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## MEMORANDUM

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Mission Readiness Product Line

Reply MRPL SHI PM  
to CDR Belmont  
Attn of: (425) 736-7390

To: Distribution  
Thru: CG SILC

Subj: SUPPLEMENTAL GUIDANCE FOR AFC-43 SAFE HOMES INITIATIVE PROJECTS

Ref: (a) CG-43 memo 11000 dtd 27 Oct 2020  
(b) My memo 11101 dtd 10 Jan 2020  
(c) Safety and Environmental Health Manual COMDTINST M5100.47C, Chapter 25  
(d) HUD Technical Guidelines for the Evaluation and Control of Lead-Based Paint (LBP) Hazards in Housing  
(e) 40 CFR 763  
(f) CG-43 memo 11000 dtd 11 Feb 2020  
(g) Depot-Level Project Naming Conventions SILC-CSTO-36-11

1. This memo supplements reference (a), and provides additional guidance for Safe Homes Initiative (SHI) AFC-43 funded projects in FY21 and beyond. Paragraph 14 of this document supersedes reference (b) as guidance for standardized SHI project entries in SAMS and FPD -in order to track, maintain historical record, and account for SHI project execution and financial records. The FY21-FY23 SHI Spend Plan is attached as enclosure (1).

2. The Coast Guard launched the Safe Homes Initiative in July 2019 to identify and address potential environmental health hazards in Coast Guard owned housing. This Initiative focuses largely on homes constructed prior to 1979, when use of lead-based paint and asbestos-containing building products was prohibited. Contracted state-certified environmental risk assessments (ERAs) were initiated by CG-13. The Coast Guard is nearly complete with the pre-1979 housing ERAs. The results of the ERAs are often Action level or Major findings, which per reference (c) require immediate Interim Controls (ICs), as well as abatement within 3 years or 1 year, respectively.

3. When there are Action level or Major findings, the Coast Guard has a mandate to act without hesitation. In many cases, the local Base can contract lead dust cleaning and/or institute administrative controls to satisfy IC requirements when a state-certified assessor concurs with such actions. In other cases, the problem is too complex for an organizational-level (AFC-3X funded) solution. In these cases depot-level (AFC-43 funded) solutions are required.

4. The first priority of any SHI AFC-43 project is to safely and expeditiously mitigate identified SHI hazards to the Monitoring level. Use of SHI AFC-43 funds should specifically address lead, asbestos, or radon hazards, and should not seek to address all possible hazards in a home (i.e. structural, fire, or electrical code deficiencies).

5. **SHI Business Rules:** All SHI AFC-43 projects shall be planned, prioritized and executed according to the following business rules:

- a. All Action level and Major findings must be mitigated. Priority should first be given to addressing ERA findings through use of Interim Controls that lower the risk to a Monitoring level. A well planned, designed and funded Abatement project will follow the Interim Controls within 1 to 3 years of when the hazard was first identified in the ERA. For both Interim Control and Abatement projects, the project scope must address the specific ERA findings.
- b. New SHI projects should target executability within the programmed FY. Consideration for planning, design, contracting Procurement Administrative Lead Time (PALT) and the Minor Construction Authority (MCA) are key aspects of executability.
- c. When abatement of all ERA findings is not plausible, due to time or fiscal constraints (funds available, FRMM/OE Cert limitations), MRPL shall be notified in writing with an outlined business case that projects the costs of maintaining interim controls for a 20-year period. In such cases, MRPL will consult with appropriate stakeholders to facilitate a way forward.
- d. In cases where other DLM work can be completed incidental to SHI hazard mitigation, projects can be consolidated into a single contracting action; however, execution of SHI projects shall not be delayed toward this end. The financial limitations of reference (f) still apply, including the MCA. SHI AFC-43 funds will only fund the actual SHI work. Additionally, consideration must be given to how including the DLM work may negatively impact follow-on abatement projects.
- e. SHI projects should not be delayed for possible divestiture situations. When CG owned family housing is approved for divestiture, it is listed on the annual Congressional Report titled "Conveyance of Coast Guard Real Property". If a CG owned home is not listed on the annual report, then a SHI project shall be planned and executed. MRPL can help coordinate a determination of divestiture status with SILC and CG-43.

6. **Self-Help Projects:** In *most* cases a Self-Help project that utilizes Coast Guard personnel to resolve ERA findings is not authorized. When considering the use of Coast Guard personnel, the following guidance from reference (c) must be strictly followed:

- a. If during the ERA, destructive sampling further damages lead based paint, Coast Guard personnel are only allowed to conduct minor repairs and maintenance activities to that specific area. Minor repairs and maintenance activities are defined as activities that disturb 6 sq. ft. or less of painted surfaces per room for interior activities; 20 sq. ft. or less of exterior activities, and do not involve window replacement. Separate from correcting ERA findings, Coast Guard personnel may conduct other minor repairs and maintenance activities incidental to disturbing the lead based paint, as long as a lead hazard control plan is in place, i.e. replacing an electrical outlet or unclogging plumbing. Consultation with the local Safety and Environmental Health Officer (SEHO) prior to starting work is strongly encouraged.

- b. Otherwise, in accordance with reference (c), All asbestos and lead Major or Action Level findings must be corrected by contractors licensed to perform asbestos and/or lead work and not by Coast Guard personnel.
- c. Self-Help projects must not impact asbestos containing material (ACM).
- d. A qualified radon service professional must correct all radon Major or Action Level findings.

**7. Lead Finding Response:** The objective level of performance of every SHI AFC-43 lead project should always be to fully abate through removal of all lead hazards in Coast Guard owned housing (to include military family housing, unaccompanied personnel housing and REPFACs). A secondary priority should be to abate lead hazards reasonably connected to the housing community, which would address the adjacent buildings or structures (i.e. lighthouses) contributing to the elevated lead hazard (i.e. lead dust) in the homes. With that said, we must recognize that the demand for lead remediation far outweighs resources available. Therefore, the threshold level of performance of every SHI AFC-43 project is to meet the minimum requirements of reference (c) by first addressing the lead finding as defined in the original lead inspector's reports (ERA) and recorded as findings in the Housing Maintenance Information System (HMIS).

- a. Interim Controls. ICs are intended to make dwellings lead-safe quickly by temporarily controlling lead-based paint hazards, while abatement is intended to permanently control lead-based paint hazards and eliminate exposure risks.
  - i. Administrative controls are a form of Interim Controls and could include a site-specific lead hazard control plan, notification of the residents, physically restricting access to the area where the hazard is or instituting specific cleaning procedures.
  - ii. Local OLM performed work could include lead dust cleaning, paint stabilization, and addressing friction surfaces with a temporary solution.
  - iii. CEU/HQ FE AFC-43 work would include lead paint stabilization.
- b. Abatement. While the ICs employed may rely on "spot" paint stabilization and dust clean up, the abatement must specifically address all of the lead finding as defined in the original lead inspector's ERA reports and recorded in HMIS. Abatement is intended to permanently control lead-based paint hazards and could include component replacement, paint removal, enclosure, or encapsulation.
- c. Definitions. Enclosure (3) provides pertinent definitions related to lead hazard ICs and abatement, including:
  - i. *Removal of the building component:* Removing a door, window sill, hand rail, etc. coated with lead paint intact and in whole for proper disposal;
  - ii. *Removal of the lead paint from components:* Complete removal of all lead paint from surfaces or components down to bare substrate by an EPA certified lead firm;
  - iii. *Enclosure of the component:* installation of rigid, durable barriers that are mechanically attached to building components, with all edges and seams sealed. Surfaces with lead paint are enclosed to prevent access and exposure and to provide a dust-tight system expected to last at least 20 years under normal conditions.

- iv. *Encapsulation of lead-based paint*: A process that makes lead-based paint inaccessible by providing a barrier between the lead-based paint and the environment. This barrier is formed using a special liquid-applied coating (with or without reinforcement materials) or an adhesively bonded covering material that meets EPA, ASTM or state standards and warranted by the manufacturer for at least 20 years;
- v. *Soil removal or covering*: Several options exist to abate soil lead hazards including: covering with a resilient, impervious surface material such as asphalt or concrete (all levels of contamination); removing/replacing the top 6” of soil (high contamination); and soil amendment and treatments (moderate to low contamination).

8. **Asbestos Finding Response**: The objective level of performance of every SHI AFC-43 asbestos project should always be to fully abate through removal of all asbestos containing building material (ACBM) hazards in Coast Guard owned housing (to include military family housing, unaccompanied personnel housing and REPFACs). With that said, we must recognize that the scope of demand far outweighs resources available. The threshold level of performance of every SHI AFC-43 project is to meet the minimum requirements of reference (c), i.e. the abatement must address the asbestos finding as defined in the original asbestos inspector’s reports and recorded as findings in HMIS. Furthermore, the current SEHM indicates the Civil Engineering Program should not seek out and create new projects in homes without asbestos Action level or Major Findings for the sole reason of removing asbestos. Rather, the guidance steers the Program to first abate the asbestos findings, which then would make it the optimal time to abate all of the asbestos in a home.

- a. Asbestos Interim Controls and Abatement. Per reference (c), there are similar approaches used for ICs to address asbestos hazards as are used to address lead hazards. In both cases “Action Level findings must receive interim control that either manages the hazard in place or abates the hazard” and “Major findings must receive immediate interim control measures.”
  - i. Interim Controls. Administrative controls are a form of Interim Controls and could include a site-specific asbestos hazard control plan, notification of the residents, and physically restricting access to the area where the hazard is and closing off air flow to and from the space.
  - ii. Abatement of Action Level Findings. For Action Level Findings, abatement is an acceptable 20-year solution that manages the asbestos in place. This could include repair, encapsulation or enclosure, however complete removal of the asbestos containing building material (ACBM) should always be evaluated for feasibility and cost.
  - iii. Abatement of Major Findings. For asbestos abatement of Major Findings, a 20-year solution that manages the asbestos in place is acceptable, unless the condition of the ACBM, likelihood of future ACBM disturbance by operations and maintenance activities, required regular follow-on ACBM maintenance or expense of such a solution, makes full removal of the asbestos a necessary solution.
- b. Definitions: Reference (e) provides the following definitions for response actions to ACBM (which covers a broad range of materials, including thermal insulation

and floor tiles) as follows:

- i. *Encapsulation* means the treatment of ACBM with a material that surrounds or embeds asbestos fibers in an adhesive matrix to prevent the release of fibers, as the encapsulant creates a membrane over the surface (bridging encapsulant) or penetrates the material and binds its components together (penetrating encapsulant).
  - ii. *Enclosure* means an airtight, impermeable, permanent barrier around ACBM to prevent the release of asbestos fibers into the air.
  - iii. *Removal* means the taking out or the stripping of substantially all ACBM from a damaged area, a functional space, or a homogeneous area.
  - iv. *Repair* means returning damaged ACBM to an undamaged condition or to an intact state so as to prevent fiber release.
  - v. *Response action* means a method, including removal, encapsulation, enclosure, repair, operations and maintenance that protects human health and the environment from friable ACBM.
- c. In the absence of SHI asbestos findings, when a maintenance, emergency repair, or renovation project will need to disturb asbestos, strong consideration should be given to complete removal of the asbestos in and near the area of disturbance by a qualified contractors licensed to perform asbestos work and not by Coast Guard personnel.

**9. Radon Finding Response:** Per reference (c), “A qualified radon service professional must correct all radon Major or Action Level findings.” An exception to this statement would be if a specific radon ventilation system was previously installed by a qualified service professional, yet requires parts replacement as part of a typical maintenance or repair activity executed by in-house personnel. New systems should be installed by a qualified radon service professional.

**10. 3rd Party Certification:** A critical aspect of all Interim Control or Abatement actions is the 3rd party state-certified lead, asbestos or radon assessor. The assessor must conduct a clearance examination, provide documentation and certify that the actions taken have reduced the risk to a monitoring level for Interim Controls or have abated the original findings. The 3<sup>rd</sup> party state-certified assessor must remain independent and impartial.

**11. HMIS:** After the 3rd party state-certified assessor clears the house, the Housing Program is responsible for updating the status in HMIS. Close coordination between the Housing Program representatives and the Civil Engineer Program will ensure that all of the findings are either reduced to a monitoring level or abated and that HMIS is properly updated.

**12. State vs. Coast Guard standards:** When planning an Interim Control or Abatement project, keep in mind that a number of states have laws for asbestos, lead or radon that are more stringent than the Coast Guard requirements. In those states, state law shall take precedence over the requirements set forth in reference (c).

**13. SHI Funding:** As per reference (a), MRPL will prioritize and SILC will distribute approximately \$8M in annual SHI funding for FY21-23. The focus for FY21 SHI lead hazard projects is to quickly implement ICs as a result of the SHI ERAs initiated in FY19 and FY20.

FY22 SHI projects should be focused on any remaining ICs while transitioning to full abatement projects for homes that already received ICs. SHI projects in FY23 and beyond should be full abatement projects, likely revisiting homes with in place ICs.

- a. Recognizing the relative immaturity of the SHI Program as compared to normal lead times for design and contracting, some portion of AFC-43 SHI funds may be more effectively applied to planned/funded projects. Therefore, executing units may request reimbursement for approved C-POP and R-POP projects with an SHI-nexus. Specific FY21 and FY22 projects meeting this criteria were identified and listed in Enclosure (1) as *Below the Cut Line SHI Projects*. For FY23, *Below the Cut Line SHI Projects* are C-POP approved and R-POP projects under consideration.
- b. Annually, MRPL will prepare a spend plan and list of known SHI projects that will not be addressed in the FY, creating a backlog list of SHI projects. Additionally, MRPL will maintain a list of projects where reference (c) requirements cannot be met due to FRMM limitation. The development of an annual SHI spend plan and the backlog will rely heavily on CEU and HQ FE input.
- c. For FY24 and beyond, MRPL will produce an SHI spend plan, backlog and list of projects where reference (c) cannot be met for CG-43 to seek CG-1 endorsement. Both the Housing Program and the Health and Safety Program fall under the CG-1 chain of command, so in time of conflict, CG-1 shall determine which CG-1 policy prevails.

**14. SHI Documentation:** To efficiently track and organize AFC-43 projects related to the Safe Homes Initiative, MRPL is implementing the following Shore Asset Management System (SAMS) data entry guidelines. This guidance supersedes reference (b).

- a. Utilizing the optional entry component per reference (g), housing projects in support of the Safe Homes Initiative shall use “SHI” in the SAMS *Project Title* field using the following naming convention and format:
  - (1) [SHI] + [Action Verb] + [specific component] + [location description] + [notes]
  - (2) The Action Verb is either “Interim Controls” or “Abatement”. For a child project, the Action verb may be followed by “Design” or “Testing”.
  - (3) The specific component is optional, as often in an SHI project, each house is unique in its ERA findings.
  - (4) The location description is the plain language name of the primary RPUID involved.
  - (5) Notes shall contain the words “Asbestos”, “Lead”, and/or “Radon”. This section will always be in parenthesis.
  - (6) Example: SHI Abatement Exterior Siding STA Smith Island Family Housing (Lead and Asbestos)

Subj: SUPPLEMENTAL GUIDANCE FOR AFC-43 SAFE HOMES  
INITIATIVE PROJECTS

11001  
15 Dec 2020

- b. Additionally, in the SAM *Description of Work* field, the phrase “Safe Homes Initiative” shall be utilized to characterize the project.
- c. In accordance with reference (b), cost center 72331 was established to track all Safe Homes Initiative projects. This cost center should be linked to all obligations and expenditures resulting from SHI projects. Additionally:
  - (1) The FPD “Project” data field shall be populated using “SAFEHOME”.
  - (2) If a project is not 100% related to the Safe Homes Initiative, only work items connected to the Safe Homes Initiative shall be coded with cost center 72331.

15. **EC&R Projects and Funding:** This guidance is not meant to supersede or override EC&R remediation policies or guidance for findings outside of a building’s dripline. Close coordination between CG-43 and CG-47 is necessary to address SHI ERA findings that require both AFC-43 and EC&R corrective action.

16. Not every situation can be covered by this guidance. Executing units should refer specific questions to the Mission Readiness Product Line / Housing Asset Line.

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Enclosure: (1) FY21-23 MRPL SHI Spend Plan  
(2) CG-113 Risk Assessment Frequently Asked Questions  
(3) CG-113 Safe Homes Initiative Frequently Asked Questions Additions

Dist: CG CEU Cleveland  
CG CEU Honolulu  
CG CEU Juneau  
CG CEU Miami  
CG CEU Providence  
TRACEN (Cape May, Petaluma, Yorktown, Mobile) (fe)  
CG Yard  
CG ACADEMY (fe)  
CG FDCC

Copy: COMDT (CG-13), (CG-43), (CG-47)  
CG PSC-PSD-fs

**FY21 SHI Spend Plan**

Project Number	Benefitting Unit / Tenant Unit	ATU	Project Description	IGE Sum	SHI Portion	Executing Unit
16130252	Base Alameda	31	SHI Remediate Lead Hazard Exposure at Novato Housing (Phase 2/2)	\$ 400,000	\$ 400,000	CEU Oakland
15829805	Base Cape Cod	31	SHI Abate LBP/Asbestos 11 Homes Base Cape Cod Housing	\$ 65,459	\$ 65,459	CEU Providence
15832603	Base Cape Cod	31	SHI: Abate LBP/Asbestos Base Cape Cod CDC and 45+ Homes	\$ 1,400,000	\$ 1,400,000	CEU Providence
16157377	Base Det Borinquen	31	SHI Repair Air Station Housing Safe Homes Initiative Phase I	\$ 3,500,000	\$ 3,500,000	CEU Miami
14585032	CGA	60	SHI - USCGA Encapsulation Quarters 4	\$ 68,811	\$ 68,811	CGA
16401805	CGA	60	SHI Lead Cleaning & Wipe Sampling Qtrs 4	\$ 32,000	\$ 32,000	CGA
13136241	STA Monterey	11	SHI Abate/Encapsulate Lead Paint at Point Pinos Housing	\$ 350,000	\$ 250,000	CEU Oakland
15204016	STA Tillamook	13	SHI Abate Lead Based Paint at 1200 Garibaldi Ave	\$ 500,000	\$ 450,000	CEU Oakland
9949558	TRACEN Petaluma	74	SHI - Reroof & Reside 405 Housing	\$ 1,200,000	\$ 800,000	TRACEN Petaluma
14796824	TRACEN Petaluma	74	SHI- Interim Controls Phase 1	\$ 220,000	\$ 220,000	TRACEN Petaluma
15597344	Base Boston	1	SHI Repair Siding & Tile Flooring Beverly Hsg	\$ 50,000	\$ 50,000	CEU Providence
8927460	Base Kodiak	31	Major M&R Kodiak SOQ E	\$ 989,470	\$ 200,000	CEU Juneau
10083202	STA Sturgeon Bay	9	Convert Qtrs A&B to Multi-Use UPH at STA Sturgeon Bay	\$ 799,799	\$ 114,000	CEU Cleveland
			Third Party State Certified Inspector Costs	\$ 500,000	\$ 500,000	
<b>Grand Total:</b>					<b>\$ 8,050,270</b>	

**FY21 Below the Cut Line SHI Projects**

Project Number	Benefitting Unit / Tenant Unit	ATU	Project Description	IGE Sum	SHI Portion	Executing Unit
TBD	Base Cape Cod	31	SHI: Interim Controls LBP/Asbestos Base Cape Cod Housing	\$ 500,000	\$ 500,000	CEU Providence
3449585	CGC MACKINAW	31	Repair Cheboygan Mackinaw Housing	\$ 277,500	\$ 50,000	CEU Cleveland
05-C03058	Sta Milford Haven	5	STA Milford Haven UPH	\$ 250,000	\$ 50,000	CEU Cleveland
8270991	USCGC HICKORY	31	Repair Housing Interiors Homer (Phase 4 of 5) (C-POP)	\$ 1,000,000	\$ 150,000	CEU Juneau
10269637	STA Brant Point	31	Major M&R Gouin Village HSG Phase 2 (C-POP)	\$ 2,310,000	\$ 100,000	CEU Providence
11584609	SEC North Bend	13	Major M&R of Coos Bay Family Housing, OR (Phase 2 of 4) (C-POP)	\$ 1,095,000	\$ 300,000	CEU Oakland
7332071	STA Eatons Neck	1	Eatons Neck Lighthouse Abatement (Neither C-POP nor R-POP)	\$ 1,300,000	\$ 1,300,000	CEU Providence

**FY22 SHI Spend Plan**

Project Number	Benefitting Unit / Tenant Unit	ATU	Project Description	IGE Sum	SHI Portion	Executing Unit
4375287	Base Ketchikan	31	SHI Base Ketchikan Abate Lead Paint CO Quarters	\$ 100,000	\$ 100,000	CEU Juneau
TBD	D1	1	SHI Abate D1 REPFAC	\$ 900,000	\$ 600,000	CEU Providence
16360667	TRACEN Petaluma	74	SHI M&R Replace Siding Housing B413 / B414	\$ 660,000	\$ 660,000	TRACEN Petaluma
TBD	Base Alameda	31	SHI Abate Spanish Style Family Homes Phase I	\$ 1,400,000	\$ 1,400,000	CEU Oakland
TBD	Base Cape Cod	31	SHI Abate Cape Cod Homes	\$ 2,000,000	\$ 2,000,000	CEU Providence
TBD	Base Det Borinquen	31	SHI Abate Borinquen Housing Phase I	\$ 2,000,000	\$ 2,000,000	CEU Miami
16462734	CGA	60	SHI Abatement - Quarters 4	\$ 1,500,000	\$ 1,000,000	CGA
15705233	STA Neah Bay	13	SHI Abatement Neah Bay Housing Unit 221 Coast Guard Drive	\$ 60,000	\$ 60,000	CEU Oakland
			Third Party State Certified Inspector Costs	\$ 500,000	\$ 500,000	
<b>Grand Total:</b>					<b>\$ 8,320,000</b>	

**FY22 Below the Cut Line SHI Projects**

Project Number	Benefitting Unit / Tenant Unit	ATU	Project Description	IGE Sum	SHI Portion	Executing Unit
8270993	USCGC HICKORY	31	Repair Housing Interiors Homer (Phase 5 of 5) (C-POP)	\$ 1,200,000	\$ 200,000	CEU Juneau
9989146	SEC North Bend	13	Major Maintenance and Repair of Coos Bay Family Housing, OR (Phase 3 of 4) (C-POP)	\$ 1,000,000	\$ 300,000	CEU Oakland
01-P9178	STA Brant Point	1	Repair Interior Nantucket Housing (C-POP)	\$ 1,200,000	\$ 600,000	CEU Providence
11696054	STA Kauai	14	Repair Exteriors Kauai Housing (C-POP)	\$ 1,000,000	\$ 200,000	CEU Honolulu
8555917	STA Neah Bay	13	Major Maintenance and Repair for Neah Bay Housing (Phase 1 of 2), Neah Bay, WA (C-POP)	\$ 823,000	\$ 100,000	CEU Oakland

FY23 SHI Spend Plan						
Project Number	Benefitting Unit / Tenant Unit	ATU	Project Description	IGE Sum	SHI Portion	Executing Unit
16361064	TRACEN Petaluma	74	SHI M&R Replace Siding Hsg 415/416	\$ 670,000	\$ 670,000	TRACEN Petaluma
TBD	Base Alameda	31	SHI Abate Spanish Style Family Homes Phase I	\$ 2,000,000	\$ 2,000,000	CEU Oakland
TBD	Base Cape Cod	31	SHI Abate Cape Cod Homes	\$ 1,000,000	\$ 1,000,000	CEU Providence
TBD	Base Det Borinquen	31	SHI Abate Borinquen Housing Phase II	\$ 2,000,000	\$ 2,000,000	CEU Miami
16462420	CGA	60	SHI USCGA Lead and Asbestos Abatement Quarters 1 - REPFAC	\$ 1,500,000	\$ 1,000,000	CGA
4641930	Base Honolulu	31	SHI Abate and Repair Exteriors Housing and Rec Center Wailupe	\$ 1,000,000	\$ 1,000,000	CEU Honolulu
			Third Party State Certified Inspector Costs	\$ 500,000	\$ 500,000	
			<b>Grand Total:</b>		<b>\$ 8,170,000</b>	
FY23 Below the Cut Line SHI Projects						
Project Number	Benefitting Unit / Tenant Unit	ATU	Project Description	IGE Sum	SHI Portion	Executing Unit
11133911	STA Neah Bay	13	Major Maintenance and Repair for Neah Bay Housing (Phase 2 of 2), Neah Bay, WA (C-POP)	\$ 705,000	\$ 100,000	CEU Oakland
9989147	SEC North Bend	13	Major Maintenance and Repair of Coos Bay Family Housing, OR CPOP (Phase 4 of 4) (C-POP)	\$ 1,165,000	\$ 300,000	CEU Oakland
01-P05088	STA Jonesport	1	Major M&R Jonesport Duplex Housing	\$ 550,000	\$ 150,000	CEU Providence
5334995	STA Boothbay Harbor	1	Major M&R Boothbay Harbor Duplex	\$ 550,000	\$ 150,000	CEU Providence
4400354	STA Cape Disappointment	13	Major Maintenance and Repair of Baker Bay Housing Units, Ilwaco, WA (Phase 1 of 3)	\$ 965,000	\$ 100,000	CEU Oakland
15852281	Base Honolulu	31	SLEP Housing Wailupe Qtrs A	\$ 600,000	\$ 300,000	CEU Honolulu
15890720	Base Honolulu	31	SLEP Housing Wailupe Qtrs D/E	\$ 550,000	\$ 275,000	CEU Honolulu
15890722	Base Honolulu	31	SLEP Housing Wailupe Qtrs F/G	\$ 600,000	\$ 300,000	CEU Honolulu
10995727	AIRSTA Sitka	17	AIRSTA Sitka Repair Buildings 3 & 4 Housing	\$ 800,000	\$ 150,000	CEU Juneau
4565332	Base Honolulu	31	SHI Repair Exterior Envelope Barracks/Galley Building	\$ 1,500,000	\$ 1,000,000	CEU Honolulu

## Risk Assessment Frequently Asked Questions (FAQs)

*Updated April 20, 2020*

### What does a State-certified Risk Assessment entail?

A State-certified Risk Assessment for housing is an assessment of the potential presence of at least two hazards, but may be three:

1. **Lead**:

- Soil samples are taken outside of the unit in random areas. Additional samples are collected from the drip line (a line on the ground in the same vertical plane as the outside edge of a structure's roof) and/or bare soil areas. Soil sampling removes a small "plug" of soil from the ground.
- Lead dust samples are taken via a sampling wipe from doorways, window sills, bare floors (high traffic areas not carpeted), kitchens, bathrooms, etc. The lead assessor will arrive on site and perform a visual assessment looking for chipping, peeling or degraded surfaces. After the visual portion is done, the assessor will take dust samples from each room using a swipe cloth; the dust samples will then be sent to a lab for evaluation.
- Paint chips are removed if there is evidence of peeling paint -- normally from an inconspicuous area if available. Regardless as to whether chipping paint is present or not, all surfaces are tested for Lead Base Paint using an X-ray fluorescence (XRF) analyzer. XRF is a non-destructive analytical technique used to determine the elemental composition of materials. XRF analyzers determine the chemistry of a sample by measuring the fluorescent (or secondary) X-ray emitted from a sample when it is excited by a primary X-ray source.

2. **Asbestos**: Asbestos sampling is taken from any suspected exposed area. The sample area is encapsulated per Housing and Urban Development (HUD) and Environmental Protection Agency (EPA) standards.

3. **Radon**: A short term radon test kit is left in the housing unit basement or crawlspace, undisturbed for a minimum of 48 hours, but no more than 72 hours. Residents are instructed not to disturb the test kit. Not all houses may need a radon assessment.

### What is the difference between an inspection and risk assessment?

An inspection is a surface-by-surface investigation to determine whether there is lead-based paint in a home or child-occupied facility, and where it is located. Inspections can be legally performed only by certified inspectors or risk assessors. Lead-based paint inspections determine the presence of lead-based paint. It is particularly helpful in determining whether lead-based paint is present prior to purchasing, renting, or renovating a home, and identifying potential sources of lead exposure at any time.

A risk assessment is an on-site investigation to determine the presence, type, severity, and location of lead-based paint hazards (including lead hazards in paint, dust, and soil) and provides suggested ways to control them. Risk assessments can be legally performed only by certified risk assessors. Lead-based paint risk assessments are particularly helpful in determining sources of current exposure and in designing possible solutions. You can also have a combined inspection

and risk assessment. With any of these options, the risk assessor or inspector will provide you with a written report of findings.

### **What spaces will be accessed during a Risk Assessment?**

The entire housing unit will be accessed - all rooms, closets, basements, storage areas, attached garages, adjacent structures, etc.

### **How much time is required to complete an assessment?**

The amount of time will vary depending on the size and age of the home and what is or may be encountered. Assessments are typically completed within two to eight hours. Multiple visits to your unit may be required to patch and seal any wall or surface sample holes. Your local housing staff will communicate these needs during the initial assessment.

### **Who needs to be present during the assessment?**

Residents are not required to be present, but they may remain in the home during the assessment if they choose. If the resident is unable to be present, the Housing Representative or Local Housing Office should be notified so that a command representative can escort the risk assessor for the duration of the assessment in your unit.

### **Are residents required to make any preparations?**

The state-certified risk assessor will require unobstructed access to each room or space, including the garage, basement, exterior areas, crawlspace, and stairs. In addition, baseboards should be accessible. There is no need to move furniture. Residents should not clean horizontal surfaces prior to assessment. This will help ensure that accurate test samples are collected.

### **How much damage/repair can be expected as a result of an assessment?**

Risk assessors should not cause any damage to visible areas. However, if damage does occur, residents should immediately report this damage to the Local Housing Officer.

### **How long after the assessment is complete will the results be available to residents?**

The report will be completed and submitted to the Coast Guard no more than 14 days after receipt of laboratory sample results.

### **How do I review the assessment findings of my housing unit?**

Contact the Area Housing Office for the results for your unit.

# Safe Homes Initiative

## Frequently Asked Questions Additions

### What actions are classified as lead abatement?

Any measure designed to permanently eliminate lead paint or lead paint hazards. The US EPA and HUD recognize the following methods as abatement:

- Removal of the building component: Removing a door, window sill, hand rail, etc. coated with lead paint intact and in whole for proper disposal;
- Removal of the lead paint from components: Complete removal of all lead paint from surfaces or components down to bare substrate by an EPA certified lead firm;
- Enclosure of the component: installation of rigid, durable barriers that are mechanically attached to building components, with all edges and seams sealed. Surfaces with lead paint are enclosed to prevent access and exposure and to provide a dust-tight system expected to last at least 20 years under normal conditions.
- Encapsulation of lead-based paint: A process that makes lead-based paint inaccessible by providing a barrier between the lead-based paint and the environment. This barrier is formed using a special liquid-applied coating (with or without reinforcement materials) or an adhesively bonded covering material that meets EPA, ASTM or state standards and warranted by the manufacturer for at least 20 years; or
- Soil removal or covering: Several options exist to abate soil lead hazards including: covering with a resilient, impervious surface material such as asphalt or concrete (all levels of contamination); removing/replacing the top 6" of soil (high contamination); and soil amendment and treatments (moderate to low contamination).

### How does Abatement differ from Interim Controls?

Interim controls are intended to make dwellings lead-safe quickly by temporarily controlling lead-based paint hazards, while abatement is intended to permanently control lead-based paint hazards and eliminate exposure risks. Coast Guard policy requires that all lead hazards (Action Level or Major Findings) identified in housing be promptly reduced to the Monitoring Level. In most instances, this is achieved by implementing effective interim controls to temporarily mitigate exposure risks followed by abatement actions to permanently control the hazards.

For example, a local housing officer (LHO) identifies paint chips and dust on a window sill and adjacent living room floor produced by the friction surfaces of a window, which constitutes a Major Finding given that small children occupy the housing unit. Appropriate interim controls would be to notify occupants of the lead hazard, restrict access to the contaminated area (especially to children) until cleaned by a certified lead firm and confirmed safe by clearance sampling, secure the window to prevent opening/closing, and increase surveillance and inspection frequency in the housing unit by the LHO. Simultaneously, the unit should engage the cognizant area housing officer and facility engineers to plan for proper abatement (likely window removal and replacement), which is required to be completed in one year according to policy.

### What is the difference between paint stabilization and encapsulation?

- Paint stabilization is an interim control (not abatement) that entails removing deteriorating paint, preparing the substrate for repainting, and repainting with conventional household paints to temporarily stabilize damaged lead paint surfaces and temporarily mitigate lead exposure risks.
- Encapsulation can be used as an interim control or abatement and uses special coatings that adhere and bond with the existing lead paint to form a protective barrier. For encapsulation to be considered abatement, the encapsulants must meet appropriate federal and consensus standards, be applied in

## **Safe Homes Initiative**

### **Frequently Asked Questions Additions**

accordance with the manufacturer's requirements and be warranted by the manufacturer for at least 20 years. Typically, the word encapsulation is used in reference to abatement (long-term) and paint stabilization is used to refer to interim controls (short-term).

#### **Does abatement apply only to the immediate area where the lead hazard finding is located or does the entire room or home require abatement?**

First, it is essential to clearly understand the definition of a *lead finding*. As shown in the original ERA inspection reports and recorded in HMIS, lead findings represent specific building components such as stair railing, doors, trim, windows, interior sills, etc. as defined by state-certified lead inspectors based upon building component functions and painting history. This was completed for nearly all Coast Guard Housing units between 1995 and 1999 and the lead findings are recorded in HMIS.

As an example, a lead inspector may record an entire window as a single lead finding or record the window components (interior sill, exterior sill, trough, sash, apron, parting bead, stop bead, casing, etc.) as separate lead findings. However, because it is highly unlikely that all these components have different painting histories, entire windows are normally recorded as a single lead finding unless the inspector's professional judgment and field condition dictate otherwise.

All lead exposure risks identified by the state-certified risk assessor as Action Level or Major Findings require interim controls followed by abatement. For example, if the certified lead risk assessment identifies Action Level findings in the bedroom #1 on the closet door frame, then the damaged lead paint on the door frame would require interim controls to return it to the Monitoring Level. However, for the required abatement, the answer depends upon how the lead finding is defined/recorded by the lead inspector (original ERA assessment and HMIS records). So, if the entire door frame is recorded as a single lead finding, then the entire door frame must be abated to permanently remove the lead hazard from that component.

#### **Also, can we just perform "spot" abatement or partial abatement that just addresses the current lead paint damage?**

The short answer is no. Interim controls are employed to temporarily mitigate risks often using "spot" paint stabilization approach followed by dust clean up, etc. However, as mentioned above, abatement is different and must address the *lead finding* as defined in the original lead inspector's reports and recorded as findings in HMIS. As decided by CG senior leadership over 25 years ago, the intent of the SEH lead in housing policy is to manage lead paint in place and systematically eliminate the hazards over time through abatement as lead paint failures occur.

So, the policy expectation is that each time an Action Level or Major Finding is identified, an HMIS finding will be marked abated within the database within 3 years and 1 year, respectively. Spot abatements do not allow any HMIS Findings to be marked abated and only serves to complicate understanding regarding the locations of remaining lead paint hazards. In other words, unless all building components in an HMIS lead finding are fully abated at once, then all of the components must still be treated as lead paint. The practice of conducting partial abatements does not ultimately result in any long-term hazard control or safety gains for Coast Guard, but can and does result in a false sense of security, reduced awareness regarding lead hazard locations and significant funding losses due to recurrent abatement actions on the same surfaces.

## **Safe Homes Initiative Frequently Asked Questions Additions**

### **What qualifications are needed to perform lead paint stabilization, dust removal from sills or floors, etc.?**

Coast Guard policy requires all asbestos and lead Action Level and Major Findings be corrected by contractors licensed to perform asbestos and/or lead work and not by Coast Guard personnel. Therefore, when paint stabilization and dust removal are conducted in order to address, correct and reclassify Action Level or Major Findings to the Monitoring Level, the workers and the supervisor must be EPA-certified renovators, or, if any of the workers are not certified renovators, the supervisor must be a certified lead-based paint abatement supervisor in addition to being a certified renovator.

### **The SEH Manual states that Major Findings require immediate interim control measures. What is the definition of immediate? Does immediate apply to Action Level Findings as well?**

Immediate signifies a high priority and generally means “without hesitation”. Often, the first interim controls are to notify the residents of the hazard and restrict access whenever possible. Still, interim control measures will differ based upon the exposed population, access to the hazard, lead concentrations, etc. The occupants are expected to be part of the prevention efforts through proper hazard disclosure and understanding the measures that they can employ to reduce exposure risks. Whether Major Findings or Action Level findings, all efforts to mitigate lead exposure risks should be immediate and without hesitation.

### **Can Major Findings be downgraded to Action Level Findings if the at-risk family is removed from the home?**

If susceptible occupants are removed from a housing unit containing Major Findings, by policy, the hazards would constitute Action Level findings providing susceptible populations will not be allowed to occupy the housing units and interim controls have returned the conditions to the Monitoring Level.

### **Can at-risk families be assigned to a home with Action Level or Major Findings once effective interim controls are in place?**

Housing assignment is a CG-1333/Housing Authority decision. From a safety perspective, Coast Guard SEH policy focuses on ensuring that hazards and exposure risks in housing units are mitigated through interim controls and ultimately eliminated through abatement to provide a healthy and safe living environment for CG families. Therefore, ensuring that all lead paint and hazards in CG housing are maintained at the Monitoring Level is the highest priority.

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27 Oct 2020

## MEMORANDUM

From: P. J. Dugan, CAPT  
COMDT (CG-43)

Reply to: MRPL SHI PM  
Attn of: CDR Belmont  
(425) 736-7390

To: CG SILC

Subj: GUIDANCE FOR FY2021-23 AFC-43 SAFE HOMES INITIATIVE EXECUTION

Ref: (a) Safety and Environmental Health Manual COMDTINST M5100.47C

1. This memo promulgates FY2021-23 guidance for Shore Depot Level Maintenance Allotment Fund Code 43 (AFC-43) program execution of Safe Homes Initiative (SHI) projects. Additionally, the notional plan for FY24 and beyond is outlined. The Coast Guard launched Safe Homes in July 2019 to identify and address potential environmental contaminants in Coast Guard owned housing. This Initiative focuses largely on homes constructed prior to 1979, before lead-based paint and asbestos-containing building products were prohibited. Contracted state-certified environmental risk assessments (ERAs) were initiated by CG-13 in 2019 and the Coast Guard is nearing the end of the ERA period. The results of the ERAs are often Action level or Major findings, which per reference (a) require immediate Interim Controls, as well as abatement within 3 years or 1 year, respectively. In FY20, CG-43 dedicated \$1M off the top of the AFC-43 Budget specifically for addressing SHI findings. As part of the FY21 President's Budget request, an additional \$8M in AFC-43 is anticipated to be provided specifically for SHI work.
2. The goal of every SHI AFC-43 project should always be to fully abate through removal all lead or asbestos hazards in Coast Guard owned housing, to include military family housing, unaccompanied personnel housing and REPFACs, and to control radon if present. A secondary priority should be to abate hazards reasonably connected to the housing community, which would address the adjacent buildings or structures such as lighthouses contributing to the elevated lead hazard (i.e. lead dust) in the homes. With that said, we must recognize that the scope of demand far outweighs resources available.
3. SILC, by way of MRPL, shall prioritize and distribute the \$8M in annual SHI funding for FY21-23. FY21 and FY22 AFC-43 projects have already been programmed through Centralized and Regional POP, and it is projected that FY23 will be consumed by high priority phased projects in areas such as Base Cape Cod, MA and Base San Juan/Base Detachment Borinquen, Puerto Rico.
  - a. All \$8M will be obligated annually.
  - b. Previously prioritized C-POP or R-POP housing projects can have lead, asbestos and/or radon work reimbursed with SHI funds. The executing CEUs/HQ FE's would be able to use the subsequent AFC-43 refund for C-POP or R-POP needs as necessary (i.e. next below the cut line priorities, normally unaffordable option items, etc)
  - c. New SHI projects should target executability within the programmed FY.

- d. When full abatement is not plausible and/or cannot be afforded due to FRMM restriction, CG-43 shall be notified with an outlined business case showing what projected 20 years of interim controls would cost.
  - e. In cases where other depot-level maintenance work can be completed incidental to environmental hazard mitigation, units can consolidate projects into a single contracting action. Execution of SHI projects, however, shall not be delayed toward this end.
  - f. SHI projects shall not be delayed due to potential future divestiture. When a CG-owned housing unit is approved for divestiture, it is listed on the annual Congressional Report titled "Conveyance of Coast Guard Real Property". If a housing unit is not listed on the annual report, then all SHI projects for that unit shall be planned and executed.
4. Annually, the MRPL will prepare a spend plan and list of known SHI projects that will not be addressed in the FY, creating a backlog list of SHI projects. Additionally, MRPL will maintain a list of projects where reference (a) requirements cannot be met due to FRMM limitation or the economics laid out in a simple business case decision.
  5. For FY24 and beyond, MRPL will produce a SHI spend plan, backlog and list of projects where reference (a) cannot be met for CG-43 to seek CG-1 endorsement. Both the Housing Program and the Health and Safety Program fall under the CG-1 chain of command, so in time of conflict, CG-1 shall determine the appropriate way ahead.
  6. Not every situation can be covered by this general guidance. Executing units should refer specific questions to the Mission Readiness Product Line.

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CG TRACEN Cape May (fe)  
CG TRACEN Mobile (fe)  
CG TRACEN Yorktown (fe)  
CG Yard (fe)  
TRACEN Petaluma (fe)



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11 Feb 2020

## MEMORANDUM

From:   
F. J. Dugan, CAPT  
COMDT (CG-43)

Reply to: CG-43  
Attn of: Michelle Curry  
(202) 475-5713

To: CG SILC

Subj: GUIDANCE FOR FY2021 AFC-43 PROGRAM EXECUTION

Ref: (a) DHS Appropriations Structure 2.0, 01 Oct 2016  
(b) Senate Bill Report, 2582, Department of Homeland Security Appropriations Act, 2020  
(c) COMDT (CG-843) memo 7100 of 11 Oct 2017  
(d) Financial Resources Management Manual, COMDTINST M7100.3 (series)  
(e) Financial Resources Management Manual Procedures, COMDTINST M7100.4A  
(f) Civil Engineering Manual COMDTINST M11000.11B

1. This memo promulgates FY2021 guidance for Shore Depot Level Maintenance Allotment Fund Code 43 (AFC-43) program execution. Projects awarded in FY18-20 will continue to follow policies respective to time of award. The Coast Guard has adopted the Common Appropriation Structure established by reference (a), which is aligned with reference (b) stating the Minor Construction Authority (MCA) ceiling and the percentage at which maintenance plus alteration plus code compliance (M+A+C) work for a Real Property Unique Identifier (RPUID) is considered a service life renewal. The waiver provided by reference (c) is hereby obsolete and no longer applicable.

2. While both references (a) and (b) provide a upper threshold for use of Operations and Support (O&S) for real property construction (i.e., MCA) at \$2,000,000, the Coast Guard's internal policy for MCA ceiling is hereby established at \$1,800,000 for any project location (site). Any RPUID with M+A+C costs equal to or greater than 75% of the Plant Replacement Value (PRV) included in the project and improvement (I) costs contribute to the MCA threshold for each respective project site. When the work per RPUID has an equal to or greater than \$175,000 in MCA contribution, the project will be established as a Construction in Progress (CIP) project per references (d) and (e).

3. Projects that include demolition for Replacement in Kind (RIK) of any RPUID shall apply those demolition costs to the MCA threshold. RIK demolition costs shall be placed under the Improvement (I) column on the O&S Certification. Incidental demolition costs shall be included in the work category the demolition supports (e.g., Maintenance, Alteration or Code Compliance). Please see enclosure (1) for specific examples.

4. The following provides the approval levels and documentation to be submitted for AFC-43 projects. See enclosures (2) and (3) for further clarification and documentation signatory requirements.

- a. Unit Level Approval - O&S Certification / Separate and Severable (S&S): Units may approve AFC-43 projects with a total project cost less than \$1,000,000 regardless of MCA contribution. Units shall upload an O&S Cert and S&S documentation with a brief project description to the AFC-43 Projects Site at award.

- b. SILC Level Approval - Project Development Submittal (PDS) Lite: SILC will approve AFC-43 projects with a total project cost equal to or greater than \$1,000,000 regardless of MCA contribution and projects with MCA contribution less than \$1,400,000 regardless of total project cost. For these projects, a PDS Lite shall be reviewed and approved by the SILC with an auto-notification to CG-43 prior to award.
  - c. CG-43 Level Approval - PDS: CG-43 will approve any AFC-43 project with MCA contribution equal to or greater than \$1,400,000 regardless of total project cost.
  - d. All PDS packages shall be submitted through SILC to CG-43 for review and approval prior to award.
  - e. CG-43 will conduct management reviews of AFC-43 funded projects in accordance with reference (f).
5. AFC-43 projects for existing housing shall not exceed \$50,000 of improvement (I) costs per unit; i.e., a multifamily building with four separate units has a \$200,000 improvement (I) threshold. Any housing project that includes (I) costs shall follow the PDS Lite approval process.
6. Reference (e) states that M+A+C greater than 75% PRV shall be categorized as (I). This is because an expenditure of funds for an asset over 75% of the PRV is defined as an extension of service life, which is a criteria for capital improvement. However, with regard to the O&S Certificate, work shall remain documented in the Shore Asset Management (SAM) system under the respective MAC categories, and costs will contribute to the MCA threshold.
7. Dialogue continues regarding recapitalization for structures such as towers and parking lots. Once final decisions are made regarding these assets and any other policy items impacting the Civil Engineering community, changes will be communicated in the update to reference (f).
8. The policies established in this memo will be included in the next update to references (d) through (f).
9. My point of contact is Michelle Curry, who can be reached at (202) 475-5713 or Michelle.D.Curry2@uscg.mil

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Encl: (1) GUIDANCE FOR FY2021 AFC-43 PROGRAM EXECUTION  
(2) O&S/SS CERT EXAMPLE  
(3) FIGURE 4-2 AFC-43 PROJECT APPROVAL DOCUMENTATION FLOWCHART

Copy: CG Academy (fe) COMDT (CG-845)  
CG CEU Cleveland TRACEN Petaluma (fe)  
CG CEU Honolulu  
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CG TRACEN Mobile (fe)  
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CG Yard (fe)  
COMDT (CG-842)

The policy changes stemming from DHS Appropriations Structure 2.0 and the Senate Bill Report, 2582, Department of Homeland Security Appropriations Act, 2020 relate to the criteria for determining AFC-43 contributions towards the \$2,000,000 (CG-43 internal threshold \$1,800,000) Minor Construction Authority (MCA) to support AFC-43/PC&I funding determinations by Real Property Unique Identification (RPUID) within the Shore Asset Management (SAM) system work categories of Maintenance (M), Alteration (A), Code Compliance (C), Demolition (D) and Improvement (I). The policy is as follows:

1. **MAC RENEWAL/LIFE EXTENDING:** When M+A+C is equal to or greater than 75% of a RPUID's PRV, work costs will contribute to the Minor Construction (MC) authority and will be capitalized (as extending the service life of the asset). **COMMENTARY:** Classifying the work as extending the service life of the asset, while retaining the work within the MAC work category eliminates additional work for the field and retains the rationale for the work determination when it meets service life extending criteria. This will not require changes to the Child Work Order (CWO) in SAM.
2. **DEMOLITION:** The Demolition (D) category will only include activities that completely remove an RPUID with no future plans to replace it, decrease the size or quantity of an RPUID, and disposal activities (i.e., GSA contract support, plans, and permits). Otherwise, demolition that is incidental to maintenance, alteration or code compliance driven work shall be included in the M, A, or C cost of the project.
3. **UNIFORMAT II:** Project work on the following Level 2 Group Elements (A10/Foundations, A20/Basement Construction, and B10/Super Structure) are to be classified to the work category (MACI) that aligns with the work being completed. **COMMENTARY:** The Level 2 Group Elements (A10/Foundations, A20/Basement Construction, and B10/Super Structure) are no longer automatically classified as Improvements: This requires changes to the child work order (CWO) in SAM to enable the O&S Cert to properly record the costs.
4. **IMPROVEMENT:** The contributions to the Minor Construction (MC) authority threshold are those that meet the following conditions:
  - a. Constructs a new asset where one did not exist before (new RPUID);
  - b. Replaces or replaced by asset in kind (both RPUID replaced and new RPUID);
  - c. Increases **capacity** by increasing the asset's quantity of a Unit of Measure (UoM);
  - d. Increases the **capability of a building** different from or significantly greater than its current use (changes the RPUID use and the SAM primary category code);
  - e. Increase in **capability of a structure** different from, or significantly greater than, its design use/capability (changes the asset's loading/volume/material/rating).

**COMMENTARY:** MAC work that involves replacing, upgrading and adding system components (i.e., mechanical, electrical) to an existing building or structure should not be classified as an improvement if it is due to obsolescence, technology refreshments, or to preserve/maintain and is related to achieving any of the following: reliability, maintainability, reduce operating & maintenance cost, effectively optimize space/usage, code/safety/health.

**Building Improvements Examples:**

1. Constructing a building addition to increase the square footage by 600 square feet (sf). Work increases the quantity of a unit of measure in SAM and meets the criteria of an improvement.
2. Maintenance, repairs and alteration to a building resulting in a change of the use code (e.g., Category Code 441-10 Mission –Support Maintenance/Parts Storage Warehouse to Category Code 219-10 FE Maintenance Shop) constitutes an improvement.
3. Construct a new building addition. The work will demolish 500 sf of existing space and replace it with a 1,000 sf new addition, for a net total of 500 sf. All costs shall be classified as an improvement based on project driver.

**Structure Improvements Examples:**

1. Increasing the height (increasing the unit of measure in SAM) of a tower or replacement of a tower system.
2. Replace asphalt pavement with concrete to increase the capability for larger/heavier vehicle traffic.
3. Adding real property system assets such as water and electric lines to a pier. The water and electric lines are separate RPUIDs and would result in an increase in size.



FIGURE 4-2 AFC-43 PROJECT APPROVAL DOCUMENTATION FLOWCHART

