Prevention of Unplanned Explosions at Munitions Sites in Tajikistan

Poorly stored stockpiles of aging munitions continue to pose threats in Tajikistan. Since 2009, the Fondation Suisse de Déménage (the Swiss Foundation for Mine Action or FSD) has worked with Tajikistan’s Ministries of Defense and Interior and its border guards to dispose of surplus weapons and munitions. These efforts were funded by the government of the Netherlands and the Office of Weapons Removal and Abatement in the U.S. Department of State’s Bureau of Political-Military Affairs (PM/WRA).

With the dissolution of the Soviet Union in the early 1990s, former Soviet republics inherited vast amounts of Soviet weaponry from military units previously stationed in these now independent republics. Three of these countries, Turkmenistan, Uzbekistan and Tajikistan, served as staging points for Soviet forces during the invasion of Afghanistan in the 1980s and produced and maintained considerable stocks of Soviet weapons and munitions. When Tajikistan entered into civil war in 1992, these former Soviet armories (still occupied by idle Soviet units) served as a major source of small arms for both government and opposition forces. Other sources of small arms came from high-ranking local law enforcement officers who appropriated the weapons available to them, as well as from Afghanistan, Kyrgyzstan, Russia and Uzbekistan.1

When the war ended in 1997, thousands of tons of munitions were left unguarded in makeshift storage sites, many of which were forgotten. Today, the munitions stored in these abandoned caches continue to decay, increasing the likelihood of unplanned explosions. Moreover, these caches, some of which include weapons such as mortars, heavy machine guns, rocket-propelled grenade launchers and shoulder-launched surface-to-air missiles, have reportedly been targeted by criminals and militant extremists and pose a serious security threat to the Tajikistani people.2

Although demilitarization programs operated across the country during and after the civil war, recent clashes in Tajvildara (2009), Gharm (2010) and Khorugh (2012) with armed groups show that citizens continue to possess a considerable amount of small arms and light weapons (SA/LW).3,4,5

Small arms ammunition being destroyed in an incinerator. Photo courtesy of Artyom Harutyunyan/FSD.
Unplanned Explosions

A survey conducted by the Small Arms Survey indicates a more than two-fold increase in unplanned explosions at munitions sites globally since 1987, with 69 events from 1987–1996 and 194 events from 1997–2006. Although there are no official statistics available, there was at least one unplanned explosion in Tajikistan in 2009 caused by handling errors and poor working practices.

While unplanned explosions tend to originate from mechanical and chemical deterioration of ammunition brought on by poorly met standards within storage depots, additional risk factors exist:

- Storage area defects such as electrical short circuits
- Negligent behavior including dropping ammunition or smoking in the facility
- Environmental dangers such as extreme temperature shifts, lightning or fires

In Tajikistan, summer temperatures can reach upward of 50 degrees Celsius (122 degrees Fahrenheit), and the dry climate increases the likelihood for fires.

Reducing the number of unplanned munitions explosions may require additional training for staff working at storage sites. Likewise, constructing new storage facilities and renovating existing structures will eliminate external and environmental threats. Problems related to deteriorating munitions can only be solved by separating them from stable munitions and disposing of the unstable munitions.

Weapons and Ammunitions Disposal

In 2003, the Fondation Suisse de Déminage (the Swiss Foundation for Mine Action or FSD) signed a memorandum of agreement, which the Majlisi Oli (Tajikistan’s Supreme Assembly) ratified on 20 June 2003. Tajikistan’s inability to properly secure and maintain its munitions sites alerted FSD of the need for a Weapons and Ammunitions Disposal (WAD) team in Tajikistan. In April 2009, FSD and Tajikistan’s First Deputy Minister of Defense, Lt. Gen. Ramil Nadirov, met and initiated the WAD project.

Besides conducting munitions disposal, FSD’s other activities in the region include landmine and explosive remnants of war survey, clearance and land release. FSD’s WAD project is the only Tajik program actively operating in weapons, small-arms and ammunition disposal and is supported by Tajikistan’s border guards, Ministry of Defense (MOD) and Ministry of Interior (MOI). Its objectives are as follows:

- To train and provide necessary equipment for teams consisting of FSD and MOD staff for the destruction of unserviceable, outdated and redundant conventional ammunition
- To facilitate SA/LW, large-caliber ammunition, aircraft
bombs and man-portable air-defense systems (MANPADS) destruction

- To improve munitions-stockpile security and management through relevant staff trainings

The government of the Netherlands funded the first team to conduct WAD operations starting in May 2009 and has continuously assisted the WAD team for nearly three and a half years. Over this period, the Netherlands contributed more than EU€1,000,000 (US$1,277,300 as of 4 April 2013) to FSD.

In 2011 and 2012, the Office of Weapons Removal and Abatement in the U.S. Department of State’s Bureau of Political-Military Affairs (PM/WRA) provided Tajikistan with more than US$2.5 million to support WAD teams and mine action in Tajikistan. The total PM/WRA contribution for Tajikistan in 2011 was US$1 million, and the 2012 total was $1,691,120. Through fiscal year 2012, the U.S. invested more than $6.8 million in conventional weapons-destruction (CWD) programs in Tajikistan.

Program Results

From 1 May 2009 to 31 December 2012, WAD project teams achieved the following results:

- 154,952 rounds of ammunition of 20-mm caliber and higher were destroyed by using a high explosive attack method.
- 1,025,155 small arms ammunition from 5.45-mm to 14.5-mm caliber were destroyed in incinerators designed locally by FSD’s technical staff in Tajikistan.
- 7,180 light weapons and their components were destroyed with high pressure hydraulic shears.

During a 2012 examination of depots throughout the country, Tajikistan’s MOD officers and WAD staff also found 645 anti-personnel mines, which later were destroyed at FSD’s central demolition site near Dushanbe. Other notable munitions were found as well:

- 116 anti-tank mines from depots
- 400 cluster munitions
- 40 MANPADS

Two refresher courses and three courses in ammunition safe-handling and explosive-ordnance disposal (EOD) at each of the three International Mine Action Standards levels were carried out from 2009–2013. Additionally in 2012, two SA/LW Cutting Standard Operation Procedures courses were given to MOI and border guard officers. Altogether, 82 civilians,
25 officers from the MOD Engineering Department, eight officers from MOI and five border guard officers attended courses and were successfully accredited as EOD operators.

Physical security and stockpile management (PSSM) issues continue to present serious security concerns to Tajikistan, and FSD strives to support the government in resolving these issues. Additionally, the government of Tajikistan continues to take steps to improve stockpile security. On 3 January 2013, deputies of Majlisi Namoyandagon (Tajikistan’s lower house of parliament) ratified a PSSM agreement between Tajikistan and NATO.12 FSD hopes the MOD, together with the MOI, will take ownership and manage the PSSM project in the near future; however, no concrete steps to transfer control of the project have been taken at this time.

Endnotes
11. Program results taken from the FSD WAD database, Artyom Harutyunyan, email correspondence with author, 7 June 2013.