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# A proposal of decommissioning procedures for bulk facilities

Old nuclear facilities in the final stage of life cycle will be charged into decommissioning phase in near future. On the safeguards requirement in the additional protocol to safeguards agreements, the IAEA has a right and obligation to confirm the decommissioned status of such facilities. However, confirmation measures of these facilities have not been established and still be under discussion.
The safeguards agreement and additional protocol suggest that the IAEA should confirm two conditions; the first is to confirm that all nuclear materials have been removed and the second is to confirm that all essential equipment have been taken away from the facility or destroyed dismantled until the facility is in rendered in-operable.
At physical inventory talking during the operation stage, nuclear material in bulk facilities have been recovered from the processes as practical as possible, but several quantities must be retained as residuals. These are usually represented as a negative MUF in the final material balance when the residuals will be recovered. The negative MUF could normally contribute to reduce the cumulative MUF calculated through the lifetime of the facility. However, the cumulative MUF could not be evaluated as zero due to measurement errors through life time of operation, unrecoverable waste and other reasons.
According to the safeguards agreement, a location using more than 1 ekg of nuclear material is defined as a facility and facilities with a content and throughput less than 5ekg of nuclear material are categorized as the facility which is inspected less than once a year. From these context, even if the final inventory will be recovered closely zero, the decommissioning procedure could not be completed until the cumulative MUF would be less than 1 ekg.
In this paper, we discuss the decision making process for quantity requirement and determining factors for completion of decommission.

## Which ”Key Question” does your Abstract address?

NEW1.6

## Topics

NEW1

## Which alternative ”Key Question” does your Abstract address? (if any)

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