Ammunition stockpile management: from evaluation to destruction

The conditions and duration of storage can make weapons and ammunition particularly dangerous to handle. Geomines therefore technically assesses warehouses to determine the degree of dangerousness, storage conditions and compliance with international regulations, for arms manufacturers or armed forces in France and abroad.

Inventory and storage site visits

To guarantee a high-quality technical assessment in line with their customers expectations, Geomines' experts carry out site visits, in order to establish an inventory of the ammunitions concerned and evaluate existing storage measures.

Experts from Geomines, former members of the French armed forces, have access to daily updated databases. They also possess all the skill-sets and certifications necessary for the technical assessment of ammunitions.

Audits and recommendations of storage infrastructures

As part of the modernisation and security enhancement of storage infrastructures, Geomines conducts audits of existing facilities. When laying out the initial diagnosis, Geomines pays a particular attention to its customer's needs with a thorough and detailed examination of input data: site, neighborhood constraints, stored ammunition.

In order to guarantee the choice of safe approach and the use of the best existing technologies, Geomines relies on a set of regulations adapted to specific mission contexts (IMAS, IATG, STANAG, AASTP...) and regularly monitors new developments.

Audits and recommendations of stored weapons and ammunitions

In addition to infrastructure audits, Geomines carries out audits on stored ammunitions. Geomines offers governments a technical evaluation service of stockpiles (missiles, bombs, shells, rockets...) in order to assess the degree of dangerousness, as well as the storage conditions.

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X-Ray inspection of ammunition

The inspection of each piece of ammunition using an X-ray machine can be added to the audits processes. Such approach enables to thoroughly analyse ammunition's components and assesses cracks, delamination and identify anomalies, together with their precise location. It also help reduce handling and transportation associated risks.

Geomines' experts define the safest actions to be taken in accordance with their conclusions. A personalized proposal is drawn up based on customers expectations, from the construction of new depots to the ammunition destruction process itself. The regulations adapted to each country serve as a basis for the reflection carried out.



Ammunition stockpile destruction

Geomines offers States ammunition stockpile destruction services (missiles, bombs, marine mines, torpedoes, rockets, etc.). Geomines' experts have the necessary know-how and experience to dismantle outdated ammunition and audit large stockpiles. The ammunitions are destroyed in strict compliance with security, transportation, fire and waste reprocessing protocols.

Complete management of ammunition stockpile, from their evaluation to their destruction.

Technical evaluation of stocks

A preliminary storage sites visit is mandatory. Such audits help establish an inventory of the ammunition to be managed and to analyse their storage conditions. They also allow for the measurement of the level of danger posed by the stockpiles as well as for the identification of the best approach for their dismantlement and destruction.

Risk analysis

Geomines identifies safety measures for transport, dismantling and destruction.

The technical assessment operations are carried out in strict compliance with operator safety rules and are based on international standards (IMAS, IATG, STANAG, AASTP).

Dismantling

Ammunition dismantling is only carried out when they cannot be destroyed nominally: in case, for example, of the presence of noxious materials (asbestos) or non transportable ammunition.

The dismantled elements are placed in ADR transportation (dangerous goods) or special boxes, depending on the harmful materials, to be either treated or destroyed later.

Destruction

Depending on the risk analysis, destruction processes can take different forms.

Geomines generally supports destruction in pits. Only specific operations are carried out in the open air, such as the burning of powders or the combustion of propellants.

Control

After destruction, the teams make sure that all sensitive components have been properly destroyed and cannot be reused, while paying a specific attention to explosives' waste.

Thanks to their longstanding operational experience, Geomines' teams can model the effects of blast and fragments and recommend specific measures for the protection and reduction of dedicated explosion effects, depending on the type of operation to be carried out: underground containers, rubber cylinders, trenches, etc.



Founded in 2002, Geomines is a french mine-clearance company specialized in geopysical survey and UXO clearance. We support our customers for the full range of UXO clearance-related needs, in France and abroad: land and underwater survey, land clearance, underwater clearance, excavation and drilling security, training.