

## SLR Document Changes: Environments for AMP XI.M42

**Overview of purpose of change:** Revise AMP XI.M42 environments as follows: (a) add air and condensation environments to the scope of the program; (b) add soil, concrete, and underground external environments to the FSAR Supplement; and (c) correct inconsistencies for the lubricating oil environment. In addition, add new GALL-SLR line items for management of loss of coating/lining integrity and loss of material for piping, piping components, heat exchangers, tanks with internal coatings/linings exposed to air-dry by AMP XI.M42.

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**Basis Document Input:** None

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### Document Changes:

#### SRP-SLR:

Modify the following SRP-SLR line items as follows:

3.2-1, 072	BWR/PWR	Any material piping, piping components, heat exchangers, tanks with internal coatings/linings exposed to closed-cycle cooling water, raw water, treated water, treated borated water, lubricating oil, condensation	Loss of coating or lining integrity due to blistering, cracking, flaking, peeling, delamination, rusting, or physical damage; loss of material or cracking for cementitious coatings/linings	AMP XI.M42, "Internal Coatings/Linings for In-Scope Piping, Piping Components, Heat Exchangers, and Tanks"	V.A.E-401 V.B.E-401 V.C.E-401 V.D1.E-401 V.D2.E-401
3.2-1, 073	BWR/PWR	Any material piping, piping components, heat exchangers, tanks with internal coatings/linings exposed to closed-cycle cooling water, raw water, treated water, treated borated water, lubricating oil, condensation	Loss of material due to general, pitting, crevice corrosion, MIC	AMP XI.M42, "Internal Coatings/Linings for In-Scope Piping, Piping Components, Heat Exchangers, and Tanks"	V.A.E-414 V.B.E-414 V.C.E-414 V.D1.E-414 V.D2.E-414
3.3-1, 138	BWR/PWR	Any material piping, piping components, heat exchangers, tanks with internal coatings/linings exposed to closed-cycle cooling water, raw water, raw water (potable), treated water, treated borated water, fuel oil, lubricating oil, waste water, air-dry	Loss of coating or lining integrity due to blistering, cracking, flaking, peeling, delamination, rusting, or physical damage; loss of material or cracking for cementitious coatings/linings	AMP XI.M42, "Internal Coatings/Linings for In-Scope Piping, Piping Components, Heat Exchangers, and Tanks"	VII.C1.A-416 VII.C2.A-416 VII.C3.A-416 VII.D.A-416 VII.E4.A-416 VII.E5.A-416 VII.F1.A-416 VII.F2.A-416 VII.F3.A-416 VII.F4.A-416 VII.G.A-416 VII.H1.A-416 VII.H2.A-416

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3.3-1, 139	BWR/PWR	Any material piping, piping components, heat exchangers, tanks with internal coatings/linings exposed to closed-cycle cooling water, raw water, raw water (potable), treated water, treated borated water, fuel oil, lubricating oil, waste water, <u>air-dry</u>	Loss of material due to general, pitting, crevice corrosion, MIC	AMP XI.M42, "Internal Coatings/Linings for In-Scope Piping, Piping Components, Heat Exchangers, and Tanks"	VII.C1.A-414 VII.C2.A-414 VII.C3.A-414 <u>VII.D.A-414</u> VII.E4.A-414 VII.E5.A-414 VII.F1.A-414 VII.F2.A-414 VII.F3.A-414 VII.F4.A-414 VII.G.A-414 VII.H1.A-414 VII.H2.A-414
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### GALL-SLR:

1. Revise the AMP XI.M42 program description as follows:

**Program Description:** Proper maintenance of internal coatings/linings is essential to provide reasonable assurance that the intended functions of in-scope components are met. Degradation of coatings/linings can lead to loss of material or cracking of base materials and downstream effects such as reduction in flow, reduction in pressure, or reduction of heat transfer when coatings/linings become debris. The program consists of periodic visual inspections of internal coatings/linings exposed to closed-cycle cooling water (CCCW), raw water, treated water, treated borated water, waste water, fuel oil, and-lubricating oil, air, and condensation.

2. Revised the "scope of program" program element of AMP XI.M42 as follows:

**Scope of Program:** The scope of the program is internal coatings/linings for in-scope piping, piping components, heat exchangers, and tanks exposed to CCCW, raw water, treated water, treated borated water, waste water, fuel oil, and-lubricating oil, air, and condensation where loss of coating or lining integrity could prevent satisfactory accomplishment of any of the component's or downstream component's current licensing basis (CLB) intended functions identified under Title 10 of the Code of Federal Regulations (10 CFR) 54.4(a)(1), (a)(2), or (a)(3).

3. Revise the 1<sup>st</sup> paragraph of the FSAR Supplement as follows:

Table XI-01 F SAR Supplement Summaries for GALL-SLR Report Chapter XI Aging Management Programs		
AMP	GALL-SLR Program	Description of Program
XI.M42	Internal Coatings/Linings for In-Scope Piping, Piping Components, Heat Exchangers, and Tanks	This program is a condition monitoring program that manages degradation of internal coatings/linings exposed to closed-cycle cooling water, raw water, treated water, treated borated water, waste water, lubricating oil, <del>or</del> fuel oil, <u>air,</u>

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		<p>or condensation that can lead to loss of material of base materials or downstream effects such as reduction in flow, reduction in pressure or reduction of heat transfer when coatings/linings become debris. This program can also be used to manage loss of coating integrity for external coatings exposed to any air environment, or condensation, soil, concrete, or an underground environment credited with isolating the external surface of a component from the environment (e.g., SRP SLR Section 3.2.2.2.2).</p>
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4. Add the following new GALL-SLR line items to VII AUXILIARY SYSTEMS Table D Compressed Air System

VII.D.A-416	3.3-1, 138	Piping, piping components, heat exchangers, tanks with internal coatings/linings	Any material with an internal coating/lining	Air-dry	Loss of coating or lining integrity due to blistering, cracking, flaking, peeling, delamination, rusting, physical damage, loss of material or cracking for cementitious coatings/linings	AMP XI.M42, "Internal Coatings/Linings for In-Scope Piping, Piping Components, Heat Exchangers, and Tanks"
VII.D.A-414	3.3-1, 139	Piping, piping components, heat exchangers, tanks with internal coatings/linings	Any material with an internal coating/lining	Air-dry	Loss of material due to general, pitting, crevice corrosion, MIC	AMP XI.M42, "Internal Coatings/Linings for In-Scope Piping, Piping Components, Heat Exchangers, and Tanks"

5. Revise the following ENGINEERED SAFETY FEATURES GALL-SLR line items:

V.A.E-401	3.2-1, 072	Piping, piping components, heat exchangers, tanks with internal coatings/linings	Any material with an internal coating/lining	Treated borated water, lubricating oil	Loss of coating or lining integrity due to blistering, cracking, flaking, peeling,	AMP XI.M42, "Internal Coatings/Linings for In-Scope Piping, Piping Components, Heat Exchangers, and Tanks"
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					delamination, rusting, physical damage; loss of material or cracking for cementitious coatings/linings	
V.A.E-414	3.2-1, 073	Piping, piping components, heat exchangers, tanks with internal coatings/linings	Any material with an internal coating/lining	Treated borated water, lubricating oil	Loss of material due to general, pitting, crevice corrosion, MIC	AMP XI.M42, "Internal Coatings/Linings for In-Scope Piping, Piping Components, Heat Exchangers, and Tanks"
V.B.E-401	3.2-1, 072	Piping, piping components, heat exchangers, tanks with internal coatings/linings	Any material with an internal coating/lining	Treated water, raw water, <b>lubricating oil</b>	Loss of coating or lining integrity due to blistering, cracking, flaking, peeling, delamination, rusting, physical damage; loss of material or cracking for cementitious coatings/linings	AMP XI.M42, "Internal Coatings/Linings for In-Scope Piping, Piping Components, Heat Exchangers, and Tanks"
V.B.E-414	3.2-1, 073	Piping, piping components, heat exchangers, tanks with internal coatings/linings	Any material with an internal coating/lining	Treated water, raw water, lubricating oil	Loss of material due to general, pitting, crevice corrosion, MIC	AMP XI.M42, "Internal Coatings/Linings for In-Scope Piping, Piping Components, Heat Exchangers, and Tanks"
V.D1.E-401	3.2-1, 072	Piping, piping components, heat exchangers, tanks with internal coatings/linings	Any material with an internal coating/lining	Treated borated water, <b>lubricating oil, condensation</b>	Loss of coating or lining integrity due to blistering, cracking, flaking, peeling, delamination, rusting, physical damage; loss of material or cracking for cementitious coatings/linings	AMP XI.M42, "Internal Coatings/Linings for In-Scope Piping, Piping Components, Heat Exchangers, and Tanks"
V.D1.E-414	3.2-1, 073	Piping, piping components, heat exchangers, tanks with internal coatings/linings	Any material with an internal coating/lining	Treated borated water, lubricating oil, <b>condensation</b>	Loss of material due to general, pitting, crevice corrosion, MIC	AMP XI.M42, "Internal Coatings/Linings for In-Scope Piping, Piping Components, Heat Exchangers, and Tanks"

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V.D2.E-401	3.2-1, 072	Piping, piping components, heat exchangers, tanks with internal coatings/linings	Any material with an internal coating/lining	Treated water, lubricating oil, condensation	Loss of coating or lining integrity due to blistering, cracking, flaking, peeling, delamination, rusting, physical damage; loss of material or cracking for cementitious coatings/linings	AMP XI.M42, "Internal Coatings/Linings for In-Scope Piping, Piping Components, Heat Exchangers, and Tanks"
V.D2.E-414	3.2-1, 073	Piping, piping components, heat exchangers, tanks with internal coatings/linings	Any material with an internal coating/lining	Treated water, lubricating oil, condensation	Loss of material due to general, pitting, crevice corrosion, MIC	AMP XI.M42, "Internal Coatings/Linings for In-Scope Piping, Piping Components, Heat Exchangers, and Tanks"