

TIMELINE OF US CHEMICAL WEAPON LEAKS AT DESTRUCTION SITES

Chronology of Shutdowns, Malfunctions, and other Incidents by Site since 1997

Date	Site and Event Description	Evacuation occurred? Extent (if known)?	Shutdown occurred? Duration (if known)?	Agent release to the environment?
Aberdeen (ABCDF)				
5/12/03	Alarm detects mustard agent vapor inside the east end of the process neutralization building.	Yes (9 workers)	Yes (several hours)	No
5/30/03	Alarm detects presence of mustard agent vapor during electrical power outage; second power loss occurs several hours later but no alarms sound. Operations cease for several hours until stability of electrical power is restored.	Yes (entire facility)	Yes (several hours)	None reported
6/25/03	Mustard agent vapor leak found from 55-gallon hazardous waste drum in the drain site of the neutralization building; all workers are evacuated, 3 workers are sent to medical facility and cleared.	Yes (workers in neutralization building)	No	No
8/16/03	Fire safety system automatically shuts down facility's ventilation system after smoke is detected from a carbon filter drum venting a rinse water tank; low levels of agent vapor detected in neutralization bay and adjacent rooms.	Yes (workers in neutralization building)	Yes (Restarted on 11/05/03 with modified drain station)	No
11/14/03	Alarm detects mustard agent vapor in the glove box sump piping of ton container drain station; further examination of all glove boxes identifies corrosion in the piping and sump.	Yes (3 workers)	Yes (Restarted on 1/16/04 after examination and repair of all glove boxes)	No
1/25/04	Rinse water spill occurs during a regularly scheduled flushing of the rinse water vent condenser in the neutralization bay.	No	No	No
Anniston (ANCDF)				
10/23/03	Fire alarm sounds; a small fire involving a compressor motor is quickly extinguished (no chemical agents involved).	Yes	Yes (several hours)	No
11/7/03	Chemical agent monitor detects possible presence of GB nerve agent in an unoccupied room inside the chemical laboratory where GB should not have been present; agent alarm subsequently clears.	Yes (workers in chemical laboratory)	No	No
11/13/03	Fire alarm sounds after a piece of rocket debris ignites in the Explosive Containment Room (ECR) where GB M55 rockets are processed.	Yes (workers in ECR)	Yes, several hours	No
2/4/04	Chemical agent monitor sounds in an unoccupied observation corridor of the Munitions Demilitarization Building (MDB).	Yes (MDB personnel on observation corridor)	Yes (1 day)	No
3/2/04	GB leak detected inside igloo where 105 mm projectiles are stored during routine monitoring operations.	Yes (workers in igloo)	No	None reported
3/3/04	Confirmed reading of VX nerve agent on the perimeter of Pelham Range (about four miles northeast of chemical storage area); source of readings being investigated since ANDCF disposal facilities involve rockets only containing GB.	No	No	No

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Newport (NECDF)				
7/25/02	VX agent detected inside a barrel of laboratory waste materials during routine air monitoring operations.	No	No	No
12/10/03	Emergency radios and sirens warn of chemical spill in two eastern Indiana counties; determined to be false alarm.	No	No	No
1/8/04	During dismantling operations, alarm indicates VX agent present in the former VX production facility; unclear whether VX presence resulted from new leak or residual contamination.	No	No	No
3/3/04	A chemical agent monitor sounds in a munitions dismantling area; air samples test negative for VX.	No	No	No
Pine Bluff (PBCDF)				
10/11/01	Near collision of truck into main power line to site causes power outage on north end of the arsenal.	No	No	No
1/1/02	VX leak detected in storage igloo.	No	No	No
1/23/02	Bomb threat received via telephone voice mail; construction halted and facility is closed for a day for investigation.	Yes (600 construction workers)	No	No
2/12/02	Hand-written message found on piece of protective personnel equipment indicates possible presence of biological agent; construction halted and facility is closed for a day.	Yes (800 construction workers)	No	No
Tooele (TOCDF)				
1/26/97	Alarm sounds indicating agent migration into the observation corridors of Munitions Disposal Building (MDB).	Yes	Yes	Possible
4/23/97	TOCDF shutdown for "Notice of Insufficient Quality" occurs due to failure to follow operating procedures. Shutdown initially presented as "routine maintenance."	No	Yes (Restarted on 06/15/97)	No
5/28/97	Citizens escorted through TOCDF into an area with a GB contaminated bomb present; citizen protection regulations violated but no confirmed physical effects.	No	No	No
3/30/98	Incomplete drain of an MC-1 bomb allows excess of GB agent to metal parts furnace. The resulting temperature variations cause a system shutdown.	Yes (entire facility)	Yes	Possible
10/01/98 - 12/04/98	24 GB vapor leaks involving 105mm projectiles detected; 16 leaks occurred after projectiles were transferred from storage igloos to the incinerator building, 8 occurred during the workers' removing of heavy bolts from the projectiles.	No	No	No
12/13/98	Liquid incinerator shut down after 140 gallons of GB are spilled while being fed into incinerator.	Yes	Yes	No
4/13/99	TOCDF back-up power system fails after depot-wide outage. Failures compromises the purification and air filter systems.	Yes	Yes	Possible

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	Tooele (TOCDF)			
4/16/99	Confirmed agent reading in the DFS Cyclone Enclosure adjacent to outside environment.	No	No	Possible
5/5/99	Agent vapor leak forces workers out of certain areas.	Yes	No	No
5/21/99	Agent vapor migrates to an unpack area where vapor is not supposed to be present; chemical agent monitor reading exceeds 75 times the alarm point.	Yes (7 workers)	No	No
5/24/99	Workers removing nose closures from 105mm projectiles encounter liquid agent; alarms show agent presence to exceed 50 times the maximum allowable level for protective clothing specifications.	Unknown	No	No
5/26/99	Workers in Toxic Maintenance Area removing plastic bags of waste when alarm indicates agent presence of 50 times the maximum allowable level; workers test positive for agent even after multiple cleansing procedures.	Yes	No	No
6/4/99	County-wide power outage causes shut down of air flow system; emergency power does not come on for 25 minutes, allowing agent migration to areas where agent is not supposed to be present.	Yes	Yes (Chemical Demilitarization Program orders TODCF into "Stand Down" mode until 06/14/99)	Possible
6/14/99	Within six hours of restarting after being in "Stand Down" mode, allowable feed rate for rocket processing is violated and TOCDF re-shuts down.	Yes	Yes	No
2/20/00	Two workers are exposed to GB agent when it leaks into room where they are working.	Yes (2 workers)	No	No
5/8/00	Confirmed release of GB agent into the environment after workers complete maintenance on deactivation furnace system (DFS); inconsistent alarm readings cause confusion.	Yes	Yes	Yes
5/9/00	Second confirmed release of GB into the environment 1.5 hours after first confirmed release when workers attempt to relight DFS; local emergency officials not notified until four hours after first confirmed GB release.	Yes (entire facility)	Yes (Two liquid incinerators restarted on 7/28/00)	Yes
9/2/01	GB leak detected in mechanical equipment room; depot officials state agent reading is well below the safe level for workers	No	No	No
8/27/01 - 9/30/01	GB leaks detected in 68 on-site containers (ONC). All leaks involved 155mm projectiles and were discovered during routine air monitoring procedures	No	No	No
10/5/01	Two alarms sound in the Chemical Assessment Laboratory (CAL) during routine lab operations. Two chemists tested for exposure test negative.	Yes (all CAL personnel)	Yes	No
10/1/2001 - 10/8/2001	GB leaks detected in 18 ONCs. All leaks involved 155mm projectiles and were discovered during routine air monitoring procedures.	No	No	No

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10/25/2001, 11/3/2001, 11/6/2001	GB leak detected in a wet-eye bomb shipping container located in TOCDF unpack area during routine air monitoring procedures on three occasions.	No	No	No
11/16/2001 and 11/19/2001	GB leak detected in a wet-eye bomb shipping container in Deseret Chemical Depot (DCD) Storage area prior shipment to TOCDF.	No	No	No
11/26/01	Power loss results in low-level mustard agent migration; emergency generators operable within seconds.	No	No	No
12/10/01	Liquid leak of one-half teaspoon of mustard from 155mm projectile mustard leak detected in storage area during routine monitoring operations.	No	No	No
12/12/2001, 12/17/2001, 12/21/2001	GB leak detected in one or more ONCs at TOCDF during routine air monitoring operations on three occasions.	No	No	No
1/6/02	Alarms alerted workers to GB leak during repair operations. Workers test negative for exposure	Yes (6 workers)	No	No
1/11/2002 and 1/22/2002	GB leak detected in one or more ONCs at TOCDF Container Handling Building during routine air monitoring operations on two occasions.	No	No	No
1/25/02	GB leak detected in a chemical transport vehicle at DCD storage yard.	No	No	No
1/30/02	GB leak detected in TOCDF unpack area during movement of 155mm projectiles. Workers test negative for exposure.	Yes (8 workers)	Yes (several hours)	No
2/25/02	Mustard leak from 155mm projectiles detected in storage igloo during routine monitoring operations.	No	No	No
3/2/02	GB leak detected in ONC in TOCDF unpack area during routine air monitoring operations.	No	No	No
3/7/02	Liquid leak of one-half teaspoon from valve on a VX bulk container detected in storage igloo during routine operations.	No	No	No
4/3/02	Low-level GB detected in liquid incinerator primary furnace room while workers are preparing to install burner face plate.	Yes (3 workers)	No	No
5/4/02	Low level GB vapors detected while workers performed maintenance on a burner.	No	No	No
7/5/02	Trace amounts of Lewisite blister agent are released from filter stack.	No	No	No
7/15/02	Two workers exposed to GB vapors during routine maintenance on agent purge lines in liquid incinerator room. Four workers examined for exposure; one tests positive.	Yes (4 workers)	Yes (VX agent destruction -- resumed on 03/28/03)	No
9/09/2002 and 10/16/2002	Mustard leak from 155mm projectile detected in DCD storage area during routine leaker isolation operations on two occasions.	No	No	No

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	Tooele (TOCDF)			
12/12/02	Mustard leak from unknown source detected in DCD.	Yes (4 workers)	No	No
3/27/03	VX leak in spray tank container detected during routine air monitoring operations.	No	No	No
4/9/03	Workers observe chemical reaction of VX agent and water in Agent Collection System (ACS) tank; operations suspended.	No	Yes (2 days)	None reported
5/3/03	Alarms recognizing presence of mustard agent sound in observation corridor south of Munitions Processing Bay.	Yes	Yes (3 days)	No
8/04/2003 and 8/25/2003	Mustard leak from 155mm projectile detected in storage igloo at DCD during routine air monitoring operations on two occasions.	No	No	No
8/27/03	Follow-up inspection of filtered storage igloo at DCD reveals seven mustard leaks amounting to approximately 1.5 cups.	No	No	No
9/4/03	“Maintenance Outage” to repair a leaking liner in Spent Decon System tank.	No	Yes (1 month)	No
9/29/2003, 9/30/2003, 10/14/2003	Mustard leak from 155mm projectile detected in storage igloo at DCD during routine air monitoring operations on three occasions.	No	No	No
11/3/03	Workers preparing a diluted GB agent sample evacuate a laboratory room when ACAMS alarms recognize a failure of the ventilation system; GB agent migration to adjacent room.	Yes (all workers)	Yes	No
12/10/03	Mustard leak from 155mm projectile detected in storage igloo at DCD during routine air monitoring operations.	No	No	No
12/12/03	TOCDF limits furnace processing to resolve analytical data inconsistencies from equipment that backs up real-time agent monitors in the pollution abatement system monitors.	No	Yes (several days)	No
1/28/2004 and 1/29/2004	Mustard leaks from four 155mm projectile detected in storage igloo at DCD during routine air monitoring operations over two consecutive days.	No	No	No
2/29/04	Small fire occurs at Continuous Emissions Monitoring System outlet outside of the Munitions Demilitarization Building. At the time of the fire, no waste was being processed and backup systems were in place during repairs.	Yes (all workers)	Yes (1 hour)	No
3/15/04	Leaking VX bulk container found by workers inside stockpile storage area; army states that no alarms went off nor was there any danger of an environmental release	No	No	No

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	Umatilla (UMCDF)			
8/26/2001 and 10/3/2001	VX leak from overpacked weapons and ton containers detected in storage igloo on two occasions.	No	No	No
10/5/01	A suspicious item is found in the incineration sector and tested for hazardous material; never identified but determined to pose no risk.	Yes (all workers)	Yes (4 hours)	No
12/3/02	Employee dropped glass vials of diluted GB. Workers tested negative for exposure.	Yes (3 workers)	No	No
8/1/03	Worker left grounds early with a diluted vial of GB in his pocket; vial was returned without exposure.	No	No	No
12/8/03	Low-level GB vapor detected outside storage area; no specific leak identified.	500 workers ordered to wear gas masks	No	No