



RemedyAP Ulladulla Lighthouse Case Study

REMEDY·ASSET·PROTECTION WARDEN·HEAD·LIGHTHOUSE

The lighthouse had multiple defective coating layers providing under-film-corrosion that had gone unnoticed. RAP was able to identify the extent of corrosion damage and implement an action plan to rescue the structure.

Clients request:

To remove lead-based paint, treat corrosion & apply a new protective coatings system.

Reasoning:

To protect the structure from corrosion.

Risks:

- Lead-containing paint.
- Damage to the Environment.
- Working at heights (Difficult geometry vs ergonomics).

Requests:

Provide the Department with detailed inspection reports and a final inspection to verify practical and final completion stages.

Solution:

RAP developed a detailed repair specification enabling the Department to enforce strict project controls and thus avoid unsatisfactory workmanship. The project required full coating removal and application of a new coating system based on Australian Standard 2312.1 PUR5 to provide 15-25 year durability.

This cast iron structure has a mix of lap and butt joints and well as overlapping surfaces and rivets all presenting many areas where a new protective coating will strain and prematurely split. RAP identified this and initiated a joint sealing program to supplement the coating system consisting of marine-tailing compounds and elastomeric polyurethane sealants.

Outcome:

This structure was in-degrade and the coatings added to obscure the true condition of the steel where under-film corrosion was severe. The project commenced as a re-coat however quickly became a refurbishment. It was decided to expand the project to include the whole structure rather than the external when the extent of hazardous coatings was realized.

This became a rescue of the structure due to the severe corrosion and through collaboration of:

1. → RemedyAP being:
 - To properly assess the structure and build a robust coating specification to not only halt the degradation but to improve the structure.
 - To provide site expertise and inspection which enhanced the outcomes for the Department and Contractor.
 - 2. → The Department was adaptable to changes in the scope of works and was supportive of our role in enforcing the specification.
 - 3. → The Applicator for their willingness to adhere to the specification and provide an outstanding outcome.

"This is a wonderful example of the heritage conservation achieved by the contractor, XGB Protective Coatings and RemedyAP consultancy. As clients, the Department of Industry is extremely satisfied with the result."

Ron Main | Senior Engineer Coastal

Department of Industry - Lands & Water - Maritime Infrastructure Delivery Office

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