stamped "OBSOLETE" or equivalent, and shall
1140 be retained per NIST EMS Procedure 15.0, *Records Management* in Appendix B.

1141
1142 **3. Revision**

1143 Documents may be submitted for revision at any time by the Document Owner, a NIST
1144 employee or the Environmental Officer.

1145
1146 The Environmental Officer shall coordinate a review of each revision. All parties impacted
1147 by the revision shall be afforded the opportunity to comment on the proposed changes to the
1148 document.

1149
1150 After all comments are addressed through the review process, the revised document shall be
1151 published per Section 2. The revision number and effective date shall be updated at that time
1152 and obsolete versions removed from circulation.

1153
1154 **4. Document Maintenance**

1155 NIST EMS Procedures shall be reviewed for applicability and currency at least once every
1156 three years, or when any substantial change (e.g., change in NIST's goals, significant
1157 environmental impacts, or regulatory requirements) has taken place. Other NIST EMS
1158 documents shall be reviewed/revised as specified in Table 8.1 (or more frequently if deemed

1159 necessary by the Environmental Officer). Document reviews shall be carried out by
1160 Document Owners.
1161 Any needed changes shall be accomplished using the revision process in Section 3 above.
1162

1163 **5. External Documentation**

1164 Documents of external origin (e.g. instrument manuals) determined by the NIST
1165 Environmental Officer to be necessary for effective implementation of the EMS shall be
1166 identified in the EMS External Documentation Database. Each document shall be assigned a
1167 primary owner or user.
1168

1169

1170 **RECORDS**

1171 The following records shall be created for this procedure:

1172

1173 ▪ Copies of outdated or obsolete NIST EMS documents that have been stored as records;
1174 and

1175

1176 ▪ The EMS External Document Database.
1177

1178

1179 All NIST EMS records shall be managed in accordance with the requirements of the NIST EMS
1180 Procedure 15.0, *Records Management* in Appendix B.

1180

1181
1182
1183

Table 8.1
EMS Documents Review Cycle and Location

Document	Type of Document	Review Period	Location
Environmental Policy	Policy	1 year	Web site
NIST EMS Intranet Site	Informative	3 years	Web site
EMS Committee Members	Administrative	1 year	Web site
Aspects List	Database	1 years	Web site
Environmental Management Plans - Objectives and Targets	Plans	1 year	Web site
EMS Procedures 1 - 17	Procedures	3 years	Web site
Audit Program/Checklist	Plan/Checklist	3 years	Web site

1184
1185

1186 **EMS Procedure 9.0**
1187 **Operational Controls**
1188
1189

1190 **PURPOSE**

1191 This procedure provides a process for identifying operations that are associated with NIST's
1192 significant environmental aspects, and ensuring that these operations are carried out using
1193 specified procedures (operational controls).
1194
1195

1196 **APPLICABILITY**

1197 This procedure is a component of the NIST EMS and applicability is consistent with the EMS.
1198
1199

1200 **REFERENCES**

1201 References are included in Section 4 of the EMS Suborder.
1202
1203

1204 **RESPONSIBILITIES**

1205 The NIST Environmental Officer is responsible for maintaining this procedure.
1206
1207

1208 **PROCEDURES**

1209 The following steps shall be taken to identify, plan, and implement operational controls
1210 associated with NIST activities:
1211

1212 **1. Reviewing significant environmental aspects**

1213 The Environmental Officer or designee shall review each of NIST's significant
1214 environmental aspects in conjunction with the NIST activities associated with that aspect.

1215 The review shall determine whether operational controls (either technological or
1216 administrative) are needed. If operational controls are needed, they shall be identified in a
1217 relevant environmental program.
1218

1219 Examples of types of operational controls include:
1220

- 1221 ▪ Technological controls (e.g., alarms, automatic shut-off valves, containment structures);
1222 and
- 1223 ▪ Administrative controls (e.g., signage, written procedures, work instructions, training).
1224

1225 Documented procedures shall be required to control, monitor, or improve situations where
1226 their absence could lead to deviations from NIST P 7300.00, Environmental Management or
1227 EMS Objectives and Targets.

1228

1229 **2. Documenting operational controls**

1230 Operational controls shall be documented as Environmental Suborders or Procedures. Per
1231 the requirements of the NIST EMS Document Control Procedure (Appendix B-8), this
1232 documentation shall be kept current and accessible (i.e., hard copy or electronic files on the
1233 NIST Safety Program Web site). Where applicable, documentation of the operational
1234 controls shall specify the following:

1235

1236

- Operating criteria,

1237

1238

- Monitoring and recordkeeping requirements sufficient to demonstrate compliance;

1239

1240

- Maintenance plans;

1241

1242

- Training requirements;

1243

1244

- Actions to be taken if the operational control is interrupted or fails, and

1245

1246

- Relevant roles and responsibilities to ensure effective implementation

1247

1248 **3. Implementation**

1249 Operational Controls shall be implemented as appropriate by the responsible NIST entity.

1250

1251 **4. Operational controls for external sources**

1252 When necessary, operational controls shall also be applied to the identifiable significant
1253 environmental aspects of goods and services that are received from external sources and used
1254 by NIST. If necessary, NIST shall notify the external source of any operational requirements.

1255

1256

1257 **RECORDS**

1258 The following records shall be created for operational controls:

1259

1260

- Environmental Suborders and Procedures.

1261

1262 All NIST EMS records shall be managed in accordance with the requirements of the NIST EMS
1263 Procedure 15.0, *Records Management* in Appendix B.

1264 **EMS Procedure 10.0**

1265 **Communicating with Contractors and Suppliers**

1266
1267

1268 **PURPOSE**

1269 The purpose of this procedure is to ensure that appropriate environmental information is
1270 communicated to NIST contractors and suppliers.

1271
1272

1273 **APPLICABILITY**

1274 This procedure is a component of the NIST EMS and applicability is consistent with the EMS.

1275
1276

1277 **REFERENCES**

1278 References are included in Section 4 of the EMS Suborder.

1279
1280

1281 **RESPONSIBILITIES**

1282 The NIST Environmental Officer and NIST Office of Acquisitions and Agreements Management
1283 are responsible for maintaining this procedure.

1284
1285

1286 **PROCEDURES**

1287 1. Through standard contract clauses, and contractor briefings NIST shall communicate the
1288 following information to relevant suppliers and contractors:

1289
1290

- 1291 ■ It is NIST policy to conduct its operations in an environmentally sound manner and in
1292 full compliance with federal, state and local environmental regulations;

1293
1294

- 1295 ■ NIST has an EMS based on ISO 14001; and

1296
1297

- 1298 ■ NIST requires its suppliers and contractors to consider products and services that have
1299 the least environmental consequence of available options.

1300
1301

1302 2. As appropriate, contract clauses shall be modified to include required procedures for work
1303 that impacts specific environmental aspects.

1304
1305

1306 3. Records shall be maintained of all communications with suppliers and contractors related to
1307 environmental aspects.

1308

1304 **RECORDS**

1305 Records related to this procedure shall be maintained by the Office of Acquisitions and
1306 Agreements Management and include the following:

1307

1308 ▪ Contract files

1309

1310 ▪ Communications with suppliers and contractors

1311

1312 All NIST EMS records shall be managed in accordance with the requirements of the NIST EMS
1313 Procedure 15.0, *Records Management* in Appendix B.

1314

1315 **EMS Procedure 11.0**
1316 **Emergency Preparedness and Response**

1317
1318
1319 **PURPOSE**

1320 This procedure outlines requirements for preparing and responding to incidents which can have
1321 environmental impact.

1322
1323
1324 **APPLICABILITY**

1325 This procedure is a component of the NIST EMS and applicability is consistent with the EMS.
1326

1327
1328 **REFERENCES**

1329 References are included in Section 4 of the EMS Suborder.
1330

1331
1332 **RESPONSIBILITIES**

1333 The NIST Environmental Officer is responsible for maintaining this procedure.
1334

1335
1336 **PROCEDURES**

1337 1. The Environmental Officer shall develop an inventory of potential incidents and emergencies
1338 that could have environmental consequences by reviewing:

- 1339
- 1340 ▪ The NIST environmental aspects that could result in a serious incident or emergency; and
 - 1341
 - 1342 ▪ Historical records of previous incidents and emergencies at NIST Sites.
 - 1343

1344 2. The NIST Environmental Officer shall periodically review NIST's emergency response
1345 preparedness (e.g. equipment, supplies, personnel) and procedures to ensure that the potential
1346 incidents identified above can be appropriately responded to.

1347

1348 3. At the NIST Gaithersburg Site the following emergency response resources shall be
1349 maintained:

- 1350
- 1351 ▪ The NIST-Gaithersburg Fire Protection Group (FPG) shall maintain a Hazardous
1352 Materials Emergency Response Team (24 hours) that shall respond to emergency
1353 situations and prevent or mitigate any associated adverse environmental impacts.

- 1354 ▪ A mutual agreement shall be maintained with the Montgomery County Fire Department
1355 for emergency response support. The NIST-Gaithersburg Environmental Management
1356 Group shall maintain emergency response capabilities including:
1357
1358 – Oil and hazardous material spill containment and clean-up;
1359 – Hazardous waste containment and disposal; and
1360 – Direct monitoring for air and water contaminants.
1361
1362 ▪ The Gaithersburg Safety, Health and Environment Division, Environmental Management
1363 Group (EMG) shall maintain trained personnel, spill response supplies and equipment.
1364 The EMG shall provide support to the FPG in spill response, and technical expertise
1365 during emergency situations which may have environmental impact.
1366
1367 ▪ The NIST-Gaithersburg emergency response procedures are documented in:
1368
1369 – Fire Protection Group Guidelines;
1370 – NIST Gaithersburg Occupant Emergency Plan;
1371 – Hazardous Waste Contingency Plan; and
1372 – Spill Prevention Control and Countermeasure Plan.
1373
1374
1375 4. At the NIST Boulder Site the following emergency response resources shall be maintained:
1376
1377 ▪ The Boulder Safety, Health and Environment Division shall maintain spill response
1378 supplies, air monitoring equipment, and trained personnel to respond to smaller spills that
1379 do not present a significant risk to human health.
1380
1381 ▪ A mutual agreement shall be maintained with the City of Boulder Fire and Rescue
1382 Service to provide response to fires and significant petroleum or chemical spills.
1383
1384 ▪ Emergency Response procedures at the NIST-Boulder Site are documented in:
1385
1386 – The NIST- Boulder Spill Notification Policy;
1387 – The NIST-Boulder Spill Prevention Control and Countermeasure Plan; and
1388 – NIST Boulder Occupant Emergency Plan.
1389
1390 5. The NIST Environmental Officer and the NIST Emergency Response Staff shall periodically
1391 test the applicable emergency procedures.
1392
1393

1394 **RECORDS**

1395 The following records related to this procedure are maintained:

1396

1397 ▪ Records of emergency environmental incidents and subsequent investigations and
1398 corrective actions are stored in the NIST Incident Reporting and Investigation System
1399 (IRIS) which can be found on the NIST Safety Web Page (<https://oshe.nist.gov>).

1400

1401 ▪ Records of emergency response materials, supplies and resources available for
1402 environmental incidents and emergencies.

1403

1404 ▪ Records of tests or drills conducted and the results of incident debriefings or reviews.

1405

1406 All NIST EMS records shall be managed in accordance with the requirements of the NIST EMS
1407 Procedure 15.0, *Records Management* in Appendix B.

1408 **EMS Procedure 12.0**
1409 **Tracking Environmental Performance**

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1411
1412 **PURPOSE**

1413 The purpose of this procedure is to provide guidance for selecting key parameters to serve as
1414 indicators of environmental performance.

1415
1416
1417 **APPLICABILITY**

1418 This procedure is a component of the NIST EMS and applicability is consistent with the EMS.
1419

1420
1421 **REFERENCES**

1422 References are included in Section 4 of the EMS Suborder.
1423
1424

1425 **RESPONSIBILITIES**

1426 The NIST Environmental Officer is responsible for maintaining this procedure.
1427
1428

1429 **PROCEDURES**

1430 **1. Selection of Key Parameters**

1431 Key parameters are selected by the Environmental Officer as part of establishing
1432 Environmental Management Plans (EMPs). The key parameters allow NIST to measure
1433 progress towards the attainment of objectives and targets, performance of EMS systems,
1434 adherence with EMS Operational Controls and compliance with environmental regulations.
1435

1436 Examples of key parameters for the NIST EMS may include:

- 1437
- 1438 ▪ Number of spills;
 - 1439
 - 1440 ▪ Internal or external audit findings;
 - 1441
 - 1442 ▪ Fuel use; and
 - 1443
 - 1444 ▪ Electricity use.
 - 1445

1446 The key parameters selected are initially documented in the in the EMPs or Suborders as
1447 appropriate.

1448 **2. Establishing Baselines**

1449 After selecting the key parameters, performance baselines shall be established to measure
1450 progress from a specific starting point. Baselines may not be appropriate for some objectives
1451 and targets where, due to the nature of the activity, measurement over time may not be
1452 indicative of meaningful progress.

1453
1454 Examples of a baseline may include:

- 1455
- 1456 ▪ Annual electricity use for a selected baseline year; and
- 1457
- 1458 ▪ Percent compliance for specific environmental programs and baseline years.
- 1459

1460 **3. Measurement Methods**

1461 For each key parameter, methods for monitoring and/or measuring to track progress or status
1462 must be documented. This information shall be documented in the relevant EMP or
1463 Suborder, along with documentation of the records that shall be created for each key
1464 parameter.

1465
1466 Examples of types of measuring methods may include:

- 1467
- 1468 ▪ A technological method may be sampling for NO_x from NIST boilers; and
- 1469
- 1470 ▪ A procedural method may be the frequency or the location of the measurements.
- 1471

1472 Calibration of equipment or instrumentation used to monitor or measure key EMS parameters
1473 shall be conducted in accordance with the NIST EMS Calibrating, Monitoring, and
1474 Measurement of Equipment Procedure (14.0)

1475
1476 **4. Utilization of EMS Performance Data**

1477 Information collected from monitoring and measuring key parameters shall be presented in
1478 NEMC meetings and/or annual EMS management reviews.

1479
1480
1481 **RECORDS**

1482 The following records are generated by this procedure:

- 1483
- 1484 ▪ Records that reflect the baselines for NIST EMS objectives and targets; and
- 1485
- 1486 ▪ Records of monitoring and measurements of key parameters.

1487 All NIST EMS records (including training and audit results and reviews) shall be managed in
1488 accordance with the requirements of the NIST EMS Procedure 15.0, *Records Management* in
1489 Appendix B.

1490 **EMS Procedure 13.0**

1491 **Calibration of Monitoring and Measurement Equipment**

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PURPOSE

The purpose of this Procedure is to provide a process to ensure that:

- Key parameters of NIST operations that can have a significant impact on the environment are identified, monitored and measured appropriately;
- Monitoring equipment is properly operated, maintained, and calibrated or verified in accordance with manufacturer’s specifications; and
- Associated records are retained.

APPLICABILITY

This procedure is a component of the NIST EMS and applicability is consistent with the EMS.

REFERENCES

References are included in Section 4 of the EMS Suborder.

RESPONSIBILITIES

The NIST Environmental Officer is responsible for maintaining this procedure.

PROCEDURES

1. The NIST Environmental Officer shall:

- Develop and maintain a list of the key parameters of NIST operations that can have a significant impact on the environment (per EMS Procedure 12.0 Tracking Environmental Performance, Appendix B). These key parameters shall be documented in the EMS Program Database.
- Ensure that a Calibration Database is maintained for all instrumentation used to monitor and measure EMS key parameters and that a responsible party is assigned.

1529 2. Individuals assigned responsibility for the calibration of specific instrumentation shall be
1530 responsible for ensuring each instrument is calibrated and maintained per the specified
1531 frequency and procedure, and shall maintain records of all calibration and maintenance
1532 events. Calibrations and maintenance shall be conducted per manufacturer specifications
1533 unless otherwise approved by the Environmental Officer.
1534

1535

1536 **RECORDS**

1537 The following records pertaining to calibration are kept at NIST:

1538

1539 ▪ Environmental Management Group Calibration Database; and

1540

1541 ▪ OU Records of calibrations (e.g. Steam and Chilled Water Generation Plant NOx meter
1542 calibration, Pipe and Plumbing Group pH meter calibration).
1543

1544

1544 All NIST EMS Records shall be managed in accordance with the requirements of the NIST EMS
1545 Procedure 15.0, *Records Management* in Appendix B.

1546 **EMS Procedure 14.0**

1547 **Corrective and Preventive Action for Non-Conformance**

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1549

1550 **PURPOSE**

1551 This procedure defines the responsibilities for investigating non-conformances, and for tracking
1552 corrective and preventive actions.

1553
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1555 **APPLICABILITY**

1556 This procedure is a component of the NIST EMS and applicability is consistent with the EMS.

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1559 **REFERENCES**

1560 References are included in Section 4 of the EMS Suborder.

1561
1562

1563 **RESPONSIBILITIES**

1564 The NIST Environmental Officer is responsible for maintaining this procedure.

1565
1566

1567 **PROCEDURES**

1568 1. The following issues are considered non-conformances with respect to the EMS:

1569

- 1570 ▪ Environmental regulatory violations or incidents requiring notification of an
1571 environmental regulatory agency;
- 1572 ▪ Internal or external audit findings of deviations from environmental regulatory
1573 requirements or NIST environmental requirements (specified in Directives) including
1574 EMS procedures; and
- 1575 ▪ Any situation that creates undue environmental risk as determined by the Environmental
1576 Officer.
1577 Officer.

1579

1580 2. When a non-conformance is noted, the Environmental Officer shall coordinate with any
1581 responsible individual(s) and line management to determine the root cause and as applicable,
1582 contributing factors, and corrective actions.

1583

1584 3. The Environmental Officer shall maintain a database to track corrective actions related to
1585 environmental non-conformances. The database shall include a description of the finding, a

1586 tracking number, the responsible Line Manager/Supervisor, short term actions taken to
1587 mitigate any impacts, long term actions planned, completion targets and actual completion
1588 dates.

1589

1590 4. Depending on the nature of the non-conformance and in coordination with the Environmental
1591 Officer, the Line Manager/Supervisor may be responsible for completing an incident report
1592 and investigation. The NIST Incident Reporting and Investigation System
1593 (IRIS)(<https://oshe.nist.gov>) shall be used to report incidents, submit investigation reports
1594 and track corrective actions. Within IRIS a Corrective Action Plan is also required including
1595 the following items:

1596

1597 ▪ Root Cause;

1598

1599 ▪ Short term corrective actions;

1600

1601 ▪ Proposed Long-term Corrective Action;

1602

1603 ▪ Proposed Preventive Action; and

1604

1605 ▪ Proposed dates of completion for items above.

1606

1607 5. As appropriate, the Environmental Officer shall record changes to relevant Suborders or
1608 Procedures regarding the corrective and preventive actions implemented.

1609

1610 6. The Environmental Office shall verify corrective and preventive actions are effective prior to
1611 closing out each corrective action.

1612

1613

1614 **RECORDS**

1615 Records generated by this procedure include the following:

1616

1617 ▪ Corrective Action Database maintained by the Environmental Officer;

1618

1619 ▪ Incident Reports and Investigation Reports filed in IRIS; and

1620

1621 ▪ Records of changes made to the procedure(s) for corrective and preventive actions.

1622

1623 All NIST EMS records shall be managed in accordance with the requirements of the NIST EMS
1624 Procedure 15.0, *Records Management* in Appendix B.

1625

1626 **EMS Procedure 15.0**
1627 **Records Management**

1628
1629
1630 **PURPOSE**

1631 The purpose of this Procedure is to specify requirements for maintaining NIST EMS records.
1632
1633

1634 **APPLICABILITY**

1635 This procedure is a component of the NIST EMS and applicability is consistent with the EMS.
1636
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1638 **REFERENCES**

1639 References are included in Section 4 of the EMS Suborder.
1640
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1642 **RESPONSIBILITIES**

1643 The NIST Environmental Officer is responsible for maintaining this procedure.
1644
1645

1646 **PROCEDURES**

1647 **1. Identification and Management of EMS Records**

- 1648
- 1649 ▪ Required records are identified in each Environmental Suborder (Section 6.i) along with
1650 the recordkeeping requirements and responsible party;
1651
 - 1652 ▪ Records shall be identified and retained in accordance with the NIST Records
1653 Management Procedure (Administrative Manual Section 2.06), or as specified by
1654 regulatory requirement;
1655
 - 1656 ▪ Potential new EMS records shall be forwarded to the Environmental Officer who shall
1657 determine the maintenance requirements;
1658
 - 1659 ▪ The Environmental Officer shall maintain a NIST EMS Record Database that identifies
1660 for each EMS record, the type of record, the record Owner, the record storage location,
1661 and the retention time. EMS Records shall be legible, identifiable, and traceable to the
1662 relevant activity, product or service; and
1663
 - 1664 ▪ When possible, records shall be maintained in electronic format on the NIST OSHE
1665 website.

1666 2. **Filing and Storage**

1667

1668 ▪ EMS records shall be filed in a timely manner.

1669

1670 ▪ EMS records shall be stored and maintained so that they are readily retrievable and
1671 protected against damage, deterioration, or loss.

1672

1673 3. **Corrections**

1674 If a correction is required on an EMS record, the following procedure shall be followed:

1675

1676 ▪ Draw a single line through the incorrect or improper entry.

1677

1678 ▪ Use blue or black ink to enter the correct information above the error.

1679

1680 ▪ Record the initials of the person making the correction and the date the correction was
1681 made next to the correction.

1682

1683 ▪ Do not erase original information, or utilize white-out or correction tape.

1684

1685 ▪ If performing an electronic review, the ‘Track Changes’ function shall be used when
1686 making corrections. Do not erase original information or accept changes.

1687

1688 4. **Lost Records**

1689 If an EMS record is determined to be lost, utilize the most current form to reconstruct the
1690 original entries. Stamp the new record as “Duplicate Original – Original Lost.”

1691

1692 5. **Damaged Records**

1693 If an EMS record is found to be damaged, utilize the most current form to reconstruct the
1694 original entries. Stamp the new record as “Duplicate Original – Original Damaged.” Attach
1695 the damaged original to the reconstructed record.

1696

1697 6. **Disposal of Records**

1698 Records may be destroyed as retention times are satisfied, unless there is pending litigation
1699 requiring otherwise.

1700

1701

1702 **RECORDS**

1703 The following record shall be generated and maintained as part of this EMS Procedure:

1704

- 1705 ▪ Copies of superseded versions of this NIST environmental records management
1706 procedure.
1707
1708 See the NIST EMS Procedure 8.0, *Document Control* in Appendix B for review cycles and
1709 retention times.
1710

EMS Procedure 16.0
EMS Audits

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PURPOSE

This procedure specifies the requirements for performing internal and external EMS Audits at NIST. These audits are conducted periodically to determine if the NIST EMS is properly implemented.

APPLICABILITY

This procedure is a component of the NIST EMS and applicability is consistent with the EMS.

REFERENCES

References are included in Section 4 of the EMS Suborder.

RESPONSIBILITIES

The NIST Environmental Officer is responsible for maintaining this procedure.

PROCEDURES

1. Frequency of Audits

Internal EMS Audits shall be scheduled at NIST in coordination with External EMS Audits (conducted by third parties). The schedule shall follow the pattern below:

- Year 2016: External Audit;
- Year 2017: No Audit;
- Year 2018: Internal Audit;
- Year 2019: External Audit;
- Year 2020: No Audit;
- Year 2021: Internal Audit;
- Year 2022: External Audit;

- 1751 ▪ Year 2023: No Audit; and
- 1752
- 1753 ▪ Year 2024: Internal Audit.
- 1754

1755 **2. Audit Teams**

1756 Internal or external audit teams and lead auditors shall be designated by the NIST
1757 Environmental Officer and shall consist of individuals that have received EMS audit training
1758 and/or are deemed competent to conduct such audits. The designated lead auditor is
1759 responsible for ensuring that the audit team conducts and completes the audit as planned.
1760 Internal Audit Teams are made up of NIST employees. External Audit Teams may be made
1761 up of employees from other government agencies or private contractors. The Environmental
1762 Officer is responsible managing the Audit Program.

1763

1764 **3. Audit Planning**

1765 Each audit requires an audit checklist that is prepared by the lead auditor. The audit checklist
1766 addresses all audit criteria to be assessed.

1767

1768 **4. Requirements**

- 1769 ▪ EMS audits shall be conducted against pre-established audit criteria.
- 1770
- 1771
- 1772 ▪ The audit criteria shall be developed jointly by the Environmental Officer and the lead
1773 auditor. Audit criteria shall consist of questions and tests for the EMS, and shall be based
1774 on ISO 14001 and the requirements of the NIST EMS.
- 1775

1776 **5. On-Site Audit Process**

- 1777
- 1778 ▪ EMS audits shall be conducted primarily through interviews with personnel, examination
1779 of records, and review of site conditions.
- 1780
- 1781 ▪ The audit team shall document corrective actions needed. Responsibility for corrective
1782 actions shall reside with the Environmental Officer, and as applicable the NIST Line
1783 Managers/Supervisors in an area where the findings occurred. If a corrective action
1784 relates to the EMS itself, the Environmental Officer shall have primary responsibility to
1785 make the correction. The process for corrective and preventive actions is included in
1786 Appendix B-15.
- 1787
- 1788
- 1789
- 1790

1791 6. **Audit Report**
1792 When the audit is complete, the audit leader shall complete an audit report documenting the
1793 audit findings and conclusions, and make it available to the Environmental Officer, and any
1794 NIST Line Managers/Supervisors for areas assessed.
1795

1796 7. **Audit Closure**
1797 The EMS audit is closed when the Environmental Officer establishes that the corrective and
1798 preventive actions have been accomplished.
1799

1800 8. **Input to Management Review**
1801 The Audit Report and actions taken to address findings shall be presented to top management
1802 during the annual EMS Management Review.
1803

1804
1805 **RECORDS**

1806 Records generated by this procedure include:

- 1807
- 1808 ▪ The Audit criteria and checklist
 - 1809
 - 1810 ▪ Audit Report; and
 - 1811
 - 1812 ▪ Completion of corrective and preventive actions.
 - 1813

1814 All NIST EMS records shall be managed in accordance with the requirements of the [NIST EMS](#)
1815 [Procedure 15.0, Records Management](#) in Appendix B.
1816

1817 **EMS Procedure 17.0**
1818 **Management Review**

1821 **PURPOSE**

1822 This procedure provides requirements and guidelines for conducting senior management reviews
1823 of the EMS.

1826 **APPLICABILITY**

1827 This procedure is a component of the NIST EMS and applicability is consistent with the EMS.

1830 **REFERENCES**

1831 References are included in Section 4 of the EMS Suborder.

1834 **RESPONSIBILITIES**

1835 The NIST Environmental Officer is responsible for maintaining this procedure.

1838 **PROCEDURES**

1839 **1. Annual Management Review**

1840 The NIST Director and/or applicable Senior Staff identified by the Director shall review the
1841 status of the EMS on a least an annual basis. More frequent reviews may be conducted at the
1842 discretion of the NIST Director.

1844 **2. Agenda**

1845 The review shall include sufficient information for NIST senior management to make an
1846 informed decision on whether the EMS continues to be suitable, adequate, and effective for its
1847 intended purposes, and whether decisions or actions need to be taken, or resources need to be
1848 allocated to ensure its continual improvement. Items to be included in the Management Review
1849 shall include the following:

- 1851 ▪ NIST P 7300.00, Environmental Management;
- 1852
- 1853 ▪ NIST Significant Environmental Aspects;
- 1854
- 1855 ▪ Results of monitoring and measurement of environmental indicators;
- 1856

- 1857 ▪ Results of internal and external audits;
1858
1859 ▪ Progress towards achievement of objectives and targets;
1860
1861 ▪ Regulatory compliance status;
1862
1863 ▪ History of corrective and preventive actions; and
1864
1865 ▪ Any other relevant NIST EMS information.
1866

1867 **3. Determination of EMS suitability, adequacy, and effectiveness**

1868 Upon completion of the Management Review, the NIST Director shall make a determination
1869 on the continuing suitability, adequacy, and effectiveness of the EMS implementation, and
1870 specifically on its ability to achieve the objectives and targets.
1871

1872 **4. Results**

1873 Based on the results of the Management Review, the NIST Director shall provide direction and
1874 allocate resources as needed for any necessary changes to the EMS to ensure its continual
1875 improvement. These may be direct changes to NIST P 7300.00, Environmental Management,
1876 objectives and targets, procedures, or any other elements of the NIST EMS. The
1877 Environmental Officer shall document the results of, and decisions made, during the
1878 Management Review.
1879

1880
1881 **RECORDS**

1882 Records generated by this NIST Procedure include the following:

- 1883
1884 ▪ Documentation of the Management Review that include the agenda, presentation materials,
1885 attendance, any determinations or decisions made, and any resources allocated; and
1886
1887 ▪ Records of follow-up actions completed.
1888

1889 All NIST EMS records shall be managed in accordance with the requirements of the NIST EMS
1890 Procedure 15.0, *Records Management* in Appendix B.