J1. Nine Mile Point 1: BWR-2 Mk1 **U.S.A.**

Replacement Of Waste Collector Filter Septa

Description: All waste collector filter (WCF) septa was replaced:

The operation used data and lessons from a previous replacement of a floor drain filter (FDF) in forming the ALARA review. The FDF replacement used 41.75 man hours, 22 man-hours were added to account for the setup and removal of a 3' containment wall. The work area had a dose rate next to the WCF of 50% greater than the FDF. The above data resulted in an ALARA pre-job estimate of 20 mRem/hr, 1.28 man-rem, 64 man-hours. The post-job results were 8 mRem/hr, 0.155 man-rem, and 19.5 man-hours as a result of ALARA good practices.

Comments: Future recommendations for WCF and FDF filter replacements:

- Backflush the filter until there are no appreciable reductions.
- Ensure the filter vessel is filled with water.
- Maintenance personnel should remove filter media from the septum using long-handled tools as it is raised from the filter.
- Wipe down the upper septum tie plate immediately after removal from the filter body to reduce work area dose rates.
- Use an electric impact wrench for unbolting and rebolting flange connections.
- A 3' wall is installed around the work area to guard against filter media spread of contamination.
- Immediately remove spent septa that has been placed in transport barrels from the work area.
- Use heavy plastic suits rather than thin plastic rain suits to maximize personnel protection from contamination.
- Face shields were used rather than full face respirators to optimize worker efficiency.

The highest air sample record during this work was 15% MPC. [Radiological Work Permit #91-0333 NMP1 ALARA review #91-09].

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