# **PROLIFERATION: THREAT AND RESPONSE**

## April 1996

### Office of the Secretary of Defense

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SELECTED NUCLEAR AND CHEMICAL FACILITIES

While progress for its nuclear weapons program has remained elusive, Libya has had greater success in producing chemical agents.

#### CHEMICAL PROGRAM

Libya is one of few nations in the last decade to have employed chemical weapons, having dropped chemical agents from a transport aircraft against Chadian troops in 1987. Iran supplied the agents in exchange for naval mines.

In addition, Tripoli has looked to establish an indigenous chemical warfare program, and in late 1988, with extensive foreign assistance, completed construction of the Rabta chemical agent facility. During three years of operation, at least 100 metric tons of blister and nerve agents were produced at this facility. When the United States brought Libya's chemical warfare program to the attention of the international media in 1988, Libya responded in 1990 by fabricating a fire to make the Rabta facility appear to have been seriously damaged. Although the Rabta facility appears inactive, Libya's chemical weapons program continues to flourish. To replace the Rabta facility, Libya has begun constructing a large, underground chemical warfare plant near Tarhunah, a mountainous region about 60 kilometers southeast of Tripoli. Putting the facility underground masks its activities and increases its survivability in case of an attack. In the meantime, Libya will rely on foreign sources for its precursor needs.



### TARHUNAH UNDERGROUND CHEMICAL PLANT

Past international attention on Libya's Rabta chemical facility led the Libyans to construct an underground facility at Tarhunah.

Libya claims it will not sign the CWC as long as other countries in the region possess NBC weapons. Libya almost certainly will keep its chemical warfare program as long as Qadhafi remains in power.

#### **BIOLOGICAL PROGRAM**

Libya continues its efforts to establish a biological warfare capability. However, hampered by its inadequate biotechnical foundation, the Libyan offensive biological warfare program remains in the early research and development stage. Libya may look to small research and development programs supported by universities to fill in the gaps in its technical knowledge. These technical shortcomings, combined with limitations in Libya's overall ability to put agents into deliverable munitions, will preclude production of militarily effective biological warfare systems for the foreseeable future.

#### **BALLISTIC MISSILES**

Libya's only operational ballistic missile system is the SCUD-B, acquired from the former Soviet Union in the mid-1970s. The acquisition of an extended-range missile, such as the North Korean NODONG, and the development of an indigenous missile — designed to reach 1,000 km — would give Libya the capability to reach regional adversaries.

International constraints make purchasing a longer range missile, such as North Korea's NODONG, difficult. In addition, developing an indigenous ballistic missile production program also requires extensive foreign assistance. So far, Libya's