

Material Control and Accountability as the First Line of Defense Against the Insider

Appropriate Effective
Material Control and Accounting and
Physical Protection Workshop

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A strong MC&A program is invaluable as the first line of defense against the insider

- Procedures/instructions are developed and maintained to control special nuclear materials (SNM).
- Personnel are trained to the procedures.
- SNM is in its authorized locations and access is controlled.
- Procedures are in place for emergency situations.

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- Measurements are performed and analyzed.
- Access to measurement equipment is limited to authorized individuals.
- Access to SNM inventory and transaction data is restricted to only authorized personnel with a need to know.
- A graded safeguards program is implemented to ensure the most attractive SNM is protected at a higher level.

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- Calculations are performed to ensure the accumulation of SNM (rollup) does not present a vulnerability.
- Material containment and surveillance procedures are identified and implemented to ensure effective safeguarding of the SNM.
- A rigorous program is implemented for the use of tamper-indicating devices to ensure the presence of SNM as it was originally measured.

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- A robust physical inventory system is in place to ensure presence of SNM.
- Evaluations of any inventory or shipper/receiver differences are done to ensure no theft or diversion (abrupt or protracted) of SNM has occurred.
- Item and process monitoring are implemented as key features of the MC&A program to ensure the safeguarding of the SNM.

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- Risk assessments or more detail vulnerability assessments are conducted by trained security professionals for SNM processing and storage areas.
 - Personnel from the appropriate disciplines of safeguards and security are involved in the assessments.
 - Evaluations include physical protection features of the facility, including portal monitoring.

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- Engineered controls are installed where possible to eliminate the need for administrative controls.
- Assessments are conducted to ensure procedures are being followed and any identified deficiencies are addressed.
- Corrective actions are identified and executed, if required.

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- A strong MC&A program IS the first line of defense against the insider.