

Subject: M070383-00: cleaning waiver for ELI L1, 2" REO beamsplitter in HAM4

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Reference: M070383-00

Sam Waldman requested and I have granted a waiver for deviating from the established cleaning procedure for small commercial (non-COC, non-IO) optics, [E000007-00](#). The proposal is to clean a 2 inch diameter, REO-coated beamsplitter for the HAM4 chamber for LLO with methanol rather than the liquinox cleaning procedure outlined in E000007-00. (Note that in neither case is the optics baked.) This particular optic has been recently delivered by REO and is sealed in a container in the as-delivered, pristine condition.

Note that the IO group has recently (8-Nov-2007) submitted a request (E070288-00) to the Vacuum Review Board (VRB) to use First Contact (TM) (also without subsequent baking) as an alternative to the E070007-00 cleaning procedure. The VRB has granted this request (L070097-00). However, there currently isn't a written First Contact (TM) cleaning procedure, or any First Contact (TM) material at LLO, nor is the staff trained or experienced in its use.

While we could stick to the original liquinox cleaning procedure (E000007-00), there have been concerns recently raised by realization that liquinox contains EDTA (ethylene diamine tetra acetate). EDTA attacks Tantalum, an element of the coating. The First Contact (TM) procedure is a gentler cleaning approach than liquinox.

Dennis Coyne