

INDIAN ISLAND
~~Keyport~~ Lit 8.4
Indian Island
FS 206

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

In the Matter of the) No. 91-153
)
UNITED STATES NAVY)
Indian Island Detachment) ENFORCEMENT ORDER
Jefferson County, Washington)
)
Potentially Liable Person)

To: United States Navy
Naval Undersea Warfare Engineering Station
Keyport, Washington

I. Jurisdiction

This Order is issued by the Washington State Department of Ecology pursuant to the authority of RCW 70.105D.050(1).

II. Statement of Facts

Based on currently known information, Ecology makes the following Statement of Facts:

2.1 The Naval Undersea Warfare Engineering Station, Indian Island Detachment, hereinafter referred to as the Facility, is located in Jefferson County, Washington, approximately three miles southeast of Port Townsend, along an extension of the Olympic Peninsula of Washington. The Facility is bordered by Kilisut harbor to the East, Port Townsend Bay to the west and north, and Oak Bay and Portage Canal to the south. The Facility is 5 miles long, occupies 2716 acres and is physically connected to Marrowstone Island (to the East) by a sand bar and a bridge.

1 2.2 Area 10, the North End Landfill, is situated on the north end
2 of Indian Island. The area is approximately 5 acres in size and
3 includes the off-shore sediments. The landfill was utilized as the
4 primary landfill for Indian Island from pre-1945 to the mid-1970s.
5 Residential wastes as well as such industrial wastes as lead batteries,
6 asbestos, polyurethanes, waste paint, solvents (thinners and strippers),
7 oil, and zinc plating slag may have been placed into the landfill.
8 Samples taken of water seeps, soil, and sediments in the vicinity of the
9 landfill confirm that groundwater, soil and sediments have been
10 contaminated by leachate from the landfill. These contaminants include
11 lead, petroleum hydrocarbons, 1,1,1-trichloroethane, p-cresol, DDT,
12 DDD, and phthalate esters.

13 2.3 Area 21, Building 86 Fill, is located between Building 86 and
14 Well No. 2 west of County Road on Indian Island. The area was used in
15 the 1940s as a landfill and waste disposal site. Waste oils, solvents,
16 paint, electrical equipment and miscellaneous debris were disposed of at
17 the site. Two drinking water wells, presently unused, are near the
18 site-one within 100 feet, the other within 1500 feet. Soil and water
19 samples from Area 21 indicate that contamination by lead, polyaromatic
20 hydrocarbons (PAH), and acetone has occurred.

21 2.4 Area 11, Sherman Point, is located on the northwest end of
22 Indian Island. The area was used in the 1940s as a ordnance disposal
23 area where trinitrotoluene and similar compounds were burnt. In
24 addition, 450 drums of a solution of Sulfur Trioxide and Chlorosulfonic
25 Acid were disposed of at this location.

26 2.5 Area 12, the Griffin Street Ordnance Disposal Area, is
27 located on the east side of Indian Island near the beach at Killisut
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1 Harbor. The area was used in the late 1940s and early 1950s to burn
2 5000 rounds of incendiary bombs. An unknown quantity of hazardous waste
3 residues may have been generated from this burning and released into the
4 environment.

5 2.6 Area 15, North Slab Storage Area, is located between
6 Buildings 190 and 108 on the west side of Indian Island near Port
7 Townsend Bay. From the 1940s to the 1970s, drums of unidentified liquid
8 wastes, paints, paint residues, and solvents were stored in this area.
9 Releases of hazardous materials to the environment were reported to have
10 occurred.

11 2.7 Area 18, Net Depot, is located south of Building 77 on the
12 western edge of the facility. The Net Depot is approximately 50,000
13 square feet in area. It was used for the construction and repair of
14 submarine nets in the 1940s and 1950s. Releases of such hazardous
15 materials as carbon tetrachloride, thinners, and zinc plating wastes are
16 reported to have occurred. Up to 1000 gallons of such wastes may have
17 been released over the years.

18 2.8 Area 19, Public Works Area, is a three acre site located on
19 the western edge of the island near Port Townsend Harbor. From the
20 1940s to 1979, this area contained a number of industrial shops.
21 Various hazardous materials such as carbon tetrachloride, methyl ethyl
22 ketone and trichloroethene are reported to have been disposed of on the
23 ground. The volume of contaminants is estimated to have been 4,000
24 gallons or less.

25 2.9 Area 20, Lower Ferry Street Bone Yard, is approximately two
26 to three acres in size. Spills of petroleum products, waste oil, and
27 solvents occurred in this Area from the 1940s to the 1970s.
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1 2.10 Area 22, Old Bomb Overhaul Area, is located at the south end
2 of Indian Island roughly 1000 feet from Oak Bay. The site was in use
3 from the 1940s to the 1970s. Unknown amounts (estimated at up to five
4 gallons per week) of lead containing waste paint, solvent thinners and
5 carbon tetrachloride were disposed of onto the ground.

6 2.11 The foregoing information is contained in the following
7 documents:

8 (a) SCS Engineers. 1984. " Initial Assessment Study of
9 Naval Undersea Warfare Engineering Station, Keyport, Washington."
10 Prepared for the Pacific Northwest Branch Office, Western Division,
11 Naval Facilities Engineering Command, Silverdale, Washington.

12 (b) SCS Engineers. 1987. " Current Situation Report, Naval
13 Undersea Warfare Engineering Station, Keyport and Indian Island,
14 Washington." Prepared for the Pacific Northwest Branch Office, Western
15 Division, Naval Facilities Engineering Command, Silverdale, Washington.

16 (c) Potential Hazardous Waste Site Preliminary Assessment
17 (EPA Form 2070-12) for Site 54-10 (North End Landfill), Indian Island,
18 Naval Undersea Warfare Engineering Station. 1988. Prepared by Gerald
19 T. Lionelli for Don Morris.

20 (d) Potential Hazardous Waste Site Preliminary Assessment
21 (EPA Form 2070-12) for Site 54-21 (Building 86 Fill), Indian Island,
22 Naval Undersea Warfare Engineering Station. 1988. Prepared by Gerald
23 T. Lionelli for Don Morris.

24 (e) URS Consultants. 1990. "Technical Memorandum
25 summarizing the results of the Remedial Investigation, NUWES Indian
26 Island under Contract Task Order 0011." Prepared by B&V Waste Science
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1 and Technology Corporation for Engineering Field Activity Northwest,
2 Naval Facilities Command, Silverdale, Washington under Contract
3 No. N622474-89-D-9295.
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5 III.

6 Ecology Determinations

7 3.1 The United States Navy is an "owner or operator" as defined
8 at RCW 70.105D.020(6) of a "facility" as defined in RCW 70.105D.020(3).

9 3.2 The facility is known as the Naval Undersea Engineering
10 Warfare Station, Indian Island Detachment and is located in Jefferson
11 County, Washington.

12 3.3 The substances found at the facility as described above are
13 "hazardous substances" as defined at RCW 70.105D.020(5).

14 3.4 Based on the presence of these hazardous substances at the
15 facility and all factors known to the Department, there is a release or
16 threatened release of hazardous substances from the facility, as defined
17 at RCW 70.105D.020(10).

18 3.5 By letter dated November 26, 1990, Ecology notified the
19 United States Navy of its status as a "potentially liable person" under
20 RCW 70.105D.040 after notice and opportunity for comment.

21 3.6 Pursuant to RCW 70.105D.030(1) and 70.105D.050, the
22 Department may require potentially liable persons to investigate or
23 conduct other remedial actions with respect to the release or threatened
24 release of hazardous substances, whenever it believes such action to be
25 in the public interest.

26 3.7 Based on the foregoing facts, Ecology believes the remedial
27 action required by this Order is in the public interest.
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4.1 The United States Navy will conduct and finance the cost of a Site Hazard Assessment (SHA) and, as necessary, a State Remedial Investigation and Feasibility Study for the Facility including Area 10, Area 11, Area 12, Area 15, Area 18, Area 19, Area 20, Area 21 and Area 22.

4.3 All work performed pursuant to this Order shall be under the direction and supervision of a professional engineer or hydrogeologist, or similar expert, with appropriate training, experience and expertise in hazardous waste site investigation and cleanup.

a. Site Hazard Assessment Scope of Work for the Facility
(Area 10, Area 11, Area 12, Area 15, Area 18, Area 19, Area 20, Area 21
and Area 22).

c. Site Hazard Assessment Report.

1 d. RI/FS Scope of Work.

2 e. RI/FS Management Plans, including work plan, health and
3 safety plan, sampling and analysis plan, and public participation plan.

4 f. RI/FS Report.

5 g. Cleanup Action Management Plans, including a Draft
6 Cleanup Action Plan, an Engineering Design Report, Construction Plans
7 and Specifications, Operation and Maintenance Plans, and Compliance
8 Monitoring plans.

9 4.5 The procedures for review, comment and approval of the
10 documents required by paragraph 4.4 shall be as follows:

11 a. The United States Navy will initially submit each
12 document to Ecology as a "draft document" for review and comment.

13 b. Within thirty (30) days of receipt of the draft
14 document, Ecology will provide the United States Navy with comments.

15 c. Following receipt of comments on a draft document, the
16 United States Navy shall have thirty (30) days to respond to comments
17 and submit a "draft final" to Ecology for approval.

18 d. Within thirty (30) days of receipt of a draft final
19 document, Ecology will notify the United States Navy in writing of
20 Ecology's approval or disapproval of the document.

21 e. If disapproved, Ecology may revise the draft final
22 document for the United States Navy as an approved draft final document.

1 f. Upon approval of the draft final document, the document
2 becomes "final" and the terms and schedules therein become incorporated
3 into this Order.

4 4.6 The United States Navy shall perform the tasks and submit
5 plans, reports, and other documents as required by the management plans
6 developed under paragraphs 4.4 and 4.5. This Order will fully
7 incorporate the provisions of the management plans developed under
8 paragraphs 4.4 and 4.5. In the event of any inconsistency between this
9 Order and the management plans developed under paragraph 4.4 and 4.5,
10 this Order shall govern.

11 4.7 All documents submitted pursuant to paragraph 4.4 and 4.5
12 shall comply with the applicable requirements of chapter 70.105D RCW and
13 chapter 173-340 WAC.

14 4.8 Within twenty-one (21) days of the effective date of this
15 Order, the United States Navy shall propose to Ecology deadlines for
16 completion of the following preliminary draft documents:

17 a. Site Hazard Assessment Scope of Work for the Facility
18 (Area 10, Area 11, Area 12, Area 15, Area 18, Area 19, Area 20, Area 21
19 and Area 22).

20 b. Site Hazard Assessment Management Plans including
21 workplan, safety and health plan, sampling and analysis plan, quality
22 assurance plan, data management plan, and public participation plan.

23 c. Site Hazard Assessment Report.

1 4.9 Within twenty-one days (21) of the issuance of each final
2 site hazard assessment report, the United States Navy shall propose
3 deadlines for completion of the following preliminary draft documents:

- 4 a. RI/FS Scope of Work.
- 5 b. RI/FS Management Plans, including work plan, safety and
6 health plan, sampling and analysis plan, and public participation plan.
- 7 c. RI/FS Report.
- 8 d. Cleanup Action Plans, including the Draft Cleanup Action
9 Plan, and also including a proposed schedule for completion of the
10 engineering design report, the construction plans and specifications,
11 the operation and maintenance plans, and the compliance monitoring plan.

12 4.10 Within twenty-one (21) days of issuance of each Final
13 Cleanup Action Plan, the United States Navy shall propose deadlines for
14 the completion of the following draft documents:

- 15 a. Engineering Design Report.
- 16 b. Construction Plans and Specifications.
- 17 c. Operation and Maintenance Plans.
- 18 d. Compliance Monitoring Plan.

19 4.11 Within twenty-one (21) days following receipt of the
20 proposed deadlines submitted pursuant to paragraphs 4.8, 4.9 and 4.10,
21 Ecology shall review and provide comments to the United States Navy
22 regarding the proposed deadlines.

23 Within fifteen (15) days following receipt of the comments,
24 the United States Navy shall as appropriate, make revisions and reissue

1 the proposal for Ecology approval. In the event that the revised
2 proposed deadlines are disapproved, Ecology may revise the proposed
3 deadlines for the United States Navy.

4 The finalized deadlines shall be incorporated into the
5 appropriate work plans.

6 7 V. Terms and Conditions of Order

8 5.1 Definitions: Unless otherwise specified, the definitions
9 set forth in ch. 70.105D RCW and ch. 173-340 WAC shall control the
10 meanings of the terms used in this Order.

11 5.2 Public Notice: RCW 70.105D.030(2)(a) requires that, at a
12 minimum, this Order be subject to concurrent public notice. Ecology
13 shall be responsible for providing such public notice and reserves the
14 right to modify or withdraw any provisions of this Order should public
15 comment disclose facts or considerations which indicate to Ecology that
16 the Order is inadequate or improper in any respect.

17 5.3 Remedial Action Costs: The United States Navy shall pay to
18 Ecology costs incurred by Ecology pursuant to this Order. These costs
19 shall include work performed by Ecology or its contractors for
20 investigations, remedial actions, and Order preparation, oversight and
21 administration. Ecology costs shall include costs of direct activities;
22 e.g., employee salary, laboratory costs, travel costs, contractor fees,
23 and employee benefit packages; and agency indirect costs of direct
24 activities. The United States Navy shall pay the required amount within
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1 90 days of receiving from Ecology an itemized statement of costs that
2 includes a summary of costs incurred, a general description of work
3 performed, an identification of involved staff, and the amount of time
4 spent by involved staff members on the project. Failure to pay
5 Ecology's costs within 90 days of receipt of the itemized statement of
6 costs may result in interest charges.

7 5.4 Designated Project Coordinators:

8 The project coordinator for Ecology is:

9 Name: Craig E. Thompson

10 Address: State of Washington

11 Department of Ecology

12 Mail Stop PV-11

13 Olympia, WA 98504-8711

14 The project coordinator for the United States Navy is:

15 Name: Bela Varga

16 Address: United States Navy

17 Naval Facilities Engineering Command

18 Engineering Field Activity, Northwest

19 3505 N.W. Anderson Hill Road

20 P.O. Box 2360

21 Silverdale, WA 98383-2360

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23 The project coordinator(s) shall be responsible for overseeing the
24 implementation of this Order. To the maximum extent possible,

1 communications between Ecology and the United States Navy, and all
2 documents, including reports, approvals, and other correspondence
3 concerning the activities performed pursuant to the terms and conditions
4 of this Order, shall be directed through the project coordinator(s).
5 Should Ecology or the United States Navy change project coordinator(s),
6 written notification shall be provided to Ecology or the United States
7 Navy at least ten (10) calendar days prior to the change.

8 5.5 Performance: All work performed pursuant to this Order
9 shall be under the direction and supervision, as necessary, of a
10 professional engineer or hydrogeologist, or similar expert, with
11 appropriate training, experience and expertise in hazardous waste site
12 investigation and cleanup.

13 The United States Navy shall notify Ecology as to the identity of such
14 engineer(s) or hydrogeologist(s), and of any contractors and
15 subcontractors to be used in carrying out the terms of this Order, in
16 advance of their involvement at the Site.

17 5.6 Access: Ecology or any Ecology authorized representative
18 shall have the authority to enter and freely move about all property at
19 the Site at all reasonable times for the purposes of, inter alia:
20 inspecting records, operation logs, and contracts related to the work
21 being performed pursuant to this Order; reviewing the progress in
22 carrying out the terms of this Order; conducting such tests or
23 collecting samples as Ecology or the project coordinator may deem
24 necessary; using a camera, sound recording, or other documentary type

1 equipment to record work done pursuant to this Order subject to security
2 regulations; and verifying the data submitted to Ecology by the United
3 States Navy. Ecology shall provide reasonable notice before entering
4 property unless an emergency prevents notice. Ecology shall allow split
5 or replicate samples to be taken by the United States Navy during an
6 inspection unless doing so would interfere with Ecology's sampling. The
7 United States Navy shall allow split or replicate samples to be taken by
8 Ecology and shall provide Ecology twenty (20) days notice before any
9 sampling activity.

10 5.7 Public Participation: The United States Navy shall prepare
11 a public participation plan for the Site. Ecology shall maintain the
12 responsibility for public participation at the Site.
13 The United States Navy shall help coordinate and implement public
14 participation for the Site.

15 5.8 Retention of Records: The United States Navy shall preserve
16 in a readily retrievable fashion, during the pendency of this Order and
17 for ten (10) years from the date of completion of the work performed
18 pursuant to this Order, all records, reports, documents, and underlying
19 data in its possession relevant to this Order. Should any portion of
20 the work performed hereunder be undertaken through contractors or agents
21 of the United States Navy, a record retention requirement meeting the
22 terms of this paragraph shall be required of such contractors and/or
23 agents.

1 5.9 Dispute Resolution:

2 The United States Navy may request Ecology to resolve factual or
3 technical disputes which may arise during the implementation of this
4 Order. Such request shall be in writing and directed to the signatory
5 of this Order. Ecology resolution of the dispute shall be binding and
6 final.

7 The United States Navy is not relieved of any requirement of this Order
8 during the pendency of the dispute and remains responsible for timely
9 compliance with the terms of the Order unless otherwise provided by
10 Ecology in writing.

11 5.10 Reservation of Rights: Ecology reserves all rights to issue
12 additional orders or take any action authorized by law in the event or
13 upon the discovery of a release or threatened release of hazardous
14 substances not addressed by this Order, upon discovery of any factors
15 not known at the time of issuance of this Order, in order to abate an
16 emergency, or under any other circumstances deemed appropriate by
17 Ecology.

18 In the event Ecology determines that conditions at the Site are
19 creating or have the potential to create a danger to the health or
20 welfare of the people on the Site or in the surrounding area or to the
21 environment, Ecology may order the United States Navy to stop further
22 implementation of this Order for such period of time as needed to abate
23 the danger.

1 5.11 Transference of Property: No voluntary or involuntary
2 conveyance or relinquishment of title, easement, leasehold, or other
3 interest in any portion of the Site shall be consummated by the United
4 States Navy without provision for continued implementation of all
5 requirements of this Order and implementation of any remedial actions
6 found to be necessary as a result of this Order.

7 Prior to transfer of any legal or equitable interest
8 the United States Navy may have in the Site or any portions thereof, the
9 United States Navy shall serve a copy of this Order upon any prospective
10 purchaser, lessee, transferee, assignee, or other successor in such
11 interest. At least thirty (30) days prior to finalization of any
12 transfer, the United States Navy shall notify Ecology of the
13 contemplated transfer.

14 5.12 Compliance With Other Applicable Laws: All actions carried
15 out by the United States Navy pursuant to this Order shall be done in
16 accordance with all applicable federal, state, and local requirements.

17 VI. Satisfaction of this Order

18 The provisions of this Order shall be deemed satisfied upon the
19 United States Navy's receipt of written notice from Ecology that the
20 United States Navy has completed the remedial activity required by this
21 Order, as amended by any modifications, and that all other provisions of
22 this Agreed Order have been complied with.

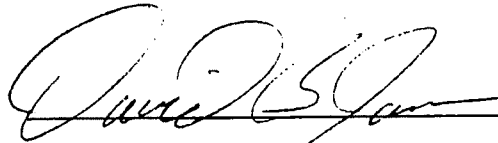
VII. Enforcement

7.1 Pursuant to RCW 70.105D.050, this Order may be enforced as follows:

- A. The Attorney General may bring an action to enforce this Order in a state or federal court.
- B. The Attorney General may seek, by filing an action, if necessary, to recover amounts spent by Ecology for investigative and remedial actions and orders related to the Site.
- C. In the event the United States Navy refuses, without sufficient cause, to comply with any term of this Order, the United States Navy will be liable for:
 - (1) up to three times the amount of any costs incurred by the state of Washington as a result of its refusal to comply; and
 - (2) civil penalties of up to \$25,000 per day for each day it refuses to comply.

1 D. This Order is not appealable to the Washington Pollution
2 Control Hearings Board. This Order may be reviewed only as
3 provided under RCW 70.105D.060.
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6 Effective date of this Order: June 10, 1991.
7 Dated this 7 day of June, 1991.
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11 David B. Jansen, P.E.
12 Section Manager
Site Cleanup Section
Toxic Cleanup Program
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