

## **Best Practice: Recycled Oil Pipelines as a Perimeter Barrier**



<b>Category:</b>	Perimeter Control
<b>Location:</b>	Saudi Arabian Oil Company (Saudi ARAMCO), Ras Tanurah
<b>Date Observed:</b>	4 December 2006
<b>POC:</b>	Mr. Adel Al-Saad, Saudi Arabian Oil Company
<b>WWW:</b>	<a href="http://saudiaramco.com/irj/portal/anonymous">saudiaramco.com/irj/portal/anonymous</a>

**Description:** The Saudi Arabian Oil Company's oil refinery at Ras Tanurah has supplemented the perimeter fencing with recycled oil pipelines.

**Discussion:** Within Saudi Arabia, recycled oil pipeline barricades are used to supplement perimeter fencing to prevent vehicles from driving through the fence line. Typical vehicles designed for highway use would have great difficulty in penetrating these barricades. These unique barriers are located along roadside ditches between the facility's road and the perimeter fence. The pipes are welded to posts buried into the ground to prevent them from rolling.

### **Potential**

**Down-side:** There is no downside to using this additional security barrier.

**Cost:** By using recycled oil pipelines there is very little cost associated with implementing this security measure. There is some cost associated with the transportation of the pipe and the labor required to install the system. No funding is required to maintain the system after the installation is complete.

**Conclusion:** This type of security system is relatively inexpensive, very easy to install and does not require a large maintenance budget. The barrier could be made of any material that is readily available. In Saudi Arabia, oil pipelines are good choice; however, logs may be a suitable replacement where forests are located nearby. Other readily available materials could also be used at an equally low price.