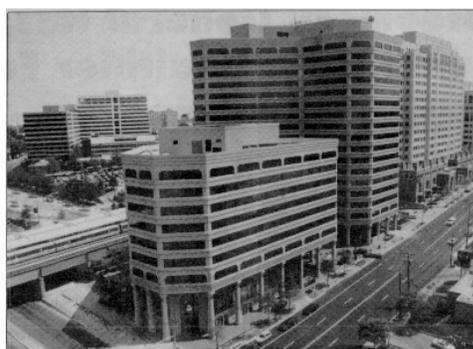


ENVIRONMENTAL MANAGEMENT SYSTEM

INTERNAL AUDIT REPORT

November 1 – 4, 2005



National Centers for Coastal Ocean Science
1305 East West Highway
Silver Spring, MD 20910

November 7, 2005

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1 Introduction

1.1 Background

The National Centers for Coastal Ocean Science (NCCOS) conducts and supports research, monitoring, assessments, and technical assistance to meet NOAA's coastal stewardship and management responsibilities. NCCOS was formed within the National Ocean Service (NOS) in March 1999 as the focal point for coastal ocean science. NCCOS' mission is to provide coastal managers with scientific information and tools needed to balance society's environmental, social, and economic goals.

There are five NCCOS Centers. Each of its five Centers has specific capabilities and research expertise in coastal and ocean issues. Three of the Centers have on-site research facilities, while two Centers conduct research through analyses of field data or sponsored extramural research.

- Center for Sponsored Coastal Ocean Research (CSCOR) in Silver Spring, Maryland
- Center for Coastal Monitoring and Assessment (CCMA) in Silver Spring, Maryland
- Center for Coastal Fisheries and Habitat Research (CCFHR) in Beaufort, North Carolina; and the Kasitsna Bay Laboratory in Seldovia, Alaska
- Center for Coastal Environmental Health and Biomolecular Research (CCEHBR) in Charleston, South Carolina; and the Oxford Cooperative Laboratory in Oxford, Maryland
- Hollings Marine Laboratory (HML) in Charleston, South Carolina

This internal audit included visits to Silver Spring, Maryland, which included NCCOS Headquarters staff, CSCOR, and CCMA; Beaufort, North Carolina, which included the CCFHR Beaufort Laboratory; and Charleston, South Carolina, which included the CCEHBR and HML Laboratories.

The CSCOR's mission is to provide the highest quality research in support of coastal management decisions through competitive, peer-reviewed research and holistic ecosystem studies. The Center develops and improves predictive capabilities for managing the Nation's use of its coastal resources through competitive research programs. CSCOR also supports efforts to translate the results of its research investments, and those of others, into accessible and useful information for coastal managers, planners, lawmakers, and the public to help balance the needs of economic growth with those of conserving the resources of our Nation's Great Lakes, estuaries, and coastal ocean.

The CCMA's mission is to assess and forecast coastal and marine ecosystem conditions through research and monitoring. The scientists of CCMA conduct field observations on regional and national scales. The Center provides the best available scientific information for resource managers and researchers, technical advice, and accessibility to data.

The mission of the CCFHR is to understand and forecast ecological effects of coastal habitat and resource change. CCFHR conducts research on the effects of coastal habitat change and restoration on living marine resources such as fish, marine mammals, and protected species.

CCEHBR's mission is to conduct integrated environmental research and develop diagnostic tools to measure coastal ecosystem health. Chemical, biomolecular, microbiological, ecological, toxicological, and histological methods are developed and used in both laboratory and field studies to describe, evaluate, and predict the controlling factors and outcomes of natural and anthropogenic influences in marine and estuarine habitats.

The HML is a world-class NOAA research facility, operated by NCCOS, with a mission to provide science and biotechnology applications to sustain, protect, and restore coastal ecosystems, with emphasis on links between environmental condition and the health of marine organisms and humans. Although the HML is a NOAA-owned facility, it is a fully collaborative enterprise, governed by the five partner organizations through a Joint Project Agreement. Scientists from all partner institutions work side-by-side in the laboratory, taking advantage of each other's special expertise.

1.2 Facilities Description

Facility #1 – Silver Spring, MD

NCCOS Headquarters Staff, CSCOR and CCMA are located at NOAA's headquarters in Silver Spring, Maryland.

Total number of employees:	121
Total number of buildings:	Partial occupation of 2 floors in SSMC4
Square footage of facility:	N/A
Property acreage:	N/A
Site boundaries:	N/A
Activities that occur outside site boundaries:	Field work and travel.

Facility #2 – Beaufort, NC

CCFHR's Beaufort Laboratory has a location uniquely suited to the fulfillment of NOAA's mission. The Laboratory is physically located less than 1 mile from Beaufort Inlet and the Morehead City Seaport. The Center has convenient access to important biogeographical and ecological boundaries such as Cape Hatteras and the Gulf Stream. The Beaufort Laboratory is within 20 km of the second largest estuarine complex on the east coast (Pamlico/Albemarle Sound). Estuarine and coastal ocean ecosystems are near at hand for field studies. The Center houses facilities to support both ecologically important field and experimental laboratory research. Other State of North Carolina and academic institutions engaged in marine research as well as a NOAA National Weather Service Station are located within the county providing the opportunity for fruitful partnerships in cooperative science.

Total number of employees:	110
Total number of buildings:	12
Square footage of facility:	39,000
Property acreage:	11
Site boundaries:	Shark's Slew, Taylor's Creek and Duke University Property Line
Activities that occur outside site boundaries:	Field scientific activities and conferences.

Facility #3 – Charleston, SC

NCCOS' CCEHBR and HML are located on James Island, just across the Ashley River from the historic city of Charleston, South Carolina. It is situated on the campus-like grounds of the South Carolina Department of Natural Resources (SCDNR) Marine Resources Center, at Fort Johnson near the mouth of Charleston Harbor.

Total number of employees:	120
Total number of buildings:	2
Square footage of facility:	CCEHBR-32,000; HML-45,000
Property acreage:	Fed. lease CCEHBR; HML fed building w/o acreage both are on state SC land
Site boundaries:	Building lease MOU w/ parking lot as boundaries - Feds own no land here at Ft. Johnson Site. Building lease /use only
Activities that occur outside site boundaries:	Field maritime sampling local areas and waterways conducted outside site boundaries.

2 EMS Internal Audit Report

2.1 Audit Objectives

The objective of this internal audit is to review the NCCOS EMS and ascertain whether it is properly implemented and operating effectively as intended. In addition, this internal audit provides an assessment of the NCCOS EMS conformance with the basic requirements of ISO 14001.

(Note: For additional detail regarding the facility’s EMS Internal Audit, refer to the NOAA EMS Standard - EMS.013 Regulatory Compliance and EMS Audits, and Self-Assessments)

2.2 Audit Scope

The audit assessed all operations described by the background and facility description (see sections 1.1 and 1.2), as well as all EMS elements established by the NCCOS for these operations against the foundation of ISO 14001, and the requirements of NCCOS’s EMS internal audit criteria.

2.3 Audit Team

The NCCOS EMS Team has selected Mr. Tom Welch, a contracted employee, as the lead auditor. As a RAB Certified ISO 14001 auditor, Mr. Welch has assisted numerous organizations achieve ISO 14001 certification, and has conducted more than 25 EMS audits.

Role	Name (Affiliation or Firm)	Contact
Lead Auditor	Tom Welch	(757) 893-6146 Welch_tom@bah.com

2.4 Audit Planning

Several audit planning sessions were held to discuss and plan the EMS internal audit, covering the areas described by the Audit Plan (Attachment B):

- Audit scope and objectives
- Audit criteria to be used
- Audit team
- Coordination with auditees
- Audit dates, times, and other logistics
- Review of profiles, and descriptions
- Responsibilities for the audit report

2.5 Opening Meeting

A brief audit opening session was conducted on November 1st, 2005 at SSMC. The following NCCOS staff members attended the meeting:

Name	Organization	Contact Information
Jean Durosco	NOS	301-713-3050 x165 Jean.Durosco@noaa.gov
Teresa McTigue	CCMA	301-713-3028 x141 Terry.McTigue@noaa.gov
Bernie Gottholm	CCMA	301-713-3028 x168 B.William.Gottholm@noaa.gov
Tom Simon	NOAA SECO	206-526-6295 Tom.Simon@noaa.gov
Bernie Denno	NOAA SECO	301-713-2870 x101 Bernie.Denno@noaa.gov
John Pierson	NOAA SECO	301-713-2870 x102 John.Pierson@noaa.gov
Jay Lewis	CCEHBR-Oxford	410-226-5193 Jay.Lewis@noaa.gov
Gary Matlock	NCCOS Dir	301-713-3020 Gary.C.Matlock@noaa.gov
Nick Prahl	NCCOS	301-713-3020 x186 Nick.Prahl@noaa.gov
Alicia Jarboe	NCCOS	301-713-3020 x182 Alicia.Jarboe@noaa.gov
Darrell McElhaney	CSCOR	301-713-3338 Darrell.McElhaney@noaa.gov
Rob Magnien/	CSCOR	301-713-3338 x159 Rob.Magnien@noaa.gov

Attendees by video-conference from Beaufort, NC:

Name	Organization	Contact Information
David Johnson	CCFHR	252-728-8746 David.Johnson@noaa.gov
Jeff Govoni	CCFHR	252-728-8727 Jeff.Govoni@noaa.gov
Sabrina Pittillo	CCFHR	252-728-8718 Sabrina.Pittillo@noaa.gov

Attendees by teleconference from Charleston, SC:

Name	Organization	Contact Information
Rick Meitzler	HML/CCEHBR	843-762-8842 Rick.Meitzler@noaa.gov
Raluca Semeniuc	HML	843-762-8870 Raluca.Semeniuc@noaa.gov
Fred Holland	HML	843-762-8813 Fred.Holland@noaa.gov

2.6 On-site Audit Process

- The internal audit was conducted on November 1-4, 2005.
- The EMS internal audit was conducted primarily through interviews with facility personnel and reviews of EMS documentation and records. The auditor used the audit criteria (Attachment A) as a guide to assess and record the suitability, adequacy, and effectiveness of all elements of the NCCOS’s EMS.
- The lead auditor conducted a review of specific EMS documentation (e.g., standards, EMPs, etc.) and, where appropriate, assessed other data and documents that provided information on the functionality of the EMS.
- The lead auditor conducted interviews with individuals having a variety of roles relating to the EMS, from general employees to those whose work activities interact with or produce significant environmental aspects.
- The auditor conducted a facility walk-through to observe operations and activities and visually assess the implementation of EMS standards, programs, and controls applied to activities.
- The auditor documented findings and opportunities for improvement. Responsibility for corrective actions will be identified during the corrective action process and will be incorporated into the corrective action requests.
- This audit report will be used as input to the management review.

The following NCCOS management and staff were interviewed during the on-site audit:

EMS Function	Name	Division/Position
Management Representative NOS	Jean Durosko	NOS
EMS Team Coordinator	Rick Meitzler	HML/CCEHBR
EHS Representative – Silver Spring	Bernie Gottholm	CCMA
EHS Representative – Beaufort	Sabrina Pittillo	CCFHR
EHS Representative – Oxford	Jay Lewis	CCEHBR
	Martin Burnett	CCEHBR / Maintenance Engineer

In addition, approximately 70 Federal and State employees, post graduates, students, university employees, and support contractors were approached and interviewed at random to evaluate their general awareness of the EMS program.

3 Audit Findings

The auditor identified **5 findings of non-conformance** with the established audit criteria (Attachment A). In addition, the auditor identified **6 opportunities for improvement** of the EMS. A summary of the audit findings is provided below, followed by a summary of enhancement opportunities noted during the audit.

3.1 Summary of Findings

3.1.1 Nonconformities

The following non-conformities were identified and will require that corrective actions be completed by NCCOS:

#	Classification	Description of Non-Conformity	EMS Element
1	Minor	The EMS at NCCOS is still dependent on just a few EMS team members at each facility. As the system matures, emphasis should be placed on system continuity regardless of people.	Roles and Responsibilities
2	Minor	Compliance and other competency training (such as regulatory required training) are given on a recurring basis; this forms the knowledge to perform work in an environmentally sound manner. Tracking of competency training at CCFHR needs improvement.	Training
3	Minor	Numerous work instructions are available at the EMS website, both generic and facility specific, but they are not yet integrated into day-to-day activities. Further emphasis on improving work instructions is required.	Operational Controls
4	Minor	Local procedures for communicating significant environmental aspects to contractors and suppliers were not available at Charleston or Beaufort.	Procurement
5	Minor	NOAA contracts managed from Kansas City are not integrated into the site-specific EMS. Contractors and suppliers are not aware of site-specific environmental issues.	Procurement

3.1.2 Opportunities for Improvement

In addition to the corrective actions listed above that relate to identified non-conformities, NCCOS may want to consider the following opportunities for improvement to further strengthen its EMS:

#	Opportunity for Improvement	EMS Element
1	It was noticed during the audit interviews that NCCOS has already implemented or is considering adopting a number of important measures that can contribute to the mitigation of negative environmental impacts of its operations. These include: green building practices, permeable parking lots, use of hybrid vehicles and bio-diesel among others. These initiatives could be managed more effectively if incorporated into Environmental Management Programs, and progress tracked during management reviews.	EMPs
2	In future reviews of the EMS objectives and targets, NCCOS should consider including at least one objective and target specific to each facility.	Objectives and Targets
3	Although the EMS Awareness Training available online is very comprehensive and covers all the essential elements of an EMS, it could be improved by providing examples of how these concepts can be apply to specific job types or tasks.	Training
4	In Oxford and Beaufort, there is an Invasive Species Release Prevention Program. The accidental release of invasive species should be included in the list of aspects and have its significance determined and performance tracked as part of the EMS.	Environmental Aspects
6	The list of regulatory requirements is incomplete. Federal requirements has been identified and recorded, as well as NOAA requirements. A list of State legal requirements that apply to each individual facility is currently being developed and should be completed as soon as possible.	Legal and Other Requirements
7	Additional performance measures should be developed for each site to monitor progress towards achieving EMS objectives and targets.	Monitoring and Measuring

Attachment A – Audit Criteria

National Oceanic and Atmospheric Administration**Environmental Management System
Internal Audit Criteria**

October 2005

Introduction**Purpose**

The purpose of this document is to support the internal validation assessment of the Environmental Management System (EMS) implemented at the National Oceanic and atmospheric Administration (NOAA) so that it can self-declare in compliance with Executive Order 13148 and in conformance with the requirements of ISO 14001.

Findings

The findings of this internal assessment were classified as following:

Type of finding	Description
Critical	Entire element of the EMS is either missing or severely deficient.
Major	A significant number of minor findings against one element of the EMS.
Minor	A single nonconformity against an element of the EMS.
Opportunity for Improvement (OFI)	Although this is not a nonconformity, the EMS would be improved by addressing this observation

NCCOS will have failed to properly implement and operate its EMS, in conformance with the basic requirements of ISO 14001, only if a critical non-conformity is detected during this assessment.

1 – Policy

Goal: To identify whether the organization has an environmental policy.

No.	Requirement	Finding	Relevant Documents	Observations
1	Verify that the environmental policy is dated and subscribed by top management.	-	https://www.ems.noaa.gov/Sites/NCCOS/Documents/NCCOS%20EnvPolicyfinal.pdf	Policy is available at the website. Signed on March 22, 2005 by Gary Matlock. An update to the Policy has been drafted and is awaiting signature.
2	Verify that persons working for or on behalf of the organization have received the environmental policy and that they are aware of its content in general terms.	-		Via awareness training. Approximately 20 people were interviewed in Silver Springs, 15 in Beaufort, and 35 in Charleston. Virtually all know the environmental policy and are aware of the EMS. Personnel in Silver Springs had a harder time tying day-to-day tasks to EMS then did Beaufort and Charleston employees.
3	Verify that the environmental policy is available to the public.	-		Available at public section of the NCCOS EMS website.
4	Does the policy contain basic commitments to comply with legal and other requirements, to continually improve the EMS and to employ pollution prevention?	-	https://www.ems.noaa.gov/Sites/NCCOS/Documents/NCCOS%20EnvPolicyfinal.pdf	The drafted version of the Policy to be signed meets all the criteria.

2 – Roles and Responsibilities

Goal: To identify whether the organization has formed a team to conduct the activities required for the implementation and continual improvement of the EMS and whether the organization has defined the roles and responsibilities for the EMS team members.

No.	Requirement	Finding	Relevant Documents	Observations
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1	Verify that the organization has formally designated an EMS Management Representative (Coordinator).	-	https://www.ems.noaa.gov/Sites/NCCOS/Documents/Matlock_EMS_Letter.pdf	The EMS Management Representative (Coordinator) for NCCOS is Mr. Rick Meitzler.
2	Verify that the organization has formed an EMS cross-functional team (CFT).	-	https://www.ems.noaa.gov/Sites/NCCOS/Documents/NCCOS%20EMS%20%20R&%20R(10-26-05).doc	The EMS CFT is composed of: <ul style="list-style-type: none"> • Environmental Management Representative NOS (Management Liaison) • Environmental Management Representative NCCOS • EMS Team representatives from each of the NCCOS centers
3	Verify that roles, responsibilities and accountabilities for tasks and functions related to the EMS implementation and maintenance are established and clearly communicated.	Minor	https://www.ems.noaa.gov/Sites/NCCOS/Documents/NCCOS%20EMS%20%20R&%20R(10-26-05).doc	The roles and responsibilities for the EMS are well defined. However, the EMS team at each facility is composed only of one employee.
4	Verify that all team members have been properly declared competent to fulfill their EMS roles and responsibilities.	-		EMS team members were determined to be competent on the basis of the requirements of their positions as EHS Representatives.

3 – Personnel Performance Standards

Goal: To identify whether the organization has established personnel performance standards and to ensure that personnel are assessed in line with their EMS responsibilities.

No.	Requirement	Finding	Relevant Documents	Observations
1	Verify that the organization has integrated environmental performance into personnel assessments.	N/A		Not evaluated during this preliminary assessment. To be addressed during external audit.

2	Verify that employees are fully aware of personal liabilities for environmental law violations as it applies to their roles and responsibilities.	N/A		Not evaluated during this preliminary assessment. To be addressed during external audit.
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4- Environmental Impact Identification

Goal: To verify whether the organization has established a process to identify and assess existing and/or potential environmental impacts resulting from its activities, products and services.

No.	Requirement	Finding	Relevant Documents	Observations
1	Verify that the organization has identified and documented its activities, products and services that result in environmental interactions. Ask to see any records that contain this information.	-	NCCOS Summary of Aspects and Controls 050923 available at https://www.ems.noaa.gov/Sites/NCCOS/HTML/Significant_Aspects.htm	NCCOS had a detailed list of activities and aspects.
2	Verify that the organization has established and maintains a methodology for identifying its environmental impacts and determining which ones are significant.	OFI	NOAA Standard EMS.004 Environmental Impact Identification	A detailed procedure was in place. In Oxford and Beaufort, there is an Invasive Species Release Prevention Program, so the accidental release of invasive species should be included in the list of aspects and have its significance determined.
3	Verify that the organization has been following the procedure, especially with respect to the frequency of review.	-		Procedure appeared to have been followed.

5 – Environmental Laws, Regulations, and Other Requirements

Goal: To verify whether the organization has established a process to identify, interpret applicability and provide means to comply with Federal, State, and Local regulatory requirements and other requirements applicable to facilities activities, operations, products or services.

No.	Requirement	Finding	Relevant Documents	Observations
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No.	Requirement	Finding	Relevant Documents	Observations
1	Verify that the organization has established and maintains a procedure to identify legal and other requirements that are applicable to the aspects of its activities, products, and services.	-	Standard EMS 005 ENVIRONMENTAL LAWS, REGULATIONS AND OTHER REQUIREMENTS	Procedure exists but is under revision.
2	Verify that the organization maintains a list of applicable legal and other requirements.	OFI	NCCOS Summary of Aspects and Controls 050923	The list of regulatory requirements is incomplete. Federal requirements has been identified and recorded, as well as NOAA requirements. A list of State legal requirements that apply to each individual facility is currently being developed.
3	Review the list of legal and other requirements to determine if it is up-to-date, legible, and readily accessible.	-	NCCOS Summary of Aspects and Controls 050923	The list of legal and other requirements is available at the NCCOS EMS website.

6 – Environmental Improvement Activities

Goal: To identify whether the organization has established objectives for environmental improvement and that it has developed environmental improvement activities to achieve these objectives.

No.	Requirement	Finding	Relevant Documents	Observations
1	Verify that the organization has established objectives for environmental improvement addressing the following broad areas: <ul style="list-style-type: none"> • Regulatory compliance • Risk minimization • Facility Stewardship • Pollution Prevention 	OFI	https://www.ems.noaa.gov/Sites/NCCOS/HTML/Objectives_Targets.htm	In future reviews of the EMS objectives and targets, NCCOS should consider including at least one objective and target specific to each facility.

2	<p>Verify that the organization has developed Environmental Management Plans and Improvement Plans using a work plan format that includes:</p> <ul style="list-style-type: none"> • Specific objectives • Work plan actions including responsibilities, means and time frame • Means to monitor performance • Quantifiable data whenever possible 	OFI	https://www.ems.noaa.gov/Sites/NCCOS/HTML/EMPs.htm	<p>NCCOS has established two EMPs:</p> <ul style="list-style-type: none"> • Materials Management Program • Waste Management Program <p>And two Improvement Plans:</p> <ul style="list-style-type: none"> • Training Improvement Plan, and • Resource Allocation Improvement Plan <p>Other EMPs should be created to manage more effectively initiatives that the facilities have already started (e.g. green building practices, permeable parking lots, use of hybrid vehicles, bio-diesel, etc.)</p>
3	<p>Verify that the objectives set are consistent with the commitments in the environmental policy, including compliance, pollution prevention and continual improvement.</p>	-	https://www.ems.noaa.gov/Sites/NCCOS/HTML/Objectives_Targets.htm	<p>Objectives are consistent with the Policy.</p>
4	<p>Verify that the objectives established take into account the significant impacts and legal requirements previously identified.</p>	-	https://www.ems.noaa.gov/Sites/NCCOS/HTML/Objectives_Targets.htm	<p>Objectives and targets were set for hazardous materials and waste (hazardous, solid, universal, etc.), both which were determined to be significant aspects significant of NCCOS operations.</p>
5	<p>Verify that the organization has established performance indicators (measures) for monitoring progress towards achieving its objectives.</p>	OFI	https://www.ems.noaa.gov/Sites/NCCOS/HTML/EMPs.htm	<p>Additional performance measures should be developed for each site.</p>

7 – Environmental Awareness and Training

Goal: To identify whether the organization has assessed awareness and training requirements to help promote a culture of environmental protection and stewardship at all NOAA locations and line functions that have adopted an EMS.

No.	Requirement	Finding	Relevant Documents	Observations
1	Verify that the EMS Awareness Training covered, at a minimum: <ul style="list-style-type: none"> • Environmental Policy • Environmental Improvement Activities inclusive of Pollution Prevention, and • Environmental Operational controls applicable to all facility 	OFI	https://www8.nos.noaa.gov/nccos/ems/html/sta/tutorial.aspx	EMS Awareness training is available for employees on the NCCOS EMS website. A record of those completing the awareness training exists. Although the EMS Awareness Training available online is very comprehensive and covers all the essential elements of an EMS, it could be improved by providing examples of how these concepts can be apply to each specific job type or task.
2	Verify that Level-to-Level Training, specific to job function has been provided to employees, and covered, at a minimum: <ul style="list-style-type: none"> • Roles and Responsibilities • Environmental Impacts and Improvement Activities • Operational Controls covering normal, abnormal or emergency, and maintenance conditions 	OFI		Competency training records need improvement.

3	Verify that employees and contractors (where applicable) have the necessary skills and knowledge to perform their work in an environmentally sound manner.	Minor		Compliance and other competency training are given on a recurring basis; this forms the knowledge to perform work in an environmentally sound manner. Tracking of competency training at CCFHR needs improvement.
4	Verify that records generated during training sessions have been properly maintained.	-		NCCOS maintains a database with information on completion of online awareness training (employee name, type, date, time)

8 – Environmental Operational Controls

Goal: To identify whether the organization has developed operational controls to be applied to its significant activities and environmental impacts.

No.	Requirement	Finding	Relevant Documents	Observations
1	Verify that the organization has established the appropriate operational controls in line with activities and significant environmental impacts.	Minor	https://www.ems.noaa.gov/Sites/NCCOS/HTML/NCCOS%20Operational%20Controls.htm	Numerous work instructions are available on the EMS website, generic and facility specific, but they are not yet integrated into day-to-day activities.
2	Verify that the operational controls are updated, as necessary, due to organizational changes.	N/A		The EMS has just been developed and implemented; therefore no organizational changes affecting operational controls have occurred yet.

9 – Internal Communications

Goal: To identify whether the organization has taken measures to ensure that effective communications are maintained among all departments within NOAA, and within Line Office functions and departments. To ensure that all employees and contractors are aware of EMS matters and that free and open communications regarding environmental issues are encouraged.

No.	Requirement	Finding	Relevant Documents	Observations
1	<p>Verify that the organization has established and maintains an EMS supporting website where the following documentation is available:</p> <ul style="list-style-type: none"> • EMS Introduction • EMS Manual • EMS Launch Guidance • EMS Implementation Guidance including Compliance Assurance Program covering Federal requirements • EMS Pilot status and implementation products 	-	https://www.ems.noaa.gov/Sites/NCCOS/index.htm	In addition to the EMS website, internal communications are also facilitated through manager meetings, emails, team/branch meetings as needed, and safety bulletin boards.

10 – External Communications

Goal: To identify whether the organization has developed procedures and practices to ensure proper external communications among NOAA Line Offices, facilities and field offices and interested parties which include government agencies, non-government groups, community and neighborhood representatives.

No.	Requirement	Finding	Relevant Documents	Observations
1	Verify that the organization has developed a formal method for receiving inquiries from external parties.	-	Standard EMS.010 External Communications	
2	<p>Verify that the organization reports to NOAA Administration all communications with government agencies associated with:</p> <ul style="list-style-type: none"> • Emergency situations • Health and safety major injury or death • Incident involving neighbor/community personal property 	N/A		Requirement was not assessed in this internal audit.

3	Verify that the organization is in conformance with all external reporting requirements to government agencies.	N/A		Requirement was not assessed in this internal audit.
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11 – Documentation and Control of EMS Documents and Records

Goal: To identify whether the organization has established procedures and practices for proper EMS documents and records control.

No.	Requirement	Finding	Relevant Documents	Observations
1	Verify that the organization has developed and maintains an EMS Document Control Guidance.	-	EMS.011 Documentation And Control Of EMS Documents And Records	Virtually all of the EMS documentation was available on the EMS website or the NCCOS network. Only the latest version of EMS documents is uploaded to the website, and no obsolete versions were observed. In both laboratories visited, current versions of MSDS were observed as well as Chemical Hygiene Plans. Charleston had three versions of MSDS: a MSDS notebook in each lab, one in the hallways and on-line versions. This seemed cumbersome.

12 – Environmental Sampling, Monitoring and Performance Measurements

Goal: To identify whether the organization has identified the appropriate performance measurements to track and report its environmental performance.

No.	Requirement	Finding	Relevant Documents	Observations
1	Verify that the organization has been performing environmental sampling when deemed necessary.	-		None of the facilities visited have environmental regulatory sampling requirements. Air sampling was occurring in Charleston.

2	Verify that the organization maintains a list of monitoring requirements associated with the key characteristics of its activities and environmental impacts.	-		
3	Verify that the organization retains all monitoring, measurement and analysis results for the appropriate retention period.	-		Charleston and Beaufort both retained measurement results.
4	Verify that the instruments used in the collection of data are calibrated in conformance with manufacturer's recommendations.	-		Equipment requiring calibration was observed. All equipment had been calibrated in accordance with manufacturer's recommendations.

13 – Regulatory Compliance and EMS Audits and Self-Assessments

Goal: To identify whether the organization has implemented a process for conducting self-assessments and audits to ensure conformance is maintained to the EMS, and to reinforce conformance to the NOAA Regulatory Compliance Audit Policy.

No.	Requirement	Finding	Relevant Documents	Observations
1	Verify that the organization has established and followed a procedure for assessing regulatory compliance.	-	Standard EMS.013 Regulatory Compliance And EMS Audits And Self-Assessments	Beaufort – Audits (compliance, safety) completed in Aug/04. Charleston – Compliance Audit was completed in 2003.
2	Verify that the organization has established and maintains a procedure for conducting periodic EMS self-assessments and internal audits.	-	Standard EMS.013 Regulatory Compliance And EMS Audits And Self-Assessments	Available at the EMS website.

**14 – Corrective Action to Regulatory Compliance Audits and EMS Non-Conformances
Corrective and Preventive Actions**

Goal: To identify whether the organization has implemented a process to address EMS non-conformances through corrective and preventive actions.

No.	Requirement	Finding	Relevant Documents	Observations
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1	Verify that the organization has been following NOAA Environmental Corrective Action Resolution Policy 98-02 to handle EMS related non-conformities and regulatory non-compliances.	N/A		This is the first internal audit of NCCOS EMS. EMS related non-conformities have not yet been addressed.
2	Verify that the organization has identified and documented the following information about EMS non-conformities: <ul style="list-style-type: none"> • Auditor and staff identifying the non-conformance • Date and location • Description of the non-conformance • Identification of any associated operational controls and records • Associated legal requirement non-compliance • Proposed corrective and preventive actions 	N/A	N/A	This is the first internal audit of NCCOS EMS. EMS related non-conformities have not yet been addressed.

15 – Management Review

Goal: To identify whether the management review of the EMS has been conducted to ensure it continues to be effective, suitable and adequate.

No.	Requirement	Finding	Relevant Documents	Observations
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No.	Requirement	Finding	Relevant Documents	Observations
1	Verify that the top management has been provided with all the necessary information for the management review. This includes: <ul style="list-style-type: none"> • EMS audit results • Communication(s) from external interested parties, including complaints • The environmental performance of the organization • Progress towards achievement of objectives and goals • Regulatory compliance status • Status of corrective and preventive actions • Follow-up actions from previous audits and management reviews • Changing circumstances, including developments in legal and other requirements related to the organization's environmental aspects, and • Recommendations for improvement 	N/A	N/A	The first EMS Management Review will occur formally at the NCCOS level and is scheduled after this internal audit.
2	Verify that the management review procedure provides for management decisions and actions for the continual improvement of the EMS.	-	Standard EMS 015 MANAGEMENT REVIEW	Available on the EMS website.
3	Verify that top management has conducted a review of the EMS and determined that the system continues to be adequate and suitable for its intended purposes.	N/A	N/A	Management Review has not been conducted yet.
4	Verify that top management has determined that the system continues to be effective, specifically on its ability to achieve the objectives and targets.	N/A	N/A	Management Review has not been conducted yet.

No.	Requirement	Finding	Relevant Documents	Observations
5	Verify that top management has determined any necessary changes or actions, and new objectives and targets, as needed, to ensure the system's continual improvement.	N/A	N/A	Management Review has not been conducted yet.
6	Verify that the decisions of the management review have been adequately documented and communicated to the appropriate parties in the organization.	N/A	N/A	Management Review has not been conducted yet.
7	Verify the implementation status of all follow-up actions resulting from the management review.	N/A	N/A	Management Review has not been conducted yet.

16 – Change, New Project Management and Procurements

Goal: To identify whether the organization has adequately considered the environmental impacts of changes associated with its operations and activities.

No.	Requirement	Finding	Relevant Documents	Observations
1	Verify that locations have been using the Management of Change Authorization Form, whenever a change is identified.	N/A		The EMS has just been developed and implemented; therefore no changes affecting environmental aspects have occurred yet.
2	Verify that the potential environmental impacts of proposed changes have been identified by using the Project Environmental Checklist.	N/A		The EMS has just been developed and implemented; therefore no changes affecting environmental aspects have occurred yet.

3	<p>Verify that acquisitions and contracting is subject to an environmental assessment covering:</p> <ul style="list-style-type: none"> • Applicable legal and other requirements • Minimization of environmental impact • Use and application of “best technologies” • Changes to the EMS 	Minor		<p>It was observed during the site assessment in Beaufort that a construction project (parking lot demolition) did not have a silt fencing installed. This could be a potential violation of the storm water phase 2 regulations. Beaufort has no influence over contracting / procurement for these construction projects, which is done by Kansas City.</p>
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Attachment B - Audit Plan

<i>Plan No.1</i>		<i>Audit date(s):November 1-4, 2005</i>		
<i>A. Audit objectives and scope</i> The objective of this internal audit is to review the NCCOS EMS and ascertain whether it is properly implemented and operating effectively as intended. In addition, the audit provides an assessment of the NCCOS EMS conformance with the basic requirements of ISO-14001. The scope of this internal audit includes all NNCOS operations. Three NCCOS centers will be visited: CCMA, CCFHR, and CCEHBR.				
<i>B. Audit criteria</i> https://www.ems.noaa.gov/Sites/NCCOS/EMS%20Programs/Audit_Program/Audit%20Criteria%20082405.pdf				
<i>C. Organization/functional units to be audited</i> Headquarters (Silver Springs, MD), CCFHR (Beaufort, NC), CCEHBR (Charleston, SC)				
<i>D. Person(s) to be interviewed</i>				
<i>Date</i>	<i>Time</i>	<i>Person</i>	<i>Department/location</i>	<i>Responsibility</i>
Nov 1	9:00	Jean Durosko	Silver Springs	Environmental Management Representative NOS
Nov 1	9:30	Bernie Gottholm	CCMA, Silver Springs	EHS REpresentative
Nov 2	8:30	Sabrina Pittillo	CCFHR, Beaufort	EHS REpresentative
Nov 2	2:30		CCFHR, Beaufort	Facility Manager
Nov 3	1:30	Rick Meitzler	CCEHBR, Charleston	EHS Representative
Nov 4	8:00	Jay Lewis	CCEHBR, Charleston	EHS Representative Oxford
<i>E. High priority elements</i>				
<i>F. Communication of observations/findings during the audit</i>				
<i>G. Reference documents (including audit procedure(s))</i>				
<i>Title</i>			<i>Location/Person Responsible</i>	
NOAA EMS Standard - EMS.013 Regulatory Compliance, EMS Audits, and Self-Assessments			https://www.ems.noaa.gov/Sites/NCCOS/HTML/NOAA_Standards.htm	
NCCOS EMS Web site			https://www.ems.noaa.gov/Sites/NCCOS/HTML/EMS_Team_Home.htm	
<i>H. Audit Schedule</i>				
<i>Date</i>	<i>Time</i>	<i>Activity</i>	<i>Audit team lead</i>	
Nov 2	10:30	Site walk-through	Tom Welch	
Nov 3	3:30	Site walk-through	Tom Welch	
<i>I. Audit Team Members</i> Tom Welch (BAH) – Lead auditor				
<i>J. Confidentiality requirements</i>				
<i>K. Reporting and distribution requirements</i>				
<i>Prepared by</i> Silvia Thompson		<i>Date</i> Oct 28, 2005	<i>Reviewed and Approved by</i> Tom Welch	
			<i>Date</i> Oct 28, 2005	

Attachment C – Audit Schedule

Day 1 – Silver Springs, MD

Approximate Time Frame	Audit Activity	Auditee Participation/Interviews	Record/Document/Facility Access
8:00 - 8:30	Opening Meeting: Introductions and Review Audit Plan	All EHS Representatives (by video conference), Environmental Management Representative NOS, Senior Management	<ul style="list-style-type: none"> • Audit Plan
8:30 – 9:00	Interview Senior Management	Senior Management	<ul style="list-style-type: none"> • Environmental Policy Statement • Organizational Chart
9:00 - 9:30	Interview Environmental Management Representative about EMS implementation approach (aspects, objectives and targets, responsibilities, etc.)	Environmental Management Representative NOS	
9:30 – 11:30	Interview EHS Representative about EMS implementation approach (Aspects, objectives and targets, responsibilities, etc.) Assessment of Improvement Plans: Training and Resource Allocation	EHS Representative Silver Springs	<ul style="list-style-type: none"> • List of aspects • List of objectives and targets • Improvement Plans • Operational Controls • Records • Other documents related to the improvement plan.
11:30 – 12:30	LUNCH BREAK		
12:30 - 1:30	Assess training of environmental competency and EMS training	EHS Representative Silver Springs, facility employees	<ul style="list-style-type: none"> • Training Records

Day 2 – Beaufort, NC

Approximate Time Frame	Audit Activity	Auditee Participation/Interviews	Record/Document/Facility Access
8:00 - 8:30	Opening Meeting	EHS Representative Beaufort	None
8:30 – 10:30	Interview EHS Representative about EMS implementation approach (Aspects, objectives and targets, responsibilities, etc.) EMP Assessment: Waste Management Program	EHS Representative Beaufort	<ul style="list-style-type: none"> • List of aspects • List of objectives and targets • EMP • Operational Controls • Records • Other documents related to the improvement plan.
10:30 – 11:30	Site walk-through	EHS Representative Beaufort	
11:30 – 12:30	LUNCH BREAK		
12:30 – 2:30	Assess Training of Environmental Competency and EMS training	EHS Representative Beaufort, Facility employees	<ul style="list-style-type: none"> • Training Records
2:30 – 3:00	Interview with Facility Manager	Facility Manager	
3:00 - 4:00	Assessment Review/Closing Meeting		

Day 3 – Charleston, NC

Approximate Time Frame	Audit Activity	Auditee Participation/Interviews	Record/Document/Facility Access
01:00 – 01:30	Opening Meeting	EHS Representative	None
01:30 - 03:30	Interview Management Representative about EMS implementation approach (Aspects, objectives and targets, responsibilities, etc.)	EHS Representative Charleston	<ul style="list-style-type: none"> • List of aspects • List of objectives and targets • EMP • Operational Controls • Records • Other documents related to the improvement plan.
03:30 - 04:30	Site walk-through	EHS Representative Charleston	

Day 4 – Charleston, NC

Approximate Time Frame	Audit Activity	Auditee Participation/Interviews	Record/Document/Facility Access
08:00 – 09:00	Interview EHS Representative about EMS implementation approach (Aspects, objectives and targets, responsibilities, etc.) EMP Assessment: Materials Management Program	EHS Representative Oxford	<ul style="list-style-type: none"> • List of aspects • List of objectives and targets • EMP • Operational Controls • Records • Other documents related to the improvement plan.
09:00 – 11:00	Assess Training of Environmental Competency and EMS training	EMS Team Coordinator, facility employees	<ul style="list-style-type: none"> • Training Records
11:00 – 11:30	Interview with Facility Manager	Facility Manager	
11:30 – 12:30	LUNCH BREAK		
12:30 – 1:00	Assessment Review/Closing Meeting	EMS Team Coordinator, whole EMS Team, and Senior Management by video conference	