Safe and environmental-friendly methods for the destruction of ammunition

Unexploded Ordnance’s (UXO’s) in the soil of the Netherlands as a heritage from WWII are still in 2005 a large problem. Up to now just approximately 10% of all ammunition that was ditched into the soil has been excavated. On an annual basis thousands of ammunition articles are found that call for destruction. In recent history the destruction of the UXO’s was accomplished by open burning and open detonation. During these uncontrolled events toxic chemicals are distributed into the environment threatening the flora and fauna as well as the health of the people involved in the open burning open detonation. However, new legislation (European Union and the Netherlands) will in near future prohibit the application of these environmental unfriendly methodologies. Therefore, TNO has developed proper techniques for the destruction of small, medium and large calibre ammunition. These techniques facilitate an on-site destruction of the ammunition which prevents an unnecessary transport of the ammunition. Furthermore, the developed methodologies enable the destruction of small, medium and large calibre ammunition on an environmental friendly and secure way. Next to this, the technique which is applied for large calibre ammunition also enables the re-use of the ammunition as a practice shell. Within this presentation we will address each technique and show their application as they will be implemented in near future.