

## AS-3; In House Applicator Trade Skills Training Audit Summary of Results

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Company Name:	Address:						
Auditor's Name:	Dates of Audit:						
	Date of Follow-up Audit:						
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Attribute Ratings: 1 = Unsatisfactor	y, 2 = Poor or Weakness, 3 = Satist	actory, 4	= Bette	r than Ave	rage, 5 =	Exception	al
Section	Comments	Section Score	Rated Value	Expected Value	Major Finding Recorded	Minor Finding Recorded	Observation Recorded
	ADMINISTRATIVE PRAC	TICES					
Business Structure							
Trade Skills Training Program Management							
Position Descriptions and Responsibilities							
General Knowledge Requirements							
Surface Preparation							
Coating/lining Application							
Data Collection & Documentation							
Testing Policies to Verify Trade Skills Knowledge							
Administrative Practices Results	This is an average of all Administrative Practices sections. It must be 3.0 or greater.						
TRAINING PRACTICES							
Execution of Training or Shop Work							
Field Practices Results	This is an average of all Field Practices sections. It must be 3.0 or greater.						

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## AS-3 In House Applicator Trade Skills Training Administrative Practices Audit Score Sheet

Attribute Ratings: 1 = Unsatisfactory, 2 = Poor or Weakness, 3 = Satisfactory, 4 = Better than Average, 5 = Outstanding

#### **Business Structure (7.1)**

Assessment of the business structure used by the contractor to manage, encourage, & deliver a trade skills training program to ensure the quality of the job being performed & availability of trained personnel.

Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
1	Business Structure and Practices 7.1	Assessment of in-house management structure and project support.			0			
2	Statement of Training Goals 7.2.1	Contractor must provide a written Statement of Training Goals & employee development objectives. Training Goals statement is readily available to employees in hard copy or electronic format. Expected: Contractor provides evidence of the training goals statement. The statement is prominently posted, and available for employees, managers, and customers to see. Outstanding: Contractor must provide evidence of routinely reminding people of the training goals commitment or emphasizing quality principles. Contractor must have a method to ensure that the training percentages from AS-1 & AS-3 are used to assign personnel to projects. Examples include banners, prominent posting, brochures showing commercially available training, or inclusion of training goals & objectives in periodic meeting discussions.			3			

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Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
3	Effective in-house training management team 7.4, & 7.4.1	Contractor must show evidence of an effective in-house management team including Training Manager, Trade Skill Instructor, Instructor, and Shop or Field Trade Supervisor. Contractor must provide evidence that there is enough depth in the organization to support all of the large jobs the contractor can perform simultaneously. Expected: Provide list of names for the required positions of Training Manager, Trade Skills Instructor, and Instructor, and evidence of experience, training, or other qualifying factors. Outstanding: Provide a list of additional qualified personnel including evidence of experience, training, or other qualifying factors for each of the positions to allow for expansion or replacement assignments as needed.			3			
4	Organizational Chart and Job Descriptions 7.4.2	Contractor must provide an organizational chart or contact list for significant training personnel within the organization. A large company may have more than one list but should include all company training personnel. Expected: One or more organizational charts covering Training Manager, Trade Skills Instructor, Instructor including contact information. Outstanding: Organizational charts would include photos and contact information for easy identification and access.			3			
5	Definitions of position descriptions for Trade Skills Manager, Trade Skills Instructor, & Instructor 7.2.2 & 7.5	Contractor must provide evidence of definitions of position descriptions for the Training Manager, Trade Skills Instructor, & Instructor. Expected: Requirement in the Training Manual that the Training Manager, Trade Skills Instructor and Instructor maintain Certification in accordance with AS-3 Auditing Standard. Outstanding not possible on this element. NOTE: SPECIFIC REQUIREMENTS OF POSTION DESCRIPTIONS ADDRESSED LATER.			3			

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Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
6	Trade Skills Training & Certification for Trade Skills Training	Contractor must provide evidence of direction for the Training Manager, Trade Skills Instructor and Instructor to maintain Certification in accordance with AS-2 Auditing Standard. Expected: Requirement in the Training Manual that the Training Manager, Trade Skills Instructor and Instructor maintain Certification in accordance with AS-3 Auditing Standard. Outstanding not possible on this element.			3			
	<b>Business Struct</b>	ture (7.1) Original Sect	ion Score:					

# **Trade Skills Training Program Management (7.3)**

Assessment of functions and management of the In House Trade Skills Training Program.

Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
7	Direction for development, review, update, and delivery of a lesson plan 7.3.1	Contractor must provide evidence of a written standard or instruction on how to manage lesson plans.  Expected: A template or sample lesson plan with instructions regarding lecture and testing, direction for periodic review & update. Outstanding: A formal tracked instruction defining tasks related to development, review, update, and delivery of a lesson plan, including a template or sample, scheduled review frequency, signatures from the author and the Training Manager for approval and requirement to mention or reference higher tier references and requirements.			3			

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Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
8	Training Plan & Lesson Plan for delivering trade skills training 7.3.2, 7.3.3, 7.3.4, 7.6.6.2, & 7.6.6.3	Contractor must provide evidence of a written Training Plan & Lesson Plan for each subject or group of subjects. Expected: A training plan & lesson plan for each subject or group of subjects describing how the subjects will be delivered and tested. Outstanding: A formal tracked instruction defining tasks and methods related to delivery of a specific lesson plan, including testing, industry standards used to develop the training plan, scheduled review frequency, signatures from the author and the Training Manager for approval and require mention of higher tier references and requirements.			3			
9	Managing written & hands on quizzes and tests 7.3.6 & 7.3.7	Training Program Manual must provide direction or protocol for administering written and hands on testing and quizzes, as well as direction for correcting or grading the tests and quizzes. Expected: At the Program level a direction or protocol for administering and correcting hands on and written tests and quizzes. Outstanding: Repeating the direction or referencing the direction from the Program level instruction in the subject matter Training Plans or the Lesson Plans.			3			
10	Trade Skills Training requirement 7.3.7	Contractor must show evidence of an instruction or manual requiring compliance with the Trade Skills Training and Certification Table in Auditing Standard AS-1. Expected: Written requirement for compliance with the Trade Skills Training and Certification Table in Auditing Standard AS-3. Outstanding not possible on this element.			3			

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Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
11	Managing, Tracking & Analyzing Employee Skills Development 7.3.8	Contractor must show evidence of an instruction for managing, tracking, & analyzing employee trade skills development. Expected: Training Program Manual or Training Plan direction for managing, tracking & analyzing employee trade skills development.  Outstanding: Program allowing the capability to report data in a format making analysis more simple and efficient. Reports, e-mails, or meeting minutes indicating active, routine analysis of data relating contractor skills requirements & employee development such as planned classes, matrix of employees with specific skills, & qualification expiration dates.			3			
12	Review contractor caused discrepancies & resolution to incorporate improvements into training 7.3.9	Contractor must show evidence of an instruction for reviewing & analyzing process or execution caused discrepancies and resolution for trends and training improvements. Expected: Contractor must provide evidence of process review related to contractor caused discrepancies. Outstanding: Contractor must provide evidence of a formal program for discrepancy analysis, including proposed or implemented process improvements, & inclusion in the applicable trade skills training plan.			3			
13	Review In House surveillances 7.3.10	Contractor must provide evidence of a written standard or instruction requiring review of surveillance reports or informal reports submitted by QA or Safety personnel for potential training changes. Expected: A written standard or instruction requiring review of surveillance reports or informal reports by QA or Safety personnel. Outstanding: A formal program requiring review of surveillance reports and analysis produced by the Training Manager including proposals for training modifications.			3			

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Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
14	Review In House surveillances 7.3.10	Contractor must provide evidence of a written standard or instruction requiring review of audit reports submitted by outside agencies, auditing bodies, or in house QA or Safety personnel for potential training changes. Expected: A written standard or instruction requiring review of audit reports submitted by outside agencies, auditing bodies, or in house QA or Safety personnel. Outstanding: A formal program requiring review of audit reports and analysis produced by the Training Manager including proposals for training modifications.			3			
	Trade Skills Training Program Management <b>Oxiginal Section Score</b> :							

## **Position Descriptions and Responsibilities (7.5)**

Assessment of Training Manager, Trade Skills Instructor, & Instructor position descriptions for thoroughness of responsibilities.

Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
15	Descriptions Development & approval of lesson plans, exams, quizzes, &	Contractor must provide detailed job descriptions for personnel within the Training organization. Expected: Contractor provide job descriptions for Training Manager. Detail including responsibility for development & approval for applicable lesson plans, exams, quizzes, lecture material, & retention testing. Outstanding: Not possible for this element.			3			
16	schedules, training schedules, & class	Contractor must provide detailed job descriptions for personnel within the Training organization. Expected: Contractor provide job descriptions for Training Manager. Detail including responsibility for OJT scheduling, training scheduling, & class scheduling. Outstanding: Not possible for this element.			3			

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Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
17	Position Descriptions Manage tracking system, OJT tasks & hours, training completed, test scores, etc. 7.5.1.3	Contractor must provide detailed job descriptions for personnel within the Training organization. Expected: Contractor provide job descriptions for Training Manager. Detail including responsibility for managing the skills tracking system for each employee, including OJT tasks & hours, training completed, training needed, test scores, due dates, progress review information to verify timely completion of tasks. Outstanding: Electronic system that tracks training & due dates, indicates training required for a specific assignment, triggers a reminder for the Training Manager, electronic tracking system for skills mix needs to match training to the employer's needs.			3			
18	to ensure balance of skills and	Contractor must provide detailed job descriptions for personnel within the Training organization. Expected: Contractor provide job descriptions for Training Manager. Detail including responsibility for selecting students for training to ensure balance between employee skills & employer needs. Outstanding: Electronic system that tracks training & due dates, indicates training required for a specific assignment, triggers a reminder for the Training Manager, electronic tracking system for skills mix needs to match training to the employer's needs.			3			
19	Position Descriptions Manage function & professional development of Instructors 7.5.1.5	Contractor must provide detailed job descriptions for personnel within the Training organization. Expected: Contractor provide job descriptions for Training Manager. Detail including responsibility for managing the functions & professional development of the instructors. Outstanding: Electronic or visual system that tracks instructor training, certification & due dates & triggers a reminder for the Training Manager. Provide opportunities for instructors to attend conferences, & workshops, on-line or in person to keep their skills current.			3			

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Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
20	Position Descriptions Present material, answer technical questions, counsel students on academic or trade skill issues 7.5.2.1, 7.5.2.2, & 7.5.2.4	Contractor must provide detailed job descriptions for personnel within the Training organization. Expected: Contractor provide job descriptions for Trade Skills Instructor. Detail including responsibility for presenting material in accordance with the applicable lesson plan, answering technical questions posed by the students, counseling students on academic or trade skill strengths & weaknesses. Outstanding: Not possible on this element.			3			
21	Position Descriptions Proctor exams & quizzes, maintain records, provide input 7.5.2.3, 7.5.2.5, & 7.5.2.7	Contractor must provide detailed job descriptions for personnel within the Training organization. Expected: Contractor provide job descriptions for Trade Skills Instructor. Detail including responsibility to proctor exams & quizzes, & maintain & provide to the Training Manager records of the students' progress, on academic or trade skill strengths & weaknesses. Outstanding: Electronic program that records scores, student records, & instructor input for use during periodic progress review.			3			
22	Position Descriptions Report recommended changes for lesson plans 7.5.2.6	Contractor must provide detailed job descriptions for personnel within the Training organization. Expected: Contractor provide job descriptions for Trade Skills Instructor. Detail including responsibility to report to the Training Manager recommendations for changes to the lesson plans. Outstanding: Not possible on this element.			3			

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Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
23	Position Descriptions Instructor responsibilities same as Trade Skills Instructor 7.5.3	Contractor must provide detailed job descriptions for personnel within the Training organization. Expected: Contractor provide job descriptions for Instructor. Detail including responsibility for presenting material in accordance with the applicable lesson plan, answering technical questions posed by the students, counseling students on academic or trade skill strengths & weaknesses. Outstanding: Not possible on this element.			3			
24	Position Descriptions Instructor responsibilities same as Trade Skills Instructor 7.5.3	Contractor must provide detailed job descriptions for personnel within the Training organization. Expected: Contractor provide job descriptions for Instructor. Detail including responsibility to proctor exams & quizzes, & maintain & provide to the Training Manager records of the students' progress, on academic or trade skill strengths & weaknesses. Outstanding: Electronic program that records scores, student records, & instructor input for use during periodic progress review.			3			
25	Position Descriptions Instructor responsibilities same as Trade Skills Instructor 7.5.3	Contractor must provide detailed job descriptions for personnel within the Training organization. Expected: Contractor provide job descriptions for Instructor. Detail including responsibility to report to the Training Manager recommendations for changes to the lesson plans. Outstanding: Not possible on this element.			3			
26	Shop/field Supervisor input on employee progress 7.5.4	Contractor must provide evidence of direction for Shop/field Supervisor input on employee progress review. Expected: Direction in the Training Manual or other document directing Shop/field Supervisor input regarding progress, strengths & weaknesses. Outstanding: Official tracking form or booklet & requirement for the Supervisor to submit the form or booklet at some reasonable frequency, such as 2 weeks.			3			

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Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
27	Employee input on employee progress & goals 7.5.5	Contractor must provide evidence of direction for employee to participate in the progress review. Expected: Direction in the Training Manual or other document directing the supervisor to conduct a meeting with the employee regarding progress, strengths & weaknesses. Outstanding: Official tracking form or booklet documenting the employee participation with the supervisor including written observations of strengths & weaknesses with a requirement for employee and supervisor signatures, and to submit the form or booklet after the meeting.			3			
	Position Descriptions and Responsibilities (75) iginal Section Score:							

### **General Knowledge Requirements (7.9)**

Assessment of the general knowledge requirements including the ability to read, write, and communicate in the language of the worksite, safety, health, and environmental training; the principles of corrosion and environmental control.

Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
28	Lesson Plan, testing, or other method to verify language skills 7.8.1	Contractor must demonstrate how using the applicable lesson plan, testing, or other methods will verify the employee's capability to read, write, speak and understand instructions in the language of the worksite. NOTE: THERE MAY BE MORE THAN ONE LANGUAGE IN COMMON USE AT THE WORKSITE. Expected: Contractor demonstrates that the lesson plan, and testing require the employee to be proficient in the language of the worksite. Outstanding: Electronic system that tracks training & due dates, indicates training required for a specific assignment, triggers a reminder for the Training Manager, electronic tracking system for skills mix needs to match training to the employer's needs.			3			

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Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
29	Employees receive general safety training prior to exposure to the worksite hazards 7.8.2	Contractor must demonstrate that employees receive general safety & health training prior to entering hazardous work sites. Expected: Contractor provides training rosters, employment papers, & job assignments to show that employees received safety & health training immediately after being hired. Training must include confined space entry, "Right to Know", use of PPE, fall protection, general respirator use, hearing protection, LOTO, & heavy metals & toxic materials exposure. Outstanding: Contractor's lesson plan, testing, quizzes, and verbal instruction are available in more than one language.			3			
30	Employees receive safety training prior to exposure to specific worksite hazards 7.8.3	Contractor must demonstrate that employees receive safety & health training specific to the task or assignment prior to performing that assignment. Expected: Contractor provides training rosters, & job assignments to show that employees received safety & health training related to the hazards of the task assigned. Training must include details on MSDS or SDS, product data sheet, working with solvents, & respiratory gear. Outstanding: Contractor's lesson plan, testing, quizzes, and verbal instruction are available in more than one language.			3			
31	Principles of Corrosion 7.8.4	Contractor must demonstrate that employees receive training covering the principles of corrosion, detrimental effects of corrosion, & principles of surface protection. Expected: Contractor provides training rosters, & lesson plan to show that employees received training related to the principles of corrosion.  Outstanding: Not possible on this element.			3			

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Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
32	Principles of Environmental Conditions & Data Collection 7.8.5.1, through 7.8.5.7	Contractor must demonstrate that employees receive training covering the principles of environmental conditions, detrimental effects of excessive humidity, surface & ambient temperature outside the acceptable range, & dewpoint. Expected: Contractor provides training rosters, & lesson plan to show that employees received training related to the principles of environmental conditions. Employees assigned to collect & record environmental data must receive training on the equipment being used, frequency of readings, documentation, and what to do if out of specification data is collected. Outstanding: Contractor has a specific, separate training module with hands on training, testing, & a qualification for personnel trained to collect & record environmental data. NOTE: AN INHOUSE TRAINING COURE DOES NOT QUALIFY AN EMPLOYEE TO PERFORM INDEPENDENT QA/QC FUNCTIONS.			3			
33	Principles of Environmental Controls 7.8.6.1, 7.8.6.2, 7.8.6.3, & 7.8.6.4	Contractor must demonstrate that employees receive training covering the principles of environmental controls to avoid detrimental effects of excessive humidity, surface & ambient temperature outside the acceptable range, & dewpoint concerns. Expected: Contractor provides training rosters, & lesson plan to show that employees received training related to the principles of environmental controls covering dehumidification, ventilation, heat, & air conditioning. Employees assigned to install, monitor, & maintain containments or environmental controls must receive training on the equipment being used. Other employees only need awareness training. Outstanding: Contractor has a specific, separate training module with hands on training, testing, & a qualification for personnel trained to install, monitor, & maintain environmental controls.			3			

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Itam	Attributo	Docarintian	Comments	Rated	Expected	Major	Minor	Observation
Item	Attribute	Description	Comments	Value	Value	Finding	Finding	Observation

## **Surface Preparation (7.10)**

Assessment of surface preparation requirements including training to perform an initial assessment of the surface, clean the surface, inspect for imperfections or manufacturer defects, prepare the surface using various methods and tools, and test the surface to ensure compliance with the specification and applicable standards.

Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
34	Existing surface assessment 7.9.1	Contractor must demonstrate that employees receive training covering the initial assessment of a surface to be prepared. Expected: Contractor provides training rosters, & lesson plan including discussion of SSPC-VIS 1 & SSPC-VIS 3 to assess the initial condition of the surface. During training employees demonstrate the use of VIS 1 & VIS 3, & assess a number of pieces of steel. Outstanding: Employees receive a description of the initial surface conditions to use at the job site.			3			
35	Existing coating assessment 7.9.2	Contractor must demonstrate that employees receive training covering the assessment of existing coatings on a surface to be prepared. Expected: Contractor provides training rosters, & lesson plan including discussion of coating degradation, heavy metals testing principles, & coating incompatibility concerns to assess the initial condition of the coating, & determine if it can be overcoated. Outstanding: Employees receive a description of the coating types, compatibility, & condition assessment to use at the job site.			3			

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Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
36	Cleanliness prior to surface preparation 7.9.3.1, 7.9.3.2, & 7.9.3.3	Contractor must demonstrate that employees receive training covering the assessment of surface cleanliness, and acceptable methods to clean surfaces that have visible contamination. Discussion must also address non-visible contamination. Expected: Contractor provides training rosters, & lesson plan including discussion of surface contamination, solvent washing, types of solvents relative to the types of contaminants. Outstanding: Training covers dipping, & vapor degreasing, as well as subjects in "Expected."			3			
37		Contractor must demonstrate that employees receive training covering surface preparation standards from NACE/SSPC, SSPC, & ISO. Expected: Contractor provides training rosters, & lesson plan including discussion of surface preparation standards. Outstanding: Not possible on this element.			3			
38	Common abrasives 7.9.5.1, through 7.9.5.9	Contractor must demonstrate that employees receive training covering common abrasives used in industry. Expected: Contractor provides training rosters, & lesson plan including discussion of common abrasives used in industry. A minimum of 5 abrasives must be included in the discussion. Outstanding: Same as above; however, a minimum of 8 abrasives must be mentioned and there must be at least 3 questions in the final test related to abrasive selection.			3			
39	Surface preparation of special substrates Zinc, Aluminum, & Stainless steel, 7.9.6.1, 7.9.6.2, 7.9.6.3, & 7.9.6.4	Contractor must demonstrate that employees receive training covering surface preparation of special substrates. Expected: Contractor provides training rosters, & lesson plan including discussion of the special substrates listed in AS-2. Outstanding: Not possible on this element.			3			

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Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
40	Surface preparation of special substrates Dissimilar metals 7.9.6.4	Contractor must demonstrate that employees receive training covering surface preparation of special substrates. Specifically, there must be discussion about the corrosive effects of dissimilar metals and preventive actions. Expected: Contractor provides training rosters, & lesson plan including discussion of dissimilar metals and the preventive actions to be taken. Outstanding: Not possible on this element.			3			
41	Surface preparation of complex geometry 7.9.7	Contractor must demonstrate that employees receive training covering surface preparation of complex geometry. Expected: Contractor provides training rosters, & lesson plan including discussion of complex geometry & the practices to be taken to prepare surfaces to the maximum extent practical. Outstanding: All of the above & discussion of the value & hazards of ricochet blasting, & the use of mirrors to verify complete surface preparation.			3			
42	Surface defects 7.9.8	Contractor must demonstrate that employees receive training covering surface defects & how to address them. Expected: Contractor provides training rosters, & lesson plan including discussion of surface defects & the practices to be taken to prepare surfaces properly when surface defects are encountered. Outstanding: Not possible on this element.			3			

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Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
43	Surface preparation methods 7.9.9.1 through 7.9.9.8	Contractor must demonstrate that employees receive training covering various methods of surface preparation. Expected: Contractor provides training rosters, & lesson plan including discussion of various methods of surface preparation & specific practices applicable to the types of surface preparation the contractor uses. Discussion should include surface preparation standards, compare surface cleanliness achieved, & cost relative to other methods. At least 5 of the methods listed in AS-2 must be discussed in detail. Outstanding: Same as above with detailed discussion of all 8 methods listed in AS-2. NOTE: SURFACE PREAPARATION METHODS AND EQUIPMENT MAY BE COMBINED IN THE LESSON PLAN AND PRESENTATION.			3			
44	Surface preparation equipment 7.9.10.1 through 7.9.10.11	Contractor must demonstrate that employees receive training covering various equipment used for surface preparation. Expected: Contractor provides training rosters, & lesson plan including discussion of various equipment used for surface preparation & specific practices applicable to the types of surface preparation equipment the contractor uses. Discussion should compare surface cleanliness achieved, & cost relative to other methods. At least 5 of the methods listed in AS-2 must be discussed in detail. Final test must include at least 3 questions about surface preparation equipment or methods. Outstanding: Same as above with detailed discussion of all 8 methods listed in AS-2. NOTE: SURFACE PREAPARATION METHODS AND EQUIPMENT MAY BE COMBINED IN THE LESSON PLAN AND PRESENTATION.			3			

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Surface preparation acceptance elements 7.9.11 through 7.9.11.3  Testing, inspection, frequency, & documentation for surface preparation for surface preparation for surface preparation for surface preparation of surface preparation standards & surface profile, cleanliness achieved vs. cleanliness specified, non-visible contaminants & specific testing applicable to the acceptance standards. Outstanding: Same as above with students demonstrating proficiency performing the tests.  Contractor must demonstrate that employees receive training covering how to perform & document various testing related to surface preparation for the elements listed in AS-2 paragraph 7.10.12; Equipment inspection, Nozzle aperture test, Blotter test, Needle pressure test, Porton visible contaminants testing, Abrasive cleanliness, & Visual surface inspection.  Expected: Contractor provides training rosters, & lesson plan including discussion of surface preparation testing above with students demonstrating proficiency performing the testing.	Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
training covering how to perform & document various testing, testing related to surface preparation for the elements inspection, listed in AS-2 paragraph 7.10.12; Equipment inspection, frequency, & Nozzle aperture test, Blotter test, Needle pressure test, documentation for surface Profile testing, Non-visible contaminants testing, Abrasive cleanliness, & Visual surface inspection. Expected: Contractor provides training rosters, & lesson 7.9.12 through Plan including discussion of surface preparation testing 7.9.12.8 & inspections listed above. Outstanding: Same as above with students demonstrating proficiency	45	preparation acceptance elements 7.9.11	training covering surface preparation acceptance standards. Expected: Contractor provides training rosters, & lesson plan including discussion of surface preparation standards & surface profile, cleanliness achieved vs. cleanliness specified, non-visible contaminants & specific testing applicable to the acceptance standards. Outstanding: Same as above with students demonstrating proficiency performing the			3			
performing the tests.	46	inspection, frequency, & documentation for surface preparation 7.9.12 through	training covering how to perform & document various testing related to surface preparation for the elements listed in AS-2 paragraph 7.10.12; Equipment inspection, Nozzle aperture test, Blotter test, Needle pressure test, Profile testing, Non-visible contaminants testing, Abrasive cleanliness, & Visual surface inspection. Expected: Contractor provides training rosters, & lesson plan including discussion of surface preparation testing & inspections listed above. Outstanding: Same as			3			

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Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
Coatin	σ/lining Annli	cation (7.11)						

Assessment of contractor's training practices related to coating/lining process. Includes discussion of the physical properties of coatings, selection of coatings, use of the product data sheet, proper material storage, application methods and equipment, recognizing and addressing application errors.

Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
47	Physical properties of coatings 7.10.1 through 7.10.1.3	Contractor must demonstrate that employees receive training covering coatings used in industry. Expected: Contractor provides training rosters, & lesson plan including discussion of coatings, convertible vs. nonconvertible, curing mechanisms, & properties of coatings used in industry. Outstanding: Same as above; however, there must be at least 3 questions in the final test related to coating selection or properties.			3			
48	Appropriate coating selection based on service 7.10.2	Contractor must demonstrate that employees receive training covering the type of coatings appropriate for a specific service environment. Expected: Contractor provides training rosters, & lesson plan including discussion of coatings, properties of coatings, how they react to conditions such as UV or chemical exposure with examples of coating types used in industry. Outstanding: Same as above; however, there must be at least 3 questions in the final test related to coating selection or properties.			3			
49	Product data sheet 7.10.3	Contractor must demonstrate that employees receive training covering the use of a Product Data Sheet. Emphasize the difference between the information on a PDS & an MSDS or SDS. Expected: Contractor provides training rosters, & lesson plan including discussion of the use of a PDS to learn the properties of coatings, how to prepare the surface, apply the coating, & cure the coating for service. Outstanding: Same as above; however, there must be at least 3 questions in the final test related to coating selection or properties.			3			

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Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
50	Material storage & staging 7.10.4	Contractor must demonstrate that employees receive training covering required material storage and staging conditions based on the Product Data Sheet. Emphasize secondary containment, temperature control, exposure to sunlight, ventilation, & environmental monitoring & recordkeeping. Expected: Contractor provides training rosters, & lesson plan including discussion of the use of a PDS to learn the properties of coatings, storage requirements, staging for use, & temperature limitations. Outstanding: Same as above; however, there must be at least 3 questions in the final test related to coating selection or properties.			3			
51	Material mixing 7.10.5 through 7.10.5.6	Contractor must demonstrate that employees receive training covering material mixing based on the Product Data Sheet. Emphasize visual inspection for condition of material in container, using clean mixer, ensure the proper Part A & Part B are being mixed, don't cross contaminate between Part A & Part B, induction time & temperature, mixing the entire batch, mixing for an adequate amount of time. Expected: Contractor provides training rosters, & lesson plan including discussion of the subjects mentioned above. Outstanding: Same as above; however, there must be at least 3 questions in the final test related to proper mixing of coatings.			3			

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Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
52	Coating/lining application methods 7.10.6 through 7.10.6.9	Contractor must demonstrate that employees receive training covering coating/lining application methods. Training should include description of methods, Pros & Cons of each method. As a minimum training should cover brush & roll, airless, plural component airless, conventional & HVLP. Expected: Contractor provides training rosters, & lesson plan including discussion of the subjects mentioned above. There must be at least 3 questions in the final test related to proper coating/lining application. Outstanding: Same as above; however, training must include air assisted airless, dip method, & flood & flow method. NOTE: TRAINING FOR APPLICATION METHODS & TOOLS MAY BE COMBINED.			3			
53	Coating/lining application tools 7.10.7 through 7.10.7.7	Contractor must demonstrate that employees receive training covering coating/lining application tools.  Training should include description of tools used for each method, Pros & Cons of each method. Training should cover brush & roll, airless, plural component airless, conventional & HVLP & compressor. Expected: Contractor provides training rosters, & lesson plan including discussion of the subjects mentioned above. There must be at least 3 questions in the final test related to coating/lining application tools. Outstanding: Same as above; however, training must include air assisted airless, dip method, & flood & flow method. NOTE: TRAINING FOR APPLICATION METHODS & TOOLS MAY BE COMBINED.			3			

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# Contractor Name 2018 Type of Audit

Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
54	Recognizing & addressing application errors 7.10.8 through 7.1110.8.6	Contractor must demonstrate that employees receive training covering recognizing coating/lining application errors. Training should include description of errors such as improper spray pattern or overlap, fingering or tailing, improper thickness, holidays, complex geometry, & off ratio pump, & how to correct the errors. Expected: Contractor provides training rosters, & lesson plan including discussion of the subjects mentioned above. Outstanding: Same as above; however, there must be at least 3 questions in the final test related to recognizing & correcting application errors.			3			
55	Testing, inspection, frequency, & documentation 7.10.9 through 7.10.9.4	Contractor must demonstrate that employees receive training covering WFT, DFT, visual inspection, holiday detection, and adhesion testing for employees involved with those activities. Training should include description of the readings, hands on use of the tools, & proficiency testing with the tools. Expected: Contractor provides training rosters, & lesson plan including discussion of the subjects mentioned above. Contractor provides evidence of hands on practical testing & test results. Outstanding: Same as above; however, there must be at least 3 questions in the final test related to testing, inspection, frequency of tests, or documentation.			3			
	Coating/lining	documentation.  Application (7.11) Original Section	on Score:					

### Data Collection & Documentation (7.12)

Assessment of contractor's training program for the collection and documentation of data. The contractor will define the training and certification required to perform data collection and quality control tasks within the company. Training may be provided by a third party such as NACE or SSPC, or training may be in house. However, in house training can only support data collection as a part of verifying the required parameters within the contractor's organization. In house training does not qualify or certify a worker to perform independent QA/QC functions.

Item   Attribute   Description   Comments	Rated	Expected	Major	Minor	Observation
Item Attribute Description Comments	Value	Value	Finding	Finding	Observation

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Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
56	Data Collection & Documentation precision measurement equipment 7.11.1.1	Contractor must demonstrate that employees receive training covering precision measurement equipment for employees involved with activities that require the use of precision measurement equipment. Training must include description of the equipment, how to operate the equipment, how to validate calibration of equipment & validation frequency, taking readings, hands on use of the tools, & proficiency testing with the tools. Expected: Contractor provides training rosters, & lesson plan including discussion of the subjects mentioned above. Contractor provides evidence of hands on practical testing & test results. Outstanding: Same as above; however, there must be at least 3 questions in the final test related to testing, validation of calibration, inspection tasks, frequency of tests, or documentation.			3			
57	Direction for actions to be taken if "Out of specification" data is collected 7.11.1.2	Contractor must demonstrate that employees receive training describing actions to take if out of specification data is collected. Training should emphasize recording the data collected, include the use of reporting forms, contact information, whether to continue work or wait for resolution. The answers to the above issues may change depending upon the type of data collected & the significance of the discrepancy. Training should refer to the specification for clarification Expected: Contractor provides training rosters, & lesson plan including discussion of the subjects mentioned above. Contractor provides evidence of case studies or role playing regarding problem solving. Outstanding: Not possible on this element.			3			

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Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
58	Data Collection & Documentation completing sample forms 7.11.1.3	Contractor must demonstrate that employees receive training describing specific hold point test requirements, general observation requirements including proper use of applicable form, & determining what data needs to be entered for a specific block or entry Expected: Contractor provides training rosters, written test sheets, & lesson plan including discussion of the subjects mentioned above. Outstanding: Not possible on this element.			3			
59	Specific hold point tasks & general observation tasks 7.11.1.4	Contractor must demonstrate that employees receive training describing specific hold point test requirements, & general observation requirements. Expected: Contractor provides training rosters, & lesson plan including discussion of the subjects mentioned above. Outstanding: Not possible on this element.			3			
60	Importance of objectivity & honesty in data collection & documentation 7.11.1.5	Contractor must demonstrate that employees receive training regarding objectivity & integrity when selecting random sample sites, collecting data, and recording data for test requirements & general observation requirements. Expected: Contractor provides training rosters, & lesson plan including discussion of the subjects mentioned above. Contractor provides evidence of case studies or role playing regarding integrity problems & typical worksite production pressure. Outstanding: Not possible on this element.			3			
	Data Collection	& Documentation (7.12) Original Section	ion Score:					

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Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
Testing	Policies to Ver	ify Trade Skills Knowledge (7 13)						

An assessment of the Contractor's Training Manual or Training Program Instruction coverage of testing protocols used for quizzes, written tests, and hands on testing for demonstrating trade skill knowledge.

Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
61	Physical & intellectual security of materials 7.12.2.1	Contractor must provide evidence of a written policy requiring physical & intellectual security of test material, written test keys, hands on test guidelines, student records, & grades. Expected: Training Program Instruction or Manual contains direction regarding security of the above listed items. Outstanding: Not possible on this element.			3			
62	Policy on cheating 7.12.2.2	Contractor must provide evidence of a formal documented policy that any cheating during a written or hands on test will be cause for failing the test. Expected: Written policy as described above. Outstanding: Not possible on this element.			3			
63	Separate but similar question banks 7.12.2.3	Contractor must provide evidence that separate but similar question banks are used for quizzes and testing. Expected: Contractor provides access to question banks to verify separation between the quiz question bank & the test question bank. Outstanding: Not possible on this element.			3			
64	Verify each question was covered 7.12.2.4	Contractor must provide evidence that each question used for quizzes and testing are covered in the documentation, lesson plan delivery, or assigned reading. Expected: Contractor provides access to question bank log showing reference to the location where the correct answer can be found. Outstanding: Not possible on this element.			3			

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Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
65	Hands on testing test panel 7.12.2.5.1	Contractor must provide evidence that the test panel used for hands on testing of surface preparation and coating application meets the requirements of ASTM D 4228. Expected: Contractor provides evidence of the above requirement. Outstanding: Not possible on this element.			3			
66	Hands on testing test panel equivalency 7.12.2.5.2	If the test panel or location used for hands on testing of surface preparation and coating application does not meet the description of ASTM D 4228, the contractor must provide evidence that the test panel or location used for hands on testing is of equivalent difficulty. Evidence must include written or photographic description of the deviation, & written description and technical justification of the equivalency of the deviation from this auditing standard. Expected: Contractor provides evidence of the above requirement if applicable. Outstanding: Not possible on this element.			3			
67	Written test key 7.12.2.6.1	Contractor must provide evidence of a test key used for correcting written tests & quizzes. Expected: Contractor provides evidence of the above requirement. Outstanding: Not possible on this element.			3			
68	Hands on test guidelines 7.12.2.6.2	Contractor must provide evidence of written test guidelines used for grading hands on tests. Guideline must provide definition of acceptable ranges for WFT, DFT & surface profile depth. Expected: Contractor provides evidence of the above requirement. Outstanding: Not possible on this element.			3			
	Testing Policies	to Verify Trade Skills Knowledg <b>O(1gii)al Sect</b> i	ion Score:					

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### AS-3 In House Applicator Trade Skills Training Practices Audit Score Sheet

Attribute Ratings: 1 = Unsatisfactory, 2 = Poor or Weakness, 3 = Satisfactory, 4 = Better than Average, 5 = Outstanding

### Observation of Testing Practices (5.4.10)

Assessment of contractor's training practices and adherence to the management program elements previously verified during the review portion of this assessment. Jobsite assessment will include observation of training & testing, verification of mock up facility or contractor's equivalency assessment, observation of written and hands on retention testing, & grading of tests.

Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
69	Proctor retention test 5.2.4.1	Contractor will arrange for a written retention test of several employees randomly selected by the auditor from the list of qualified employees for a given subject. Auditor will select 10 names. The contractor may eliminate up to 5 names for cause, such as assigned out of the area; however, any employees eliminated will be replaced by additional employees randomly selected by the auditor. Retention test will be performed the next day. The Instructor will be allowed a 30 minute verbal review session prior to the test. Expected: Instructor will provide verbal review, require the tables to be cleared, then distribute the test used to originally qualify the students. Time allowed will be consistent with the Lesson Plan for the subject. The average of all retention test scores will pass with a 70% score. Outstanding: Average of all retention test scores is at least 90%, all students pass with at least a 70% score.			3			

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Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
70	Verify mock up facility or equivalency report 5.2.4.2	Contractor must provide access to the mock up facility & test panel. If the contractor uses a test panel or location determined to be of equivalent complexity, review the assessment & documentation required by AS 2. Expected: The mock up facility has the equipment & support services necessary to abrasive blast and apply coatings. The test panel complexity is equivalent to the complexity of the panel defined in ASTM D 4228. Outstanding: Mock up location includes confined spaces, crawling, areas that require a mirror to verify blasting & coating application.			3			
7/1	Hands on skills testing 5.2.4.4	Contractor will arrange for a hands on retention test of several employees randomly selected by the auditor from the list of qualified employees for a given subject. Auditor will select the number of names indicated per paragraph 5.2.4.4. The contractor may eliminate up to 1 name for cause, such as assigned out of the area; however, any employee eliminated will be replaced by an additional employee randomly selected by the auditor. Retention test will be performed the next day. The Instructor will be allowed a 30 minute verbal review session prior to the test. Contractor may perform a final exam for a class instead of a retention exam. Expected: Instructor will provide verbal review, then proctor the hands on test. Time allowed will be consistent with the Lesson Plan for the subject. The average of all retention test scores will be at least 70%; at least 75% of the students will pass with a 70% score. Outstanding: Average of all retention test scores is at least 90%, all students pass with at least a 70% score.			3			

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Item	Attribute	Description	Comments	Rated Value	Expected Value	Major Finding	Minor Finding	Observation
72	Grading or correcting of written tests based on a test key 7.12.2.6.1	The contractor must provide access to the written test key, and a number of graded written tests. Auditor will randomly select names for a list of qualified personnel for a given subject. The contractor shall provide the corrected test used as the basis for qualification. Expected: Auditor reviews a sample of the tests provided with the sample key to determine that the grading was consistent & objective. If there are any deviations from the results obtained with the test key they should be clearly explained on the test sheet. Outstanding: Evidence that the Instructor has identified discrepancies, such as test questions that require an incorrect answer or vague questions. The evidence must show corrective actions such as changing the test or clarifying the direction in the lesson plan.			3			
73	Grading or correcting of hands on tests based on a written guideline 7.12.2.6.3	The contractor must provide access to the written guideline & a number of graded hands on test results sheets. Auditor will randomly select names for a list of qualified personnel for a given subject. The contractor shall provide the corrected test results used as the basis for qualification. Expected: Auditor reviews a sample of the tests provided with the written guidelines to determine that the grading was consistent & objective. If there are any deviations from the results obtained with the written guidelines they should be clearly explained on the test results sheet. Outstanding: Evidence that the Instructor has identified testing discrepancies, such as too narrow a range for DFT readings or profile readings. The evidence must show corrective actions such as changing the written guidelines or clarifying the direction in the lesson plan.			3			

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