

MEETING NOTES

SUMMARY OF SOME CHEMICAL MUNITIONS  
SEA DUMPS BY THE UNITED STATES

30 JANUARY 1989

WILLIAM R. BRANKOWITZ

1. FROM: ( )  
TO: Bari, Italy  
DATE: 2 December 1943  
ACTION: Air Raid  
MATERIAL: Bombs, M70 (H), approximately 100 tons  
Explosives, conventional. unknown quantity

COMMENTS: The ship S.S. John Harvey was carrying rear area chemical stocks for the European Theatre of operations. These stocks were used as a deterrent to the use of chemical warfare by the Germans. The John Harvey was hit in a German air raid and the conventional stocks exploded killing all aboard. There were 83 deaths and 534 injuries in the harbor area due to mustard thrown out of the vessel in the explosion.

SOURCE: Final Report of Bari Mustard Casualties, Stewart Alexander, LTC Medical Corps, 20 June 1944

2. FROM: ( )  
TO: New Orleans Port of Entry (NOPE)  
DATE: 1944  
ACTION: River Disposal  
MATERIAL: Bombs, M70 (H) and projectiles (H), quantity described as more than 20

COMMENTS: Loose dump of leaking munitions into Mississippi River.

SOURCE: (1)

3. FROM: Charleston, South Carolina  
TO: Atlantic Ocean  
DATE: World War II  
ACTION: Ocean Disposal  
MATERIAL: Projectiles, 105mm (H), number unknown  
Bombs, M70 (H), number unknown

COMMENTS: Loose dump of leaking munitions.

SOURCE: (1)

4. FROM: ( )  
TO: Pacific Ocean  
DATE: August 1944  
ACTION: Ocean Disposal  
MATERIAL: Bombs, M47A2 (H), 36 each,  
Bombs, unspecified, possibly 15,000 each.

COMMENTS:

SOURCE: (1)

5. FROM: ( )  
TO: Pacific Ocean, off Pearl Harbor, Oahu, Hawaii  
DATE: War World II  
ACTION: Ocean Disposal  
MATERIAL: Toxics, unspecified, 4,220 tons

COMMENTS: Probably the source of the 1976 accidental recovery of liquid filled 4-inch Stokes Mortar rounds which injured crewman aboard a hydraulic dredge.

SOURCE: (1), (2)

6. FROM: ( )  
TO: Atlantic Ocean, off Nansaman, Norfolk, Virginia  
DATE: War World II  
ACTION: Ocean Disposal  
MATERIAL: Unknown

COMMENTS:

SOURCE: (i)

7. FROM: ( )  
TO: Indian Ocean, 19°N 88°E, Bay of Bengal  
DATE: May 1945  
ACTION: Ocean Disposal  
MATERIAL: Drums, 55 gallon (H), 572 each  
Bombs, M47 (H), 4,693 each

COMMENTS:

SOURCE: (1), (2)



8. FROM: ( )  
TO: Indian Ocean, 19°N 88°E, Bay of Bengal  
DATE: May 1945  
ACTION: Ocean Disposal  
MATERIAL: Drums, 55 gallon (H), 608 each  
Bombs, M47 (H), 4,500 each

COMMENTS:

SOURCE: (1), (2)

9. FROM: ( )  
TO: Indian Ocean, 18°N 89°E, Bay of Bengal  
DATE: May 1945  
ACTION: Ocean Disposal  
MATERIAL: Bombs, M70 (H), 37,957 each  
Bombs, M78 (CG), 1,496 each  
Bombs, M79 (CG), 8,742 each  
Bombs, M79 (CK), 2,512 each

COMMENTS:

SOURCE: (1), (2)

10. FROM: ( )  
TO: Indian Ocean, 18°N 89°E, Bay of Bengal  
DATE: November 1945  
ACTION: Ocean Disposal  
MATERIAL: Bombs, M70 (H), 2,672 each  
Bombs, M78 (CG), 910 each  
Ton Containers (H), 2,672 each  
Ton Containers (L), 883 each

COMMENTS:

SOURCE: (1), (2)

11. FROM: ( )  
TO: Pacific Ocean, 32°30'N 134°10'E, off Japanese Coast  
DATE: November 1945  
ACTION: Ocean Disposal  
MATERIAL: Gas, unspecified, 3,200 metric tons

COMMENTS: Probable captured Japanese stocks.

SOURCE: (1), (2)

12. FROM: Edgewood Arsenal, Maryland  
TO: Atlantic Ocean, 38°00' to 38°10'N, 73°17' to 73°30'W  
(Dumping Area Number 1)  
DATE: 14 September - 21 December 1945  
ACTION: Ocean Disposal - 7 separate trips  
MATERIAL: Drums, 55 gallon (Arsenic Trichloride), 1154 each  
Candles (DM), 375 tons  
Projectiles, 4.2 inch (HD), 75,852 each  
Cluster Bombs, M74, White Phosphorous, 924 each  
Cannisters, Smoke, approximately 56,000 each  
Projectiles, Smoke, approximately 23,000 each

COMMENTS: Loose dumped 7 loads of material. Material from the first load was transferred from a barge to the Coast Guard Cutter "Gentian" and was dumped from the Cutter. The following six trips were made by Navy LSM's and material was dumped from the LSM's.

13. FROM: Darra Ammunition Depot, Brisbane, Australia  
TO: Pacific Ocean, 25 miles 090° from Cape Moreton, Australia  
DATE: 2 October - 20 December 1945  
ACTION: Ocean Disposal  
MATERIAL: Variable sources indicate the following:  
Ton Containers (H), 876 each or 8,000 tons  
Ton Containers (L), 93 each or 8,000 tons  
Drums, 55 gallon (CNS), 314 each  
Drums, 55 gallon (CNB), 432 each  
Projectiles, 75-105-155mm, gas unspecified, 3,500 tons or  
8,000 tons  
Candles (DM), 8,000 tons

COMMENTS: On 19 January 1970 a one-ton container of H was  
accidentally recovered by a fishing trawler in 69 fathoms of  
water at 20° 42.8'S 153° 35.7'E. Later in the 1970s, a  
ton container washed ashore in this area. The Australian  
Government has indicated that the area is a hazard to  
mariners.

SOURCE: (1), (2), (9)

14. FROM: ( )  
TO: Pacific Ocean, off Australia  
DATE: 1945  
ACTION: Ocean Disposal  
MATERIAL: Projectiles, 6,396 tons  
Ammunition, small arms, 1,600 tons

COMMENTS: Probably the same as the Cape Moreton Dump (#12), but possibly a different dump.

SOURCE: (1), (2)

15. FROM: ( )  
TO: Skagerrak area of North Sea  
DATE: December 1945  
ACTION: Ocean Disposal  
MATERIAL: Captured German stocks as follows:  
(GB), 11,000 tons  
(H), 4,000 tons  
(CN/DM), 35,000 tons  
(CG/HS), 66,000 tons

COMMENTS:

SOURCE: (1), (2), (7)



16. FROM: Italian Depots (U.S. Army)  
TO: Mediterranean Sea off Italy (Island of Ischia, near Bari)  
DATE: 21 October - 5 November 1945, 1-15 December 1945  
ACTION: Ocean Disposal  
MATERIAL: Bombs (CG), unspecified quantity  
Bombs (CK), unspecified quantity  
Bombs (AC), unspecified quantity

COMMENTS:

SOURCE: (1), (2), (9)

17. FROM: ( )  
TO: Mediterranean Sea  
DATE: After World War II (?)  
ACTION: Ocean Disposal  
MATERIAL: Bombs, M47 (H), unspecified quantity

COMMENTS:

SOURCE: (7)

18. FROM: Mukilteo Ammunition Pier, Washington  
TO: Pacific Ocean, off Japan  
DATE: 6 March 1946  
ACTION: Ocean Disposal  
MATERIAL: 150 pound Chlorine Cylinder, 1 each

COMMENTS: Enroute to Yokohama, Japan, on board the S.S, Eugene Skipner, a chlorine cylinder was found to be leaking. After unsuccessful efforts to plug the leak it was thrown over board.

SOURCE: (9)

20. FROM: New Orleans Port of Entry  
TO: Gulf of Mexico  
DATE: 10 March 1946  
ACTION: Ocean Disposal  
MATERIAL: Bombs (H), 2 each

COMMENTS: Two mustard bombs discovered leaking upon arrival from Edgewood Arsenal, Maryland, were placed on a barge and dumped at sea.

SOURCE: (9)

21. FROM: Naval Mine Depot, Yorktown, Virginia  
TO: Atlantic Ocean, site "Baker" off Charleston, South Carolina.  
DATE: 21-25 March 1946  
ACTION: Ocean Disposal  
MATERIAL: Projectile (H), 4 carloads

COMMENTS: Disposed of from S.S. Diamond Head.

SOURCE: (9)

23. FROM: Mukilteo Ammunition Pier, Washington  
TO: Pacific Ocean, off Japan  
DATE: 8 April 1946  
ACTION: Ocean Disposal  
MATERIAL: Ton container, chlorine, 1 each

COMMENTS: Enroute to Yokohama, Japan, on board the S.S. Cape Friendship a ton container of chlorine began to leak through a faulty fusible plug. After unsuccessful efforts to plug the leak, the ton container was thrown over board.

SOURCE: (9)

24. FROM: New Orleans Port of Entry  
TO: Gulf of Mexico  
DATE: May 1946  
ACTION: Ocean Disposal  
MATERIAL: Bombs, German (CG), 3 each

COMMENTS: Bombs were probably from the S.S. Park Benjamin.

SOURCE: (9)

25. FROM: Japan  
TO: Pacific Ocean, 32°30'N 134°10'E  
DATE: 8 May - 30 November 1946  
ACTION: Ocean Disposal  
MATERIAL: Japanese (H) and (L) stocks captured in World War II.

COMMENTS:

SOURCE: (1), (2)



26. FROM: France  
TO: Mediterranean Sea off St. Raphael, France  
DATE: July - October 1946  
ACTION: Ocean Disposal  
MATERIAL: Bombs (L), 1,700 each  
Bombs (H), 1,700 each

COMMENTS:

SOURCE: (1), (2)

27. FROM: Europe  
TO: North Sea, Skagerrak, 58°14'N 9°15'E  
DATE: 1 July 1946  
ACTION: Ocean Disposal  
MATERIAL: Any captured German item/agent possible, 1,349 long tons

COMMENTS: Sunk in hulk of Sperrbrecher as Davy Jones Locker 1.  
Depth of water 650 meters.

SOURCE: (2)

28. FROM: Europe  
TO: North Sea, Skagerrak, 58°17'N 9°37'E  
DATE: 1 July 1946  
ACTION: Ocean Disposal  
MATERIAL: Any captured German item/agent possible, 1,526 long tons

COMMENTS: Sunk in hulk T65 as Davy Jones Locker 2. Depth of water 650 meters.

SOURCE: (2)

29. FROM: Europe  
TO: North Sea, Skagerrak, 58°16'N 9°29'E  
DATE: 2 July 1946  
ACTION: Ocean Disposal  
MATERIAL: Any captured German item/agent possible, 671 long tons

COMMENTS: Sunk in hulk UJ305 as Davy Jones Locker 3. Depth of water  
650 meters.

SOURCE: (2)

30. FROM: Europe  
TO: North Sea, Skagerrak, 58°18'N 9°36'E  
DATE: 14 July 1946  
ACTION: Ocean Disposal  
MATERIAL: Any captured German item/agent possible, 2,765 long tons

COMMENTS: Sunk in hulk Alco Banner as Davy Jones Locker 4. Depth of water 650 meters.

SOURCE: (2)

31. FROM: Theodore Naval Magazine near Mobile, Alabama  
TO: Gulf of Mexico  
DATE: 13 July 1946  
ACTION: Ocean Disposal  
MATERIAL: Bombs, German (H), 33 each (30 each 500 kg, 3 each 250 kg)

COMMENTS: During unloading of S.S. Francis Lee, these bombs were set aside on a barge for disposal. Dumped in 200-600 feet of water 20 miles off the coast. One bomb recovered after emptying during dumping and later floating ashore.

SOURCE: (9)

32. FROM: Charleston, South Carolina  
TO: Atlantic Ocean, Dump Site "Baker"  
DATE: 1 August - 17 October 1946  
ACTION: Ocean Disposal  
MATERIAL: Bombs (H, L and CG)  
Bombs, German (H and GA)  
Ton Containers (H)  
Projectiles (H)  
Total: 23 Barges

COMMENTS: Disposal of stocks returning from or captured in Europe.

SOURCE: (9)

34. FROM: Europe  
TO: North Sea, Skagerrak, 58°15'N 9°30'E  
DATE: 6 June 1947  
ACTION: Ocean Disposal  
MATERIAL: Any captured German item/agent possible, 4,000 long tons

COMMENTS: Sunk in hulk James Sewell as Davy Jones Locker 6. Depth  
of water 725 meters.

SOURCE: (2)



35. FROM: Europe  
TO: North Sea, Skagerrak, 58°16'N 9°33'E  
DATE: 20 June 1947  
ACTION: Ocean Disposal  
MATERIAL: Any captured German item/agent possible, 3,000 long tons

COMMENTS: Sunk in hulk James Harrod as Davy Jones Locker 7. Depth  
of water 665 meters.

SOURCE: (2)

36. FROM: Europe  
TO: North Sea, Skagerrak, 58°18'N 9°38'E  
DATE: 30 June 1947  
ACTION: Ocean Disposal  
MATERIAL: Any captured German item/agent possible, 1,000 long tons

COMMENTS: Sunk in hulk George Hawley as Davy Jones Locker 8. Depth  
of water 685 meters.

SOURCE: (2)

37. FROM: Europe  
TO: North Sea, Skagerrak, 58°15'N 9°30'E  
DATE: 18 July 1947  
ACTION: Ocean Disposal  
MATERIAL: Any captured German item/agent possible, 6,000 long tons

COMMENTS: Sunk in hulk Nesbit as Davy Jones Locker 9. Depth  
of water 580 meters.

SOURCE: (2)

38. FROM: Attu and Adak, Alaska  
TO: Pacific Ocean, 12 miles off Chichagoff Harbor, Attu, Aleutian  
Islands  
DATE: 1947  
ACTION: Ocean Disposal  
MATERIAL: Bulk (H), quantity unspecified  
Bulk (L), quantity unspecified

COMMENTS:

SOURCE: (1), (2)

39. FROM: Europe  
TO: Atlantic Ocean off Scotland and Norway, 62°57'N 1°32'E  
DATE: 24 July 1948  
ACTION: Ocean Disposal  
MATERIAL: Any captured German item/agent possible, 2,000 long tons

COMMENTS: Sunk in hulk Philip Heiniken as Davy Jones Locker 10.  
Depth of water 1,035 meters.

SOURCE: (2)

41. FROM: Charleston, South Carolina  
TO: Atlantic Ocean, 300 miles off Florida  
DATE: 15-20 December 1948  
ACTION: Ocean Disposal  
MATERIAL: Bulk (L), 3,711 each  
Bulk M14 (L), 60 each

COMMENTS: This material came from Gulf Chemical Warfare Depot and was sunk in the merchant hulk S.S. Joshua Alexander. Code named Operation Geranium.

SOURCE: (9)

42. FROM: Theodore Naval Magazine near Mobile, Alabama  
TO: Gulf of Mexico  
DATE: 20 February 1954  
ACTION: Ocean Disposal  
MATERIAL: Projectiles (CNS), one barge

COMMENTS: Items were loose dumped from LST 694.

SOURCE: (9)

43. FROM: Theodore Naval Magazine near Mobile, Alabama  
TO: Gulf of Mexico  
DATE: January - February 1955  
ACTION: Ocean Disposal  
MATERIAL: Unspecified toxic munitions, 1 or 2 barges

COMMENTS:

SOURCE: (1), (2), (9)



44. FROM: Colts Neck Naval Pier, Earle, New Jersey  
TO: Atlantic Ocean, 37°50'N 70°37'W  
DATE: 13-14 November 1957  
ACTION: Ocean Disposal  
MATERIAL: Ton Containers (L), 48 each

COMMENTS: Loose dumped in 12,600 feet of water from U.S.S. Calhoun  
County. Material originally from Edgewood Arsenal, Maryland.

SOURCE: (1), (2), (9)

45. FROM: Sunny Point, North Carolina  
TO: Atlantic Ocean off South Carolina  
DATE: 20-27 March 1958  
ACTION: Ocean Disposal  
MATERIAL: Ton Containers (L), 1,507 each  
Ton Containers (HN), 63 each

COMMENTS: Loose dumped from barges. Material originally from  
Pine Bluff Arsenal, Arkansas.

SOURCE: (1), (2), (9)

46. FROM: Naval Weapons Station, Concord, California  
TO: Pacific Ocean, 37°40'N 125°00'W, 117 miles West of  
San Francisco  
DATE: 19 April 1958  
ACTION: Ocean Disposal  
MATERIAL: Bombs, M70 (H), 301,000 each  
Ton Containers (L), 1,479 each

COMMENTS: Sunk in the hulk of the S.S. William Ralston in 13,542 feet  
of water. Material originally from Navajo and Tooele Army  
Depots.

SOURCE: (4), (9)

47. FROM: Naval Weapons Station, Concord, California  
TO: Pacific Ocean, 37°40'N 125°00'W, 117 miles West of  
San Francisco  
DATE: 25 May 1958  
ACTION: Ocean Disposal  
MATERIAL: Bombs, M47 (H), 6 each  
Ton Containers (L), 335 each  
Ton Containers (HN), 11 each  
Projectiles (H), 2 each

COMMENTS: Loose dumped from barge towed by tug Sea Lion. Material  
originally from Tooele Army Depot.

SOURCE: (1), (2), (9)

49. FROM: Edgewood Arsenal, Maryland  
TO: Atlantic Ocean, 38°30'N 72°06W  
DATE: 14-15 June 1960  
ACTION: Ocean Disposal  
MATERIAL: Ton Containers (L), 2 each  
Cylinder (L), 1 each  
Radiological Waste

Total: 320 tons

COMMENTS: Loose dumped from a single barge.

SOURCE: (1), (2), (9)

50. FROM: Edgewood Arsenal, Maryland  
TO: Atlantic Ocean, 38°30'N 72°10'W  
DATE: 18 June 1962  
ACTION: Ocean Disposal  
MATERIAL: Projectiles, 105mm (H), 378 each  
Projectiles, 155mm (H), 341 each  
Ton Container (L), 1 each  
Drums (Cyanide), 20 each  
Radiological Waste, 421,757 pounds  
White Phosphorous munitions, 5,252 each

COMMENTS: Loose dumped from a single barge.

SOURCE: (1), (2), (9)

51. FROM: Edgewood Arsenal, Maryland  
TO: Atlantic Ocean near 1960 & 1962 sites  
DATE: 6-7 August 1964  
ACTION: Ocean Disposal  
MATERIAL: Ton Containers (CNB), 456 each  
Projectiles, 75mm (H), 1,700 each  
Ton Containers (H), 74 each  
Bombs M78 (CK), 10 each  
Drums, 55 gallon, radiological waste, 800 each

COMMENTS: Loose dumped from a single barge.

SOURCE: (1), (2), (9)

52. FROM: Colts Neck Naval Pier, Earle, New Jersey  
TO: Atlantic Ocean, 39°38.7'N 70°57'W  
DATE: 15 June 1967  
ACTION: Ocean Disposal  
MATERIAL: Ton Containers (H), 4,577 each  
Rockets, M55 (GB), 7,380 each in concrete vaults

COMMENTS: Sunk in the hulk S.S. Corporal Eric G. Gibson as Operation CHASE 8 in 7,200 feet of water. Wreck site sampled 1969. Wreck located, photographed and sampled in 1972. No contamination detected.

SOURCE: (1), (2), (5)



53. FROM: Colts Neck Naval Pier, Earle, New Jersey  
TO: Atlantic Ocean, 39°32.7'N 71°01.6'W  
DATE: 19 June 1968  
ACTION: Ocean Disposal  
MATERIAL: Ton Containers (GB & VX), 38 each  
Rockets, M55 (GB & VX), 1,460 vaults  
Canisters, Arsenic and Cyanide, 120 each drums

COMMENTS: Sunk in the hulk S.S. Mormactern as Operation CHASE 11 in  
6,390 feet of water. Wreck site sampled 1969. Wreck  
located, photographed and sampled in 1972. No contamination  
detected.

SOURCE: (1), (2), (5)

54. FROM: Colts Neck Naval Pier, Earle, New Jersey  
TO: Atlantic Ocean, 39°32.7'N 71°01.6'W  
DATE: 7 August 1968  
ACTION: Ocean Disposal  
MATERIAL: Ton Containers, H contaminated and filled with water, 3,500  
each  
Conventional explosives

COMMENTS: Sunk in the hulk S.S. Richardson as Operation CHASE 12 in  
7,800 feet of water. Wreck detonated during dive to  
bottom. Site sampled in 1969 and 1972, but debris from  
wreck could not be positively identified. No contamination  
found. Ton containers were minimally contaminated with H,  
as many stood open at Edgewood Arsenal for over one year  
prior to disposal.

SOURCE: (1), (2), (5)

55. FROM: Sunny Point, North Carolina  
TO: Atlantic Ocean 29°23.1'N 75°58.0'W, 250 miles east of  
Cape Kennedy, Florida  
DATE: 18 August 1970  
ACTION: Ocean Disposal  
MATERIAL: Rockets, M55 (GB), 12,508 each in vaults  
Projectiles, 155mm (GB), 3 each  
Mine, M23 (VX), 1 each

COMMENTS: Sunk in hulk of S.S. LeBaron Russell Briggs as Operation  
CHASE 10 in 16,440 feet of water. Wreck located,  
photographed and sampled in 1971, 1972, 1973, 1974 and  
1975. No contamination detected. Last ocean dumping of  
chemical weapons.

SOURCE: (1), (2), (6)