

NCNR Corrective Action Program Implementation



11/16/2022

Photo credit: Brian Renegar

Background

After the February 3rd incident it was determined that the Corrective Action Program was both ineffective and poorly implemented. The Confirmatory Order prescribed that a program be rebuilt based on proposals by NCNR leadership and along with other Problem Identification and Resolution (PI&R) programs and be maintained going forward as part of the license.

The NCNR, like the rest of the TRTR community doesn't have the resources to stand up a power plant level Corrective Action Program.

The previous Corrective Action Program's failure had preconditioned the workforce to believe that the program is, at best, a paperwork exercise, and at worst, a way for management to punish the workforce.

A Corrective Action Program is generally self fixing if adequate importance is placed on it by management.

Corrective Action Program Principles



Create levels to triage issues for efficient resource assignment.

Minimize decision points to reduce difficulty while maintaining adequate complexity.

Right size investigative depth to correlate with the level. Not everything needs a Root Cause.

Drive the threshold for reporting to “ALARA” (as low as reasonably achievable).

Corrective Action Program Development

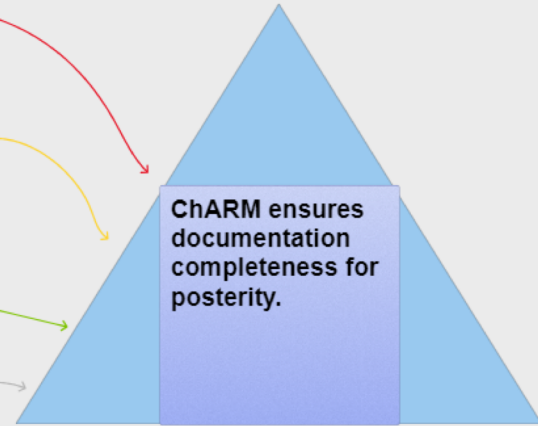
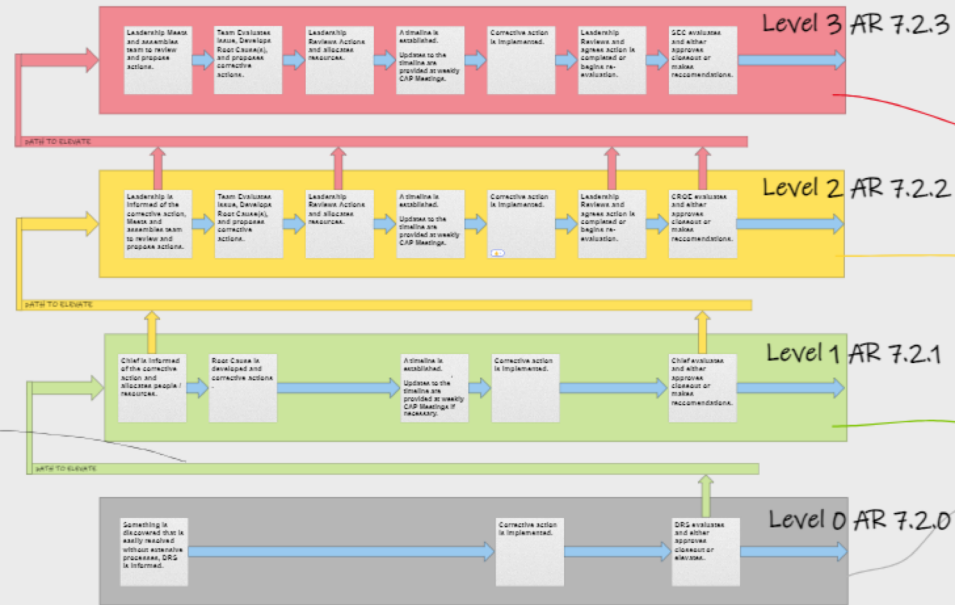
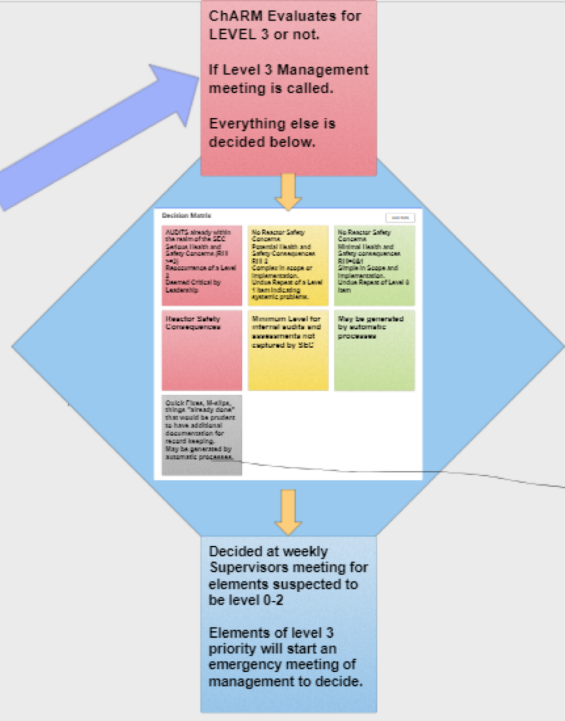
- Develop a triage process would assign levels to each issue built on set triggers with as little subjectivity as is possible.
- Develop set workflows that follows the same logical progression of Recording / Fact Finding, Evaluate, Fix, Validate, and Document.
- Initial and recurring training needs to be built to build the mental toolkit and minimize wasted effort.
- Whenever possible the finding the issue should be decoupled from fixing the issue.

Corrective Action Program Development NIST CENTER FOR NEUTRON RESEARCH

AR 7.2

Color does not indicate level

Maintenance Findings	Surveillance Findings	Procedure Findings 1) BRT reviews 2) Post job critique
NRC AUDITS SEC AUDITS SAC AUDITS	3rd Party Audits	Internal Audits
Training Program	Observation Program	Suggestions



A snapshot of the level workflows early in the development process.

Current Status



- 1.** 4 levels were approved and implemented as of March '23 each level building off the previous.
- 2.** Current process is under evaluation by 3rd party consultants. As part of our problem identification and resolution audit.
- 3.** Development of formal causal analysis methods in support of the different levels is ongoing. Expected completion late '23 to early '24
- 4.** Further iterations on design to improve reliability and response. With planned benchmarking to other facilities.

Challenges



Generations of loose and fast operation has created a lot of ambiguity and the feeling that paperwork isn't "real work".



The glut of initial entries along with differing opinions of the purpose threatens to overwhelm the system.



Lack of understanding and resources for a CAP such as performing causal analysis, developing actionable problem statements, and robust Closeout Criteria significantly contributes to delays.

Thank you

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