



**NIICAP Auditing Standard: AS-2**  
Program for Accreditation of a Coating Contractor's  
Hazardous Waste  
Removal and Management Program

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## 1. INTRODUCTION

1.1. NIICAP™ is the Contractor Accreditation Program of the NACE International Institute Business Services LLC (hereafter referred to as NIIBS). This document is the NIICAP AS-2 Standard, “Program for Accreditation of a Coating Contractor’s Hazardous Waste Removal and Management Program (hereafter referred to as AS-2). This standard should be used in accordance with the “Contractor Accreditation Program Policies and Procedures Manual” (Reference 2.1) to conduct quality management audits for shop and field industrial/marine coating and lining operations.

1.2. Requiring NIICAP accreditation will improve the level of confidence that the owner has when s/he evaluates and selects a contractor to perform work. Participation in NIICAP is an indication that the contractor holds its work to a high standard of quality.

1.3. AS-2 is a NIICAP auditing standard, and represents a consensus of the NIICAP development group that reviewed this document, its scope, and its requirements.

1.4. Following initiation of the NIICAP accreditation programs, the technical requirements of AS-2 will be managed by the NIICAP Oversight Board. Administrative oversight of the NIICAP accreditation programs is by NIIBS personnel, the NIICAP Oversight Board, and the Policies and Procedures Committee of the NACE International Institute.

1.5. The Hazardous Waste Removal and Management auditing standards, testing, and acceptance criteria will be based on References 2.2, 2.3, 2.8 and 2.9.

1.6. Management practice assessment will be based on References 2.5, 2.8 and 2.9.

## 2. REFERENCE DOCUMENTS

2.1. NIIBS “Contractor Accreditation Program Policies and Procedures Manual,” 2015 (use latest revision).

2.2. “SSPC Technology Guide 6; Guide for Containing Surface Preparation Debris Generated During Paint Removal Operations,” 2015.

2.3. “SSPC Technology Guide 7: “Guide to the Disposal of Lead-Contaminated Surface Preparation Debris,” 2015.

2.4. NIIBS “NIICAP Auditor Manual,” 2015.

2.5. ANSI/ISO/ASQ Q9001-2008: “Quality Management Systems – Requirements,” 2008.

2.6. NIICAP Contractor Program Process Map.

2.7. NIICAP Auditing Standard AS-1, “Program for Accreditation of Field and Shop Coating Contractors” (referred to hereinafter as AS-1) (use latest revision).

2.8. U.S. Federal Regulatory documents 29 CFR 1910 and 1926, various subchapters.

2.9. U.S. Federal Regulatory documents 40 CFR 58 through 268, various chapters and subchapters.

2.10. U.S. Federal Regulatory documents 49 CFR 171 through 179.

## 3. SCOPE

NIICAP applies to all industrial and marine surface preparation and coating or lining application work performed by a NIICAP-accredited coating contractor firm. The intent of the program is to determine if an industrial/marine coatings contractor has access to the personnel, organization, qualifications, procedures, knowledge and capabilities to meet customer specifications on time, first time, and within budget.

3.1. In some cases owners may choose not to invoke NIICAP as a requirement for contractor bids, or may choose to require NIICAP accreditation but exempt contractors from certain NIICAP requirements. The fact that the owner exempts a requirement will not affect the NIICAP accreditation process or requirements, since the contractor may use the accreditation on jobs where there is no exemption from

NIICAP requirements. The owner does have the option of not invoking the Hazardous Waste Removal and Management Accreditation; however, when invoked the entire accreditation applies.

3.2. In all cases owners are responsible for reviewing appropriate health, safety, environmental, and regulatory documents and for determining their applicability in relation to NIICAP prior to its specification.

3.3. The baseline NIICAP accreditation is NIICAP AS-1. It provides a core accreditation for the capability to perform surface preparation and coating/lining application process either in shop or in the field. After achieving the baseline accreditation, contractors may seek additional NIICAP accreditation including the accreditation for hazardous waste removal and management programs covered by AS-2. If the accreditation achieved in accordance with AS-1 expires or is no longer in effect for any reason, all other accreditations related to that accreditation are also suspended or withdrawn.

3.4. This document, AS-2, is the accreditation of a coating contractor's hazardous waste removal and management program. The accreditation is used to assess the contractor's hazardous waste removal and portions of the contractor's management program, as part of the contractor's overall ability to meet the customer's specifications by removing existing hazardous materials from the surface to be recoated in a safe manner, and manage the removal program, waste management program, and other portions of the program to maintain compliance with higher tier requirements. NIICAP does not certify a hazardous waste removal and management program, or the workers trained in accordance with that program. NIICAP verifies the program content, program management, training practices, work practices, documentation, and compliance actions as defined in this audit standard at the time of the audit.

3.5. A NIICAP accreditation does not ensure, guarantee, or certify that a contractor will perform in a professional, efficient, contracted, or ethical manner. A NIICAP accreditation indicates that a contractor (a) met the relevant auditing standard(s) at the time a NIICAP official audit was conducted, and (b) a sampling of the work was performed, or in the case of AS-2, the hazardous waste management and removal processes performed, prior to and at the time of the audit, based on shop or field observations, training and testing, and recorded review.

3.6. NIICAP accreditation, as implemented by AS-2, will provide industry and government with a recognized initial and ongoing accreditation program to verify that a contractor and its relevant employees have demonstrated or produced the following:

3.6.1. Have the management, training, and support infrastructure in place to meet all applicable requirements while containing, removing, venting, and managing hazardous waste.

3.6.2. Have documented experience of at least six (6) months history of performing hazardous waste removal in accordance with higher tier requirements and NIICAP requirements.

3.6.3. The specialized skills and documented training required to perform the hazardous waste removal in a safe manner as part of the surface preparation task.

3.7. Hazardous Waste Removal and Management Program

3.7.1. NIICAP will perform an audit of a contractor's hazardous waste removal and management program and, if the program meets NIICAP's criteria, NIICAP will provide accreditation of the hazardous waste removal and management program. The hazardous waste removal and management program shall, at a minimum, meet the requirements of any national, health, safety or environment (HSE), state/province, or local requirements, and this document.

3.7.2. The NIICAP audit of a Hazardous Waste Removal and Management program addresses management infrastructure, evidence of adequate containments, appropriate abrasive blast equipment, and filtered ventilation equipment, safety practices and training requirements for Hazardous Waste Removal and Management tasks, skills and tasks ancillary to Hazardous Waste Removal and Management, and data collection functions required by higher tier documents.

## 4. DEFINITIONS

For use within NIICAP and this standard, definitions shall apply as shown in Reference 2.1.

## 5. INITIAL AND RENEWAL ACCREDITATION PROCEDURES

5.1. The process for Initial and Renewal accreditation is a very thorough review of management processes, documentation, equipment availability, personnel training and experience, and recordkeeping, and includes an on-site audit of hazardous waste removal and management practices, documentation, storage facilities, containment, hazardous waste handling, spill prevention and clean up capabilities. The Maintenance accreditation process is similar to the Initial or Renewal accreditation process; however, it involves validation of a known hazardous waste management program and is less intensive.

### 5.2. Initial or Renewal Accreditation Process Overview.

5.2.1. Contractor submits application form (available at [www.niicap.net](http://www.niicap.net)), fees, and supplemental forms and information. The submission should be in PDF format, and include:

5.2.1.1. Work experience form; detail of owners and projects worked within the last twelve (12) months.

5.2.1.2. Company officers' information sheet; information on each of the principle company officers and management team.

5.2.1.3. Work specification for the job(s) where the shop/field observations will be performed.

5.2.1.4. List the experience and third-party certification as applicable for each individual in the following positions:

5.2.1.4.1. Hazardous waste program manager.

5.2.1.4.2. Environmental, safety, and health manager.

5.2.1.4.3. Competent person.

5.2.1.4.4. Qualified person.

5.2.1.4.5. If any of these positions are combined, list the applicable positions, the title used by your company for the combined position, and the experience and third party certification as applicable one time only for the combined positions. Contractors may combine positions on some sites, and have individual positions on other jobs.

5.2.1.5. Contractor-specific references such as internal instructions or manuals related to the hazardous waste removal and management program including:

5.2.1.5.1. Hazardous waste management manual (may be part of another contractor specific manual).

5.2.1.5.2. Direction for training or maintenance of current hazardous waste worker and manager certifications and skills for each position listed in Appendix B.

5.2.1.5.3. Training plans covering subjects listed in Appendix B. If commercially available training is used for some positions or training, list which training is provided in-house and which training is provided commercially.

5.2.1.5.4. Environmental, health, and safety training.

5.2.1.5.5. Hazardous waste removal, handling and management.

5.2.1.5.6. List of higher tier references applicable to each lesson plan taught in-house.

5.2.1.5.7. Direction for analyzing waste generated from removal operations, analysis of test data for appropriate waste designation, segregation, labeling, packaging, storage, and shipping. This direction should be in a manual.

5.2.1.5.8. Direction for supervisors, competent person, and qualified person to use when assessing and documenting employee hazards, engineering controls and work practices used to mitigate those hazards. This direction should be in a manual.

5.2.1.6. Contractor's information sheet including:

5.2.1.6.1. Current experience modification rate (EMR) used for insurance purposes.

5.2.1.6.2. Current bonding status, bond company and policy number.

5.2.1.6.3. Current insurance policy cover sheet and declarations sheet including the current EMR.

5.2.1.6.4. Information on any health, safety or environment (HSE), national, state/province, or local citations or notices of violation (pending or final) received within the last forty-eight (48) months for an Initial application and within the last eighteen (18) months for subsequent applications.

5.2.1.6.5. Information on any outstanding or known pending detrimental legal actions.

5.2.1.6.6. Other company names the contractor has worked under in the past thirty-six (36) months.

5.2.1.7. Contractor facility information sheet for each facility or worksite where a hazardous waste removal and management AS-2, or NIICAP AS-2 accreditation, or SSPC QP-2, has been invoked for the past 12 months. A worksite is a temporary location such as a bridge, overpass, or wastewater treatment plant where the contractor performed hazardous waste removal and recoating. The compliance plan and/or the hazardous waste management manual used for the project should provide all required information. A facility is a fixed location where the contractor performs surface preparation that includes hazardous waste removal and coating application in a shop environment:

5.2.1.7.1. Compliance program for each facility or worksite.

5.2.1.7.2. A physical description of each facility or worksite, including details on the surface preparation practices and worksite controls.

5.2.1.7.3. Complete list of surface preparation methods used by the contractor with a description of each, including equipment used and materials typically encountered and removed.

5.2.1.7.4. Environmental controls used during hazardous waste removal and surface preparation.

5.2.1.7.5. The applicable policies, practices, process instructions, and work practices performed at the facility or worksite. If all facilities or worksites use exactly the same instructions only one set of instructions is required. If there is any difference between instructions from one facility to another, a set of each of the differing instructions must be submitted with an indication of which facility uses which instructions.

5.2.1.7.6. Average number of employees on site, including temporary workers and subcontracted workers performing surface preparation or coating/lining application tasks. Breakout the number of each category of worker listed above.

5.2.1.7.7. Total amount of each waste generated, and each type of waste generated per year by month for each site. This may be accomplished by reviewing Uniform Hazardous Waste Manifests for each site.

5.2.1.8. Personnel certification review.

5.2.1.8.1. Number of personnel with current certification to perform hazardous waste removal, or hazardous waste management functions including packaging, characterization, labeling, and shipping, with a breakdown by type of certification.

5.2.2. The NIICAP lead auditor will perform a technical review based on the submitted documentation and develop a list ranking the facilities.

5.2.2.1. All facilities that have a hazardous waste management program equivalent to, or above the facility audited in the ranking will be eligible to receive NIICAP AS-2 accreditation based on successful completion of the worksite audit.

5.2.2.2. All worksites having a hazardous waste removal and management program ranked lower, or less complete than, the audited facility will not be eligible to receive NIICAP AS-2 accreditation until the subject facilities are successfully audited, or evidence is provided showing adequate improvement at the worksite to be ranked equivalent to, or above, the audited facility.

5.2.2.3. The contractor may exercise the option to pursue AS-2 accreditation for some facilities while not pursuing accreditation for other facilities.

5.2.2.4. If a contractor exercises the option to pursue AS-2 accreditation only at some facilities, no placard, statement, or evidence of AS-2 accreditation can be displayed or attributed to a facility that has not received AS-2 accreditation.

5.2.3. NIICAP personnel verifies payment of application fees prior to commencing a technical review.

5.2.4. NIICAP auditors and personnel reviews submitted documents for administrative records, personnel records, Doing Business As, proof of insurance, and bond number.

5.2.5. The company history review will include a review of regulatory sites that provide information on company performance. In the U.S., this includes OSHA and EPA sites.

5.2.6. The NIICAP lead auditor reviews technical portions of the submitted material, owner and job submissions, proof of insurance, bond number, EMR rating and company history to determine adequacy of the application.

5.2.7. The NIICAP administrator requests any additional information needed from the contractor.

5.2.8. The NIICAP administrator enters the application and submissions into database, schedules the audit, and invoices the contractor for the audit fee.

5.2.9. The NIICAP administrator selects the auditor and sends applicable documents to the auditor and the lead auditor. The NIICAP administrator may consult with lead auditor to match auditor experience to the type of industry being audited.

5.2.10. The auditor reviews submitted documents and performs the Administrative portion of the audit to the maximum extent possible prior to traveling to the contractor's facility. During the document review the auditor completes the Audit Preparation Sheet based on the information provided in the submitted documents. The auditor sends a copy of the completed Audit Preparation Sheet to the lead auditor prior to consultation. This will reduce the time spent during the audit finding facts and details related to the audit.

5.2.10.1. The Initial audit will be a thorough review of the contractor's management policies related to hazardous waste removal and management practices. The prerequisite administrative review will include:

5.2.10.1.1. The contractor's history to determine if any recent or pending actions may indicate a potential for a hazardous waste removal or management deficiency.

5.2.10.1.2. The contractor's administrative controls, instructions, training plan, documentation practices, waste management practices and tracking program that contributes to the adequacy and consistency of the hazardous waste removal and management program.

5.2.11. Successfully completing the administrative portion of the audit is a prerequisite for verifying practices at the contractor's facility. Therefore, if any of the documentation, instructions, or policies

are incomplete or inadequate and will result in a failed audit, the lead auditor will notify the contractor of the discrepancy. The contractor can request NIICAP to suspend the audit while the discrepancies are addressed and documentation is resubmitted; the request must be submitted to the NIICAP administrator in writing.

5.2.12. After all documentation, procedures, and instructions have been verified to be adequate, and NIICAP personnel verifies that contractor has paid audit fees, the auditor travels to the contractor's facility, performs the shop/field portion of audit and completes the administrative portion of audit.

#### 5.2.13. Required Field/Shop Observations by the Auditor

5.2.13.1. Observe the contractor's hazardous waste removal and management practices to verify compliance with the program already submitted and reviewed.

5.2.13.2. Observe containments, shower facilities, personal hygiene facilities, equipment condition and adequacy, waste storage facilities, documentation, waste packaging, and shipping manifests during the field/shop audit.

5.2.14. The lead auditor and auditor review observations and possible findings during all steps of the audit to determine the facts, the significance of an observation, and whether it warrants an observation, minor finding, or major finding. The lead auditor and auditor also determine the appropriate values to assign to each of the observed attributes.

5.2.15. The auditor submits the proposed audit report, through the lead auditor, to the NIICAP administrator upon completion of the shop/field portion of the audit. The lead auditor, the auditor, and NIICAP administrator review the report and concur or agree on corrections.

5.2.16. The NIICAP administrator sends an interim letter to the contractor, based on the paragraph above, with a copy to the auditor and lead auditor.

5.2.17. The lead auditor and the auditor out-brief with the contractor. Typically this event is performed by telephone since it occurs several days after the audit. The contractor proposes corrective actions that it will perform, for consideration by the auditor and lead auditor.

5.2.18. Once accepted, the contractor performs the corrective actions and the auditor verifies the actions, either based on documentation or a follow up shop/field audit. Any follow up audit site-visit will be performed only after the NIICAP administrator receives payment from the contractor.

5.2.19. The lead auditor recommends appropriate action to the appropriate NIICAP Oversight Board subgroup based on the audit report and validation of the corrective actions taken.

5.2.20. On a monthly basis, the NIICAP Oversight Board or a subgroup thereof reviews the monthly reports from the auditor/lead auditor and considers whether to confirm the recommended accreditations. Voting members may not be in the position of doing business with any contractor whose accreditation is being reviewed, or having any other conflict of interest.

### 5.3. Maintenance Application Overview

5.3.1. The Maintenance accreditation process is the same as the Initial or Renewal accreditation process; however:

5.3.1.1. The Administrative review in the Maintenance audit is less detailed and focused on determining continued consistent performance.

5.3.1.2. If the contractor has multiple locations, each round of Initial, Renewal, and Maintenance accreditation must rotate among the facilities.

### 5.4. Accreditation Cycle and Details

5.4.1. The Initial or Renewal accreditation is valid for one (1) year.

5.4.2. The cycle consists of one (1) Initial accreditation, followed by two (2) Maintenance accreditations, and starts over with one (1) Renewal accreditation followed by two (2) Maintenance accreditations. At the end of the third year the Renewal cycle is repeated. For detailed actions refer to Reference 2.6 and Section 7 of this standard.

## **6. AUDITOR QUALIFICATIONS**

6.1. NIIBS manages a written process for selecting, training, qualifying, and evaluating NIICAP auditors who are independent contractors to NIIBS. See Reference 2.4.

## **7. NIICAP HAZARDOUS WASTE REMOVAL AND MANAGEMENT CONTRACTOR REQUIREMENTS**

7.1. Business structure This is a statement of the business practices used by the contractor to manage the hazardous waste removal and management program and ensure compliance with higher tier requirements.

7.1.1. The contractor must have a documented statement of quality policy that emphasizes employee safety and health, and compliance with hazardous waste requirements. The hazardous material and hazardous waste programs must be coordinated to cover cradle-to-grave actions, controls, and requirements.

7.1.2. The statement of quality policy must be prominently posted and accessible to both managers and workers to be effective. The contractor should refer to the principles regularly in written and oral format to ensure that schedule and cost pressures do not negate or dilute the intent of the written policy.

7.1.3. The contractor must have an effective in-house management team consisting at a minimum of a project manager, hazardous waste manager, environmental safety and health (ESH) manager, training manager, QA manager and project ESH manager, each with capabilities to succeed with the challenges of a complex job. The functions of these positions may be combined as necessary; however, all of the functions listed in Appendix A must be specifically assigned.

7.1.4. There may be overlap of responsibilities or one person may be assigned multiple roles between the hazardous waste manager, environmental safety and health manager, training manager and QA manager as these positions should not be specifically related to production pressure; however, the project manager, responsible for completing the job on time and within budget, should not have primary responsibility for the other functions.

7.1.5. The team must have enough depth to support the number of jobs that invoke an AS-2 accreditation that the contractor claims to be able to work simultaneously. However, for small jobs one individual may perform more than one function or some managers may support more than one small project when these practices are allowed by higher tier requirements.

7.1.6. The contractor shall have an organizational chart or contact list for significant personnel within the organization, down to, and including, the foreman or supervisor and ESH manager of each crew. For a large company the contact list may be broken down into a number of lists covering each location; however, there should be at least one point of contact for each location on the primary list.

7.1.7. The contractor must have job descriptions for each of the major positions within the organization including a list of core duties, desired experience, and training and/or education.

### **7.2. Hazardous Waste, Environmental, Safety, and Health Program Management**

7.2.1. The contractor shall have a hazardous waste management program and a documented hazardous waste management (HWM) manual including:

7.2.1.1. Position descriptions and responsibilities of personnel related to hazardous waste management as shown in Appendix A. Training, experience, certification requirements for managers, supervisors, and training personnel are addressed in NIICAP Auditing Standard AS-1.

7.2.1.2. Training requirements for workers exposed to health or safety hazards and competent person must be included in the hazardous waste manual; however, they will be addressed in Section 7.3 and Appendix B of this document.

7.2.1.3. Contents of Appendices A and B are mandatory.

7.2.1.4. Procedures and engineering controls requirements related to:

7.2.1.4.1. Compliance program for each facility or site. Note: most of the compliance program may be included in the hazardous waste management plan; however, there must be provision for the site-specific documentation.

7.2.1.4.2. The compliance plan:

7.2.1.4.2.1. Must have a positive statement that all materials to be removed are treated as containing heavy metals until sample results or other authorized methods prove otherwise.

7.2.1.4.2.2. Must require engineering practices and administrative controls to be used when practical prior to and while relying on the use of PPE.

7.2.1.4.2.3. Must require employees to use engineering controls, PPE that is provided, and use proper suit up and un-suiting procedures.

7.2.1.4.3. Employee safety and health, including:

7.2.1.4.3.1. Employee exposure monitoring, notification, and recordkeeping.

7.2.1.4.3.2. Sanitary toilet facilities.

7.2.1.4.3.3. Shower facilities, on site and functional prior to beginning hazardous material removal operations. Shower facilities may be located elsewhere if there is a written plan to provide transportation and contamination controls for the transportation.

7.2.1.4.3.4. Employees must be required to use the shower facilities, not wear clothing home that was worn during the shift, not wear street clothes during the shift, and use the clean and dirty sides of the shower facility as intended.

7.2.1.4.3.5. Controlled area, with signs, typically consisting of the work enclosure or containment and any area outside the containment used for equipment setup or other conditions that may expose workers to hazardous waste.

7.2.1.4.3.6. Drinking water.

7.2.1.4.3.7. Eating facilities.

7.2.1.4.4. Hazardous waste removal, control, and management requirements, such as:

7.2.1.4.4.1. Accumulation facilities and management practices.

7.2.1.4.4.2. Removal processes.

7.2.1.4.4.3. Spill or loss of control, including emissions monitoring of abrasive media, liquids, and hazardous waste recovery procedures.

7.2.1.4.5. Environmental controls such as containment, and filtered ventilation as required by the specification or higher tier requirements.

7.2.1.4.6. Frequent and regular inspections of job sites, materials, and equipment by the competent person including directing or taking corrective or recovery actions as needed.

7.2.1.5. Requirement for all personnel to have environmental, safety, and health training or certification in accordance with Appendix B of this document prior to exposure to hazards on the job.

7.2.1.6. Hazardous waste generation requirements.

7.2.1.7. Hazardous waste accumulation requirements.

7.2.1.7.1. Container in good condition.

7.2.1.7.2. Container meets U.S. DOT (Department of Transportation) requirements.

7.2.1.7.2.1. Identification Codes 1A1 or 1A2 for solid lead waste and spent abrasive grit contained in barrels. Consult waste analysis documentation for reactivity of other types of waste and requirements for other waste containers.

7.2.1.7.2.2. At least two (2) expanded rolling hoops either as part of the drum or continuously welded to the drum.

7.2.1.7.3. Container compatible with the waste.

7.2.1.7.4. Closed container unless adding waste.

7.2.1.7.5. Inspect areas where containers are stored at least weekly.

7.2.1.7.6. Secondary containment for waste when required.

7.2.1.7.7. Spill kits, eye wash stations, and fire extinguishers compatible with waste being stored.

7.2.1.7.8. Secure storage location.

7.2.1.7.9. Contact information in case of emergency.

7.2.1.8. Waste shipped within applicable time frame requirements:

7.2.1.8.1. Large quantity generator generates greater than 2,200 pounds of hazardous waste per month. Waste must be shipped within ninety (90) days.

7.2.1.8.2. Small quantity generator generates between 220 pounds and 2,200 pounds of hazardous waste per month. Waste must be shipped within one hundred eighty (180) days, or within two hundred seventy (270) days if it is shipped greater than 200 miles.

7.2.1.8.3. Conditionally exempt small quantity generator generates less than 220 pounds of hazardous waste per month. There is no specified time limit for accumulation.

7.2.2. Documentation requirements at the contractor's headquarters and work site:

7.2.2.1. Technical library with access to CFR requirements, state and local requirements as applicable, and contractor's internal documents for managing hazardous waste operations.

7.2.2.2. Hazardous waste management program manual or instructions.

7.2.2.3. Technical documents and manuals necessary for the safe and compliant operation of major equipment related to hazardous waste removal, and monitoring equipment used by the contractor.

7.2.2.4. Project specification.

7.2.2.5. Emergency Action Plan (details included in Reference 2.7).

7.2.2.6. Archived hazardous waste manifests for three (3) years are required to be at one location or the other. In reality the more recently developed records will probably be at the work site while most records have been archived at the contractor's headquarters.

7.2.2.7. Site specific compliance plan.

7.2.3. Documentation Required Only at the Work Site.

7.2.3.1. Containers labeled with "Hazardous Waste," and name of contents.

7.2.3.1.1. Satellite accumulation area (SSA), date when accumulation exceeds fifty-five (55) gallons of hazardous waste or one (1) quart of acutely hazardous waste (must be shipped or transferred to a ninety (90) Day or one hundred eighty (180) day accumulation area within three (3) days of the full date),

7.2.3.1.2. Ninety (90) day or one hundred eighty (180) day accumulation area: the container must be dated upon first waste accumulation, and must be shipped within 90, 180, or 270 days as defined in Appendix C.

7.2.3.2. Accumulation area inspection reports with corrective actions.

7.2.3.3. Hazardous waste inventory.

7.2.3.4. Hazardous waste manifests for shipped waste products.

7.2.4. Employee Records Required:

7.2.4.1. List of certified employees for each certification listed in Appendix B including the recertification date.

7.2.4.2. Certification and size information for face fitting respirators as appropriate.

7.2.4.3. Certification for special skills such as confined space entry and man-lift operations.

7.3. Required Skills, Proficiencies, and Training The documented HWM program will include and document required employee training for various levels of employees. Skills training will be in accordance with Appendix B of this document.

7.3.1. The contractor's OSHA and EPA (for contractors in USA; auditors will seek equivalents in other areas) mandated training program may be delivered:

7.3.1.1. In-house.

7.3.1.2. By a third party through a commercially available program.

7.3.1.3. A combination of in-house and commercially available training.

7.3.2. NIICAP does not address the specifics within a training program; however, NIICAP will verify that the training program presented covers the required subjects.

7.3.2.1. All employees are required to receive the designated training prior to exposure to the hazard, or performing job functions related to the hazard and annually thereafter.

7.3.2.2. Contractor must maintain training records for each employee verifying required training prior to assignment to a specific job function or location. Records must include lesson plans and training rosters.

7.3.3. The contractor's base line training for workers and managers is addressed in Reference 2.7. The contractor's lead removal and hazardous waste training program shall include the following details:

7.3.3.1. A training plan detailing the management of all training in accordance with national codes related to hazardous waste generation, management, and disposal as determined to be applicable in the code(s). Normally disposal will be based on turning the waste over to a treatment center or recycler through a transportation company.

7.3.3.2. For any training that is provided in-house, a lesson plan is also required. The training plan will cover the all training requirements listed in Appendix B and the following elements:

7.3.3.2.1. An ongoing evaluation process of the current processes and the current training plan to determine specifically what the training should include, how well the training program is accomplishing its goals, and what changes, if any, are needed to better accomplish the program goals.

7.3.3.2.2. Environmental practices necessary to manage hazardous waste and prevent spills or inadvertent discharge of hazardous material or hazardous waste to the environment and to meet all applicable OSHA and EPA requirements.

7.3.3.2.3. A tracking system for each employee that includes managing and tracking:

7.3.3.2.3.1. Training elements completed by the employee.

7.3.3.2.3.2. Safety and health training including employee "Right to Know" training, and environmental training elements completed by the employee.

7.3.3.2.3.3. Certifications related to required training held by the employee.

7.3.3.2.3.4. Skills testing completed by the employee, test scores, observations, and approvals as appropriate.

7.3.3.2.3.5. Medical qualifications.

7.3.3.2.4. A periodic review of the training being delivered to determine if the training plan is being followed and if the training plan needs to be modified. The review periodicity shall be at least annually.

7.3.4. The training manager (or ESH manager) is responsible to certify all personnel who have met one or more of the training requirements above, as applicable, prior to job assignment. Workers who have not been certified, or did not meet certification requirements must not engage in activities that may expose them to the work hazards discussed above.

7.3.5. The training program will include documentation of each employee's training and certification, including what tasks the employee is certified to perform, and required recertification dates.

7.3.6. The training program will define the employee progress review frequency. Some options may include annually, at the end of a project, an exit interview prior to the end of employment, or as defined in the contractor's training program. The frequency will be at least annually.

#### 7.4. Technical Capabilities

7.4.1. General Contractor must demonstrate the ability to meet technical requirements on site for waste management, containment, safe storage of hazardous waste, documentation, shipment of waste meeting higher tier requirements, and providing for employee health and safety.

##### 7.4.2. Waste Management

7.4.2.1. Contractor must demonstrate the methods used to determine the characteristics of waste. Methods include:

7.4.2.1.1. Listing as an excluded waste.

7.4.2.1.2. Listed as hazardous waste.

7.4.2.1.3. Determining hazardous characteristics of waste:

7.4.2.1.3.1. Ignitability.

7.4.2.1.3.2. Corrosivity.

7.4.2.1.3.3. Reactivity.

7.4.2.1.3.4. Toxicity.

##### 7.4.3. Containment and Ventilation

7.4.3.1. Contractor must demonstrate that hazardous waste removal operations are conducted within a containment that meets the specification requirements.

7.4.3.2. Filtered ventilation.

7.4.3.2.1. Exhaust system operates during all dust producing activities and for an adequate amount of time after dust producing activities have ended to allow for a minimum of two (2) air exchanges.

7.4.3.2.2. Static pressure drop shall be checked when installation is complete, and periodically to verify static pressure drop is within the acceptable range, and has not significantly changed.

7.4.3.3. Containment meeting the applicable requirements to prevent escape of contaminants as defined in Reference 2.2 for all paragraphs.

7.4.3.3.1. Maintaining negative air pressure.

7.4.3.3.2. Adequate exhaust sufficient to provide prompt clearance of dust laden air within the enclosure after cessation of blasting.

7.4.3.3.3. Inlets and accesses will be baffled or arranged to minimize escape of dust or abrasive.

7.4.3.3.4. Prompt spill recovery actions consistent with the compliance plan and the specification.

7.4.3.3.5. Containment and emissions monitoring consistent with the specification and the compliance plan.

7.4.3.4. Suit up and un-suiting vestibule with clean and dirty sections, and HEPA vacuum.

7.4.3.5. Secondary containment for hoses as required.

7.4.3.6. Equipment decontamination/labeling/storage requirements.

#### 7.4.4. Adequate Supply of Potable Water

#### 7.4.5. Adequate Toilet Facilities

#### 7.4.6. Operable Shower Facility

7.4.6.1. Shower facility with change rooms on clean and dirty sides.

7.4.6.2. Lockers on the dirty side for work clothes, lockers on the clean side for street clothes.

7.4.6.3. Access from clean to dirty side must transit the shower.

7.4.6.4. Functional waste water collection tank.

7.4.6.5. Functional fresh water tank or plumbed supply with both hot and cold water.

7.4.6.6. Functional water heater and ambient heater/AC as appropriate.

#### 7.4.7. Safe Accumulation and Storage of Hazardous Waste

7.4.7.1. Contractor must demonstrate compliance with the appropriate accumulation time frame based on the type of hazardous waste accumulation area being used.

7.4.7.2. A written procedure managing waste within the applicable waste accumulation area requirements, and documentation verifying that the procedure is followed. The procedure can be a combination of the hazardous waste management manual and the site compliance plan.

7.4.7.3. Containers, tanks, drip pads, or containment buildings as appropriate that meet the applicable requirements:

7.4.7.3.1. In good condition.

7.4.7.3.2. Compatible with the waste being stored in it.

7.4.7.4. Emergency eye wash station and fire extinguisher compatible with the waste stored in the accumulation area are close to the accumulation area and functional.

7.4.7.5. All waste is labeled on the day of first accumulation with the following:

7.4.7.5.1. "Hazardous Waste" must be clearly labeled on the container.

7.4.7.5.2. Name of waste in the container.

#### 7.4.7.6. Date Requirements

7.4.7.6.1. In a satellite accumulation area, label with date when any waste accumulation exceeds fifty-five (55) gallons.

7.4.7.6.2. In a ninety (90)-day or one hundred eighty (180) day accumulation area, label with the date the container was put in the accumulation area to track required removal date.

7.4.7.6.3. Label waste accumulated in a ninety (90)-day or one hundred eighty (180)-Day accumulation area with the date that accumulation starts.

7.4.7.7. Accumulation area inventory sheets with accumulation start dates and shipment dates and other data to verify accumulation area timeframes were met.

#### 7.4.8. Jobsite Documentation

7.4.8.1. All items listed in Paragraph 7.2.2 and subparagraphs.

7.4.8.2. Documentation of monitoring and inspections performed by the competent person:

7.4.8.2.1. Environmental monitoring and inspections.

7.4.8.2.2. Accumulation Area inspections and corrective actions.

7.4.8.2.3. Personnel exposure monitoring.

7.4.8.2.4. Safety inspections.

7.4.8.2.5. Discrepancy corrective actions.

7.4.8.3. Emergency action plan.

7.4.8.4. Site compliance plan.

7.4.8.5. List of qualified employees for specific job positions.

7.4.8.6. Documentation of waste characterization.

7.4.8.6.1. Copy of completed and signed Uniform Hazardous Waste Manifest or a signed copy from the designated facility, which receives the waste. Contractor must retain a copy of each signed manifest for three (3) years.

## **8. PREREQUISITES AND ACTIONS FOR WORKSITE HAZARDOUS WASTE MANAGEMENT AUDIT**

8.1. The auditor will perform a document review to verify that the contractor's hazardous waste management plan contains the required elements, and all other documentation is available and acceptable as a prerequisite to the field/shop audit. The auditor will perform an on-site audit to verify that the contractor follows the hazardous waste management plan for all hazardous waste removal, packaging, storage, and shipment.

8.2. The contractor must ensure scheduling that allows the auditor access to hazardous waste activities and support structures, such as containment, equipment, inspections, and documentation.

8.3. While hazardous waste removal activities are being performed the auditor will observe work practices and task execution to determine compliance with technical direction and industry standards, as invoked and appropriate.

## **9. AUDIT CRITERIA ATTRIBUTE CREDIT**

9.1. Each audit attribute will be assigned a numeric value, which is identified in the audit attribute box. Some attributes are for information only, and will have a value of (0 points.). All scored attributes will have a value of 5 points.

9.2. Attribute scoring will be as follows:

9.2.1. Outstanding value (5 points) will be awarded for an outstanding finding of compliance. Requirements for an outstanding rating are included in those attributes where an outstanding rating is possible. If an outstanding finding occurs there is no reasonable recommendation to be made for improvement. An outstanding finding indicates the contractor has an efficient process that meets the requirements and minimizes risk, schedule, and cost.

9.2.2. Expected value (3 points) will be awarded for an adequate or satisfactory finding. Requirements for an expected rating are included in the attributes. Typically an adequate finding occurs when the contractor's process meets the requirement; however, there is a potential for

process improvement to reduce risk, schedule, or cost. It should be noted that generally (3 points) will be awarded, and that is an acceptable rating.

9.2.3. One point will be awarded for an unacceptable finding. Typically an unacceptable finding occurs when the contractor's documentation or process does not meet the requirement. For the administrative portion of the audit, an inadequate program may warrant a score of (2), or non-existent program may warrant a score of (1). An unacceptable finding in the shop/field should result in a failed hold point; however, a failed hold point does not in itself warrant an unacceptable rating. Even the best contractor will fail a hold point occasionally; however, if the contractor does not seem to have control of the process, does not understand the process requirements or standards, does not address the discrepancy adequately by either negotiation or repair of the work, an unacceptable rating may be appropriate.

9.2.4. Attributes do not always neatly fall into the defined conditions above. If a finding is between the defined conditions the auditor should adjust the point value appropriately i.e., a score of (2) or (4).

9.2.5. Comments or description of the condition are required for all ratings. It is important that after the audit, or when discussing the findings with the contractor, that the auditor can explain specifically what was observed. Comments may be one or two sentences, or longer as appropriate. Comments for the Administrative Practices section of the audit may be as simple as the document and paragraph or section where the requirement was found.

9.2.6. If an attribute does not apply to the process or item being observed then note "N/A" in the "Comments" block.

9.2.7. Each section of the audit ("Administrative Practices" and "Shop/Field Practices") requires an overall score of (3). Each sub-section of the "Administrative Practices" section requires a minimum score of (2.9) if the sub-section is applicable. However, any occurrence of (1) must be discussed with the lead auditor. A score of (1) may be the basis for a "Major" finding.

9.2.8. If there is a pattern of several related "Minor" findings that show a pattern of weakness in a particular area, the cumulative findings may be changed to a "Major" finding in the event that the auditor, NIICAP personnel or relevant NIIBS committee considers these minors to be indicative of a serious systemic issue.

## **10. COMMUNICATIONS**

10.1. NIICAP will periodically distribute to participating, owners and accredited contractors, a newsletter including a list of the most common findings during initial and follow up audits.

10.2. NIICAP will provide a public web page that lists accredited contractors for the purpose of aiding NIICAP participants in achieving higher performance, peer-to-peer benchmarking, and verification of contractor accreditations.

**APPENDIX A:  
POSITION DESCRIPTIONS, TRAINING, EXPERIENCE AND  
CERTIFICATION REQUIREMENTS FOR PERSONNEL  
RELATED TO HAZARDOUS WASTE MANAGEMENT**

A.1. Appendix A is a list of position titles, responsibilities, and assigned duties. Training, experience, and certification requirements, are addressed in Appendix B if applicable. Many of the position titles can be combined, or duties assigned to another position; however, all duties listed below must be assigned to a position. Contractors may combine positions on some sites, and have individual positions on other jobs.

A.2. The hazardous waste manager and ESH manager positions must report to a corporate level manager, and all functions defined below must be specifically assigned.

A.2.1. Hazardous waste manager responsible for the overall hazardous waste management (HWM) program including:

A.2.1.1. Supervision of project hazardous waste managers.

A.2.1.2. Be aware of changes in higher tier requirements that change training requirements, control procedures, engineering controls, or work practices related to hazardous waste removal, accumulation, data collection, and transfer requirements.

A.2.1.3. Maintain the HWM manual.

A.2.1.4. Review of periodic in-house surveillance or audit reports to determine compliance with applicable requirements. The program should review data developed by the competent person on findings, corrective actions, and surveillance of material storage areas, hazardous waste storage areas, and work practices. The results should be used for follow up and to incorporate lessons learned into the HWM program where practical.

A.2.1.5. Archive and review required data and recordkeeping for hazardous waste accumulation, storage, inspections, and transfer.

A.2.1.6. Coordinate with other managers regarding changes in instructions, inspections, audits, and training requirements.

A.2.2. Environmental, safety and health (ESH) manager responsible for the overall ESH program including:

A.2.2.1. Supervision of project ESH manager, competent person, and qualified person.

A.2.2.2. Be aware of changes in higher tier requirements that change training requirements, control procedures, engineering controls, containment, ventilation, or work practices related to ESH requirements.

A.2.2.3. Maintain the ESH manual.

A.2.2.4. Review of periodic in-house surveillance or audit reports to determine compliance with applicable requirements. The program should review data developed by the competent person on findings, corrective actions, and surveillance of material storage areas, hazardous waste storage areas, and work practices. The results should be used for follow up and to incorporate lessons learned into the ESH program where practical.

A.2.2.5. Archive and review required data and recordkeeping for ESH requirements, and employee monitoring.

A.2.2.6. Ensure employee notification of results within five (5) days of obtaining any employee monitoring or medical data for the employee.

A.2.2.7. Coordinate with other managers regarding changes in instructions, inspections, audits, and training requirements.

A.2.3. Project hazardous waste manager responsible for:

- A.2.3.1. Managing the hazardous waste management program at the project level.
- A.2.3.2. Collection and review of data related to the hazardous waste management program.
- A.2.3.3. Managing or performing inspections and record keeping related to the hazardous waste management program.
- A.2.3.4. Managing manifesting of waste for shipment.
- A.2.3.5. Reporting functions on each of the projects in process.
- A.2.3.6. Attending project progress meetings to maintain awareness of the job status.

A.2.4. Project environmental, safety and health (ESH) manager responsible for:

- A.2.4.1. Managing the environmental, safety and health program at the project level.
- A.2.4.2. Supervising the competent person and the qualified person.
- A.2.4.3. Ensuring employees utilize required PPE and safety and health practices.
- A.2.4.4. Ensuring employee and supervisor compliance with the environmental, safety and health manual.
- A.2.4.5. Managing, collecting and reviewing health and safety monitoring and reporting of on-site activities performed by the competent person.
- A.2.4.6. Verifying personnel certification prior to assignment.
- A.2.4.7. Attending project progress meetings to maintain awareness of the job status.

A.2.5. Competent person reports to the ESH manager, is capable of identifying existing and possible hazards in the surroundings or working conditions and who has the authority to take prompt corrective measures to eliminate them. The competent person must have the authority to shut down work and direct containment and clean up actions as necessary. The competent person is responsible for:

- A.2.5.1. Frequent and regular inspections of job sites, materials, and equipment to verify the following actions and programs.
- A.2.5.2. Verifying containment integrity, monitor emissions, compliance with specification, and spill clean-up actions.
- A.2.5.3. Verifying ventilation system operation and filter efficiency.
- A.2.5.4. Verifying personnel training prior to assignment.
- A.2.5.5. Verifying proper PPE usage during work operations.
- A.2.5.6. Verifying proper suit up and un-suited practices.
- A.2.5.7. Hazardous waste accumulation and hazardous material storage area inspections and corrective actions for discrepancies.
- A.2.5.8. Managing and reporting worker exposure monitoring data; however, the competent person normally will not perform the monitoring.
- A.2.5.9. Generating, reporting, and archiving required data collection related to all of the above actions.

A.2.6. Production and support workers perform work that exposes them to hazardous materials and hazardous waste. This includes personnel removing hazardous materials and hazardous waste from the substrate, as well as personnel collecting, packaging, labeling and storing hazardous waste. See Appendix B.

## APPENDIX B: TRAINING REQUIREMENTS

Line	Job Description	Requirement	29 CFR Requirement, or National Equivalent
1	<p>Production and support worker with potential exposure to health hazards, or safety hazards.</p> <p>“The employer shall train each employee who is subject to exposure to lead at or above the action level on any day, or who is subject to exposure to lead compounds which may cause skin or eye irritation”</p>	<p>OSHA requirement meets or exceeds RCRA requirement.</p>	<p>NOTE: The series of training requirements below is often referred to as “OSHA 10” (a national code in the USA). If a contractor uses a commercial training organization for “OSHA 10,” NIICAP will review the curriculum listing; however, that training is expected to meet the requirements below.</p> <p>Employer provide Training prior to exposure and annually thereafter.</p> <p>Safety, health and recognition of other hazards present at the work site.</p> <p>Safety, health and other hazards present at the work site.</p> <p>Employee “Right to Know.”</p> <p>Content of this standard and the attached appendices.</p> <p>Specific nature of the operations which could result in exposure to lead above the action level.</p> <p>The purpose and a description of the medical surveillance program, medical removal protection program, information on the adverse health effects of excessive exposure to lead (with particular attention to the adverse reproductive effects on both males and females, hazards to the fetus, and additional precautions for employees who are pregnant).</p> <p>Engineering controls and work practices associated with the employee’s work assignment, training employees to follow good work practices.</p> <p>Contents of the compliance plan.</p> <p>Chelating restrictions.</p> <p>Right to access records.</p> <p>Access to information and training materials.</p> <p>Use of Personal Protective Equipment (PPE).</p> <p>Safe use of engineering controls and equipment.</p> <p>Medical surveillance requirements including signs of overexposure.</p>

Line	Job Description	Requirement	29 CFR Requirement, or National Equivalent
2	Competent person.	OSHA requirement meets or exceeds RCRA requirement.	<p>All training required for a worker exposed to hazardous substances, health hazards, or safety hazards.</p> <p>Competent person defined as one who is capable of identifying existing potential or probable hazards in the surroundings or working conditions, which are unsanitary, hazardous, or dangerous to employees and has the authorization to take prompt corrective measures to eliminate them. There is no specific training protocol defined by either OSHA or EPA; however, the competent person must be designated by the employer, must show a combination of experience and training to effectively perform the position, and have the authority to take prompt corrective action.</p>

## APPENDIX C:

### ACCUMULATION AREA REQUIREMENTS BASED ON 40 CFR Part 262

See Bottom of Table for Satellite Accumulation Area Requirements.  
For Areas Outside the USA, Auditors Will Use National or Equivalent Codes,  
or 40 CFR as Referenced Throughout.

Category	Conditionally Exempt Small Quantity Generator	Small Quantity Generator	Large Quantity Generator
Quantity Limits	Less than: 220 lbs/mo 2.2 lbs/mo Acute HW 220 lbs/mo acute spill residue or soil	220 lbs to 2200 lbs/mo	Greater than: 2200 lbs/mo 2.2 lbs Acute HW 220 lbs/mo acute spill residue or soil
EPA ID	Not required	Required	Required
On Site Accumulation Quantity	Less than: 2200 lbs 2.2 lbs Acute HW 220 lbs Acute spill residue	Less than: 13200 lbs	No limit
Date on Container		Date accumulation begins See satellite accumulation area requirements below	Date accumulation begins See satellite accumulation area requirements below
Accumulation Time Limit	None	Less than 180 days, or 270 days if disposal site is greater than 200 miles	Less than 90 days
Storage Requirements	None	Basic requirements with tech standards for tanks or containers	Full compliance for management of tanks, containers, drip pads, or containment buildings
Off-site Management of Waste	State approved or RCRA permitted/interim status facility	RCRA permitted/interim status facility	RCRA permitted/interim status facility
Manifest or bill of lading	Not required	Required	Required
Biennial Report	Not required	Not required	Required
Personnel Training	Not required	Basic training required	Required

## APPENDIX C:

### ACCUMULATION AREA REQUIREMENTS BASED ON 40 CFR Part 262

See Bottom of Table for Satellite Accumulation Area Requirements.  
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or 40 CFR as Referenced Throughout.

Category	Conditionally Exempt Small Quantity Generator	Small Quantity Generator	Large Quantity Generator
Contingency Plan	Not required	Basic plan	Full plan required
Emergency Procedures	Not required	Required	Required
DOT Transport Requirements	Yes – if required by DOT	Yes	Yes

Satellite Accumulation Area (SAA) based on USA Federal Regulation 40 CFR Part 262.34:

Hazardous Waste in a SAA has fewer regulatory requirements than waste stored in central accumulation areas by small and large quantity generators.

Generator can accumulate up to fifty-five (55) gallons of hazardous waste or 1 quart of acutely hazardous waste in an SAA. Once the accumulation limits are exceeded, the container must be dated immediately and removed to a ninety (90) or one hundred eighty (180) day accumulation area (or shipped off site) within three (3) days.

Once the hazardous waste is shipped to a ninety (90) or one hundred eighty (180) “Day Accumulation Area,” it must be dated again to start the date count.

SAA does not require weekly inspections; however, containers must be in good condition, compatible with the waste stored in them, and labeled with “Hazardous Waste” and the contents.

Incompatible wastes must not be stored together.

The fifty-five (55) gallon limit is for the site, not per container; however, the generator may have multiple SAAs close to the point of generation.