



Partial Blast of Ultra High Solids Coatings on Navy Ships

NSRP SPC Panel Project Update

May 21, 2018

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Partial Blast of Ultra High Solids Coatings on Navy Ships

PROJECT TECHNICAL REPRESENTATIVE

- Bob Cloutier, GD-BIW

INDUSTRY INVOLVEMENT

- BAE Systems Southeast Shipyards, GD-NASSCO, GD-Electric Boat, HII-Newport News Shipbuilding, Main Industries, IMIA LLC, Marine Specialty Painting, MARCOM Services LLC, International Paint, Sherwin Williams, On Point Solutions

NAVY INVOLVEMENT

- NAVSEA 05, NAVSEA 04, Southeast RMC, SURFMEPP, SEA 21, Puget Sound Naval Shipyard, NSWC Philadelphia, Carrier Planning Activity, UNaval Research Laboratory

Partial Blast of Ultra High Solids Coatings on Navy Ships

SCOPE

- Continue institutionalization efforts to substitute a partial blast for a full blast during re-preservation of tanks and/or voids with ultra-high solids coatings on surface ships
 - Continue monthly working group telecom's
 - Perform additional demonstration(s) on active Navy Ships
 - Evaluate performance of documented partial blast areas
 - Perform cathodic disbondment testing of "partial blasted" test panels
 - Submit wording to SSRAC for NAVSEA Standard Item 009-32

Why “Partial” Blast?

Why do we spend a disproportionate amount of surface preparation time removing paint from “difficult areas” and then spend a disproportionate amount of application time coating those areas?

- 6.4:1 ROI with conservative assumptions
- 1.5 year payback after implementation
- Breakeven over 7 years if only 10% of tanks are candidates
- Other applicable spaces exist and will improve ROI

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Major Project Efforts

- Develop Industry Standard
- Process Demonstrations
- Performance Confirmation
- Project Outreach & Implementation



3377 (REV. 08/04) (FORM PREVIOUS EDITIONS) (REV. 08/04)

Activity Name (if applicable) _____ (SIC #) (NAICS #) (NAICS Code)

NAI/NEA Standard Specification for
Site Remediation and Abatement Committee (SSAC)
2017 SSAC Meeting

Submitted by	File #	Activity	NSQP	Date
TYPE OF PROPOSED CHANGE				
Administrative	<input type="checkbox"/>	Technical	<input type="checkbox"/>	
Standard Form	<input type="checkbox"/>	NSI	<input type="checkbox"/>	Yes <input type="checkbox"/> No <input type="checkbox"/> and Meeting Requirements: as complete
Plan Attachment ID	Page: NSQP			
NSI	<input type="checkbox"/>	Yes		
Plan	Page:			
Approach A-E	<input type="checkbox"/>	Section	Page	Page
Annex A	<input type="checkbox"/>	Page	Annex B	Page

COMMENTS:
Single task only. Prop 2224 (Type III) (Class A) is subject to general conditions at the end of these comments and any other special conditions that apply to this project. This review and approval is for the submitted plans and any other documents submitted with this task.

REVISIONS FOR CHANGE:
Single task only. Prop 2224 (Type III) (Class A) is subject to general conditions at the end of these comments and any other special conditions that apply to this project. This review and approval is for the submitted plans and any other documents submitted with this task.

PROPOSED CHANGE:
Incorporate the attached procedure as Attachment 3.
Add Note (N) (if applicable) to the PROPOSED, the bottom pre-approval method of Final Plan, located in Attachment 3 may be used in place of the current proposed NSI/NAI/E standard required in the Table List.
Reference Note (N) (if applicable) BEFORE SUBMITTING:
Table 1, Line 24; Table 2, Line 19; Table 3, Line 16; Table 4, Line 21; Table 5, Line 23A; Table 6, Line 15; Table 7, Line 18A; Table 8, Line 10; Table 9, Line 16A; Table 10, Line 16; Table 11, Line 10; Table 12, Line 16; Table 13, Line 16; Table 14, Line 20

IMPACT: NO IMPACT INCREASE DECREASE

Proposer shall be required to provide cost estimates and contractor cost associated with the proposed change.
Work independently performed by the NSQP 2017 team and CDPV 410 (approximately 6-10% of implementation cost) are included.

FINANCIAL IMPACT: NO YES

If YES, describe whether impact:
Work independently performed by the NSQP 2017 team and CDPV 410 (approximately 6-10% of implementation cost) are included.

Approaches to an Industry Standard

- The proposed procedure is essentially an adaptation to SP-10 or SP-14
 - Proposed a “Navy appendix” to the current standards
- “Partial Blast” can apply to dry abrasive blast, wet abrasive blast and waterjetting
 - Current NSI 009-32, Attachment C describes a waterjetting “spot and sweep” process
 - Drafted addition to SP-10: Annex Z – “Partial Blast” of Surfaces with Remaining Serviceable Coating
 - Developing a new industry standard for “spot and sweep” using water or abrasive

Process Demonstration

- CWP demonstrations
- LPD-21 Well Deck Overhead
- LPD-17 Fwd Peak Tank ultimately considered to risky considering the remainder of the work package
- Navy Paint Center of Excellence Project topside demonstration
- DDG-82 (LASSEN) partial blast as an option item in the work package



Performance Confirmation

- NEWYORK (LPD-21) Well Deck Overhead (~1 year old)
 - Completed inspection JAN2018 & provided backup material to clear DFS
- KEARSARGE (LHD-3) Well Deck Overhead (~6 years old)
 - Cannot distinguish swept vs SP-10 areas
- Spaces blasted as part of CWP-356 demonstration
 - No additional data available
- Cathodic Protection Testing (in progress)



Project Status

- Current end date is 31MAY2018
 - Draft report in progress
- On-going efforts
 - SSPC standards activity
 - Navy PCoE project
- Update on the NRL Initiative during MegaRust Session 8 – Thursday at 1330

Questions?

For more information attend the NRL briefing
Session 8 – Thursday as 1330