



STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

PO Box 47775 • Olympia, Washington 98504-7775 • (206) 407-6300

October 2, 1996

CERTIFIED MAIL

Mr. Raymond Nichols
Tacoma Boatbuilding Company
1840 Marine View Drive
Tacoma, WA 98422

Dear Mr. Nichols:

Enclosed is Order No. DE 96TC-S353. All correspondence relating to this document should be directed to Dom Reale, Department of Ecology, Southwest Regional Office, P.O. Box 47775, Olympia, Washington 98504-7775. If you have any questions concerning the content of the document, please call me at telephone (360) 407-6266.

Sincerely,

Dom Reale

Dom Reale
Toxic Cleanup Program
Southwest Regional Office

DR:cg(enforce)
Enclosure

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

IN THE MATTER OF THE COMPLIANCE BY)	
Tacoma Boatbuilding Company)	ORDER NO.
with Chapter 90.48 RCW and the)	DE 96TC-S353
Rules and Regulations of the)	
Department of Ecology)	

I.

JURISDICTION

This Order is issued pursuant to the authority of RCW 90.48.120(2). No obligations imposed by this Order are intended to constitute a debt, damage claim, penalty, or other civil action which should be limited or discharged in a bankruptcy proceeding. All obligations are imposed pursuant to the police powers of the state of Washington intended to protect the public health, safety, welfare, and the environment.

II.

PARTIES BOUND

This Order shall apply to, and be binding upon, the Respondent, Tacoma Boatbuilding Company (TBC), their agents, successors, and assigns and upon all persons, contractors, and consultants acting for the Respondent, and including any person or entity which assumes ownership or control of the TBC facility after settlement of bankruptcy. For the purposes of this Order, "Ecology" means the Washington State Department of Ecology. Any conduct described herein by means of the words "will," "shall," etc., indicate a duty of the Respondent to perform some act or to refrain from acting as appropriate under the terms of this Order, but conversely does not create a promise, undertaking, or legal duty on the part of Ecology.

If the bankruptcy settlement results in continued operation of the TBC facility as a boatbuilding, maintenance, or repair facility, then all parts of Section IV (Work to be Performed) shall remain binding. If the facility is no longer in operation as a boatbuilding, maintenance, or repair facility after the bankruptcy settlement, Ecology must agree in writing which, if any, parts of Section IV would not then be applicable. As a minimum, parts 7, 8, 9, 11, and 13 shall remain applicable irrespective of any new facility operations.

III.

FINDINGS OF FACT

1. Tacoma Boatbuilding Company (TBC) has operated a boat building, maintenance, and repair facility at 1840 Marine View Drive in Tacoma since 1969. Activities at the TBC facility have included: upland and in-water sandblasting of ship hulls and other ship parts, high velocity water spray cleaning (hydroblasting) of ship hulls, painting, and metal cleaning using acid and caustic dip baths.
2. TBC is located on the shore of the Hylebos Waterway in Commencement Bay. The facility is 19.6 acres in size.
3. The facility is located within the boundaries of the Head of Hylebos Waterway problem area of the Commencement Bay Nearshore/Tideflats Superfund Site. The facility is one of a number of suspected sources of elevated metals concentrations detected in the bottom sediments of the Hylebos Waterway.
4. Sandblasting grit and other boat cleaning/building residuals have accumulated on the banks and paved surface of the facility. Sandblasting grit, such as has been used at the TBC facility, typically has elevated concentrations of heavy metals, such as copper, lead, zinc, cadmium or chromium. Zinc, copper, and lead are among the problem chemicals listed for the Head of the Hylebos problem area.

5. In 1987, a study conducted by Ecology and Environment, Inc., for the United States Environmental Protection Agency (EPA) took surface water samples from the TBC facility that exceeded marine chronic water quality criteria for copper, lead, and zinc and which exceeded marine acute criteria for copper and zinc.
6. On March 24, 1993, an NPDES permit and accompanying Compliance Order were issued for the TBC facility. The permit requirements include stormwater analyses and reporting. Both the permit and the Order require implementation of Best Management Practices for many facility operations, including removal of sandblasting grit and sediments from facility storm drains and cleanup of spent grit and associated debris from the facility. In general, the permit and Order require abatement of the release of pollutants from the facility to waters of the state.
7. As of the date of the issuance of this Order, the following NPDES permit or Compliance Order violations have occurred at the TBC facility:
 - a. No discharge monitoring reports (DMRs) have been submitted to Ecology.
 - b. TBC has not implemented sufficient Best Management Practices, or stormwater treatment to abate pollution entering Hylebos Waterway via contact of stormwater with contaminated surface soil/waste.
 - c. Except for TBC completion of Special Condition S10 C (Storm Drain Sediment and Grit Removal), no other special condition has been complied with.

IV.

WORK TO BE PERFORMED

The Respondent shall achieve compliance with Chapter 173-201A WAC, Water Quality Standards for Surface Water of the State of Washington, pursuant to the provisions of Chapter 90.48

RCW, Water Pollution Control, and shall take the following actions in accordance with the following schedule:

1. Management of Hydroblasting Wastewater. Discharge of hydroblasting wastewater is prohibited until an approved collection and treatment system is on-line.
 - a. Publicly-owned treatment works (POTW). If the Respondent elects to discharge to a POTW with delegated pretreatment authority, the selected treatment option, engineering report, and plans and specifications must be submitted to the POTW authority for approval, with information copies to Ecology.
 - b. On-site treatment system. If the Respondent elects to construct a collection and treatment system for hydroblasting wastewater, then the Respondent shall submit engineering reports to Ecology recommending the treatment option(s). Prior to construction, Ecology must approve construction plans and specifications (based on the approved engineering report) for the collection and treatment system.
2. Marine Railway Containment System. The respondent shall submit to Ecology a plan for constructing a containment system for the marine railway, designed to: (1) minimize contact of dust, grit, and overspray with precipitation and seawater; and (2) collect and treat all stormwater and seawater which does come in contact with grit, spent grit, or dust in the marine railway; within eight months from the effective date of this Order. The Respondent shall construct the containment systems for the marine railway within sixty (60) days of Ecology's approval of the plan.
3. All Known, Available, and Reasonable Treatment (AKART) Report. No later than sixty (60) days from the effective date of this Order, the Permittee shall provide an AKART analysis report to Ecology. Find attached to this Order, an example of an AKART report which you may find useful in preparing the TBC report. The AKART analysis report shall include the review of best management practices (BMPs) that are currently being implemented by TBC, plus a listing of

improved/innovative BMPs proposed for future implementation. The list of BMPs evaluated in the report shall include, as a minimum, those BMPs listed in the TBC NPDES permit. The AKART report shall also include a review of possible candidate treatment technologies for the removal of metals (primarily copper and zinc) from the stormwater discharge at the facility. The analysis shall include quantification of expected pollutant discharge and associated costs for each candidate technology. The list of candidate technologies shall include, as a minimum:

- a. A combination of pollution prevention measures and facility management practices designed to keep stormwater clean enough that no treatment will be needed;
- b. A combination of measures including various treatment systems installed at some or all of the existing outfalls; and
- c. A combination of measures including collection of all stormwater along with evaluation of various treatment systems proposed for effluent discharge via a single outfall.

The AKART report shall take into account the Marine Railway Containment System described in Section 2 above. Ecology will review the AKART report and its cost benefit analysis of various treatment technologies, pollution prevention measures (such as using non-polluting grit), and facility operation/management practices and define AKART for the TBC facility. In defining AKART, Ecology will decide which combination of treatment systems, facility management practices, and pollution prevention measures constitutes AKART for the facility. Ecology will then send a letter to the Respondent which describes the chosen AKART system for the facility.

4. Engineering Report. No later than sixty (60) days after Ecology issues the letter defining AKART for the facility, the Respondent shall submit an Engineering Report for design of the Ecology-selected AKART system. This document shall also include a proposed outfall/diffuser design if Ecology has required as an element of AKART the collection of all facility stormwater (other than Marine Railway stormwater, which is addressed in Section 2 above) for treatment and effluent discharge via a single outfall. If the Respondent wishes to be granted a mixing zone

for that single outfall, then an Effluent Mixing Study should also be included in the Engineering Report. This document is subject to approval by Ecology.

The Engineering Report shall be prepared in accordance with WAC 173-240.

5. Installation of AKART System. No later than nine (9) months after Ecology approves the Engineering Report, the Permittee shall complete installation of the AKART alternative and, if needed and approved, an outfall/diffuser system as described in the Ecology-approved Engineering Report. Failure to submit a timely or complete application for all applicable permits, including the City of Tacoma Shoreline Substantial Development permit, shall not be cause for extension of this schedule.
6. Sand Blasting Shed(s)/Area(s). Within sixty (60) days from the effective date of this order, the Respondent shall upgrade all sand blasting shed(s)/area(s) to keep sand blast grit and other pollutants from contact with precipitation, and provide an area to store spent grit under cover. These activities shall comply with all applicable worker safety and air pollution requirements.
7. Marine Railway Grit. The Respondent shall clean up and remove spent grit that has accumulated in the marine railway within thirty (30) days from the effective date of this Order, and shall remove, to the extent grit can be removed by sweeping with a broom or equivalent, any newly deposited grit as soon as possible, and on an ongoing basis, and shall test and dispose of spent grit off-site in accordance with state, federal, and local regulations. Ecology shall be notified of the disposal option chosen before off-site transport.
8. Yard Debris. The Respondent shall clean up and remove debris that has accumulated in the yard within ninety (90) days from the effective date of this Order.
9. Yard Sweeping. The yard shall be swept within ninety (90) days from the effective date of this Order. Swept material shall be tested and disposed of in accordance with local, state, and federal regulations. The yard shall be maintained in this cleaned condition on an ongoing basis.

10. Spill Control Plan Submittal. As described in the NPDES permit, the Spill Control Plan shall be submitted to the Department of Ecology within ninety (90) days from the effective date of this Order.
11. Shoreline Cleanup. (a) Within sixty days (60) of this Order's effective date, the Respondent shall submit a Sampling Plan to Ecology for testing the sandblast grit and the metal slag pile and associated soils and sediments along TBC's shoreline, and characterize the waste for appropriate management. The testing shall determine the aerial extent and depth of wastes exceeding the sediment quality objectives (SQOs) listed in the Commencement Bay Nearshore/Tideflats Superfund Site 1989 record of decision (U.S. Environmental Protection Agency, Region 10, Seattle, Washington). The constituents to be tested and their corresponding SQO cleanup levels are as follows:

<u>Constituent</u>	<u>SQO Cleanup (mg/kg)</u>
Arsenic	57
Cadmium	5.1
Copper	390
Lead	450
Tributyltin	17.6 mg/kg Organic Carbon*
Zinc	410

* Based on "Recommendations for a Screening Level for Tributyltin in Puget Sound Sediment," U.S. EPA, April 1996, as amended.

The Sampling Plan shall include a map showing proposed initial sampling locations and depths. Further sampling will be needed if the bank area or depth exceeding SQOs has not been determined by initial sampling. The Sampling Plan shall describe proposed sampling methods, quality assurance/quality control tests, analytical methods, and worker health and safety methods planned for use. Ecology will review the Sampling Plan and modify the plan if needed. The

Respondent shall implement the Ecology-approved Sampling Plan (including Ecology modifications, if any) within thirty (30) days of issuance of Ecology's approval letter.

(b) The Respondent shall submit a Sampling Report/Cleanup Plan to Ecology within sixty (60) days of issuance of Ecology's Sampling Plan approval letter. This report shall include:

1. The results of testing done per the approved Sampling Plan;
2. Further sampling done or needed to determine the full areal extent or depth of soils, wastes, and sediments exceeding SQOs; and
3. A plan for proper removal and disposal of soils, wastes, and sediments exceeding SQOs, including determination of whether any of the removed materials designate as dangerous waste per Chapter 173-303 WAC.

The Respondent shall describe in the report proposed methods of waste removal and transport, proposed disposal facility(ies), worker health and safety measures, site capping/restoration measures, and proposed verification sampling to ensure all the wastes exceeding SQOs have been removed. For the purposes of this cleanup, wastes exceeding SQOs shall be removed from those areas of the bank which can be reached by upland excavation equipment during summer low tides. In addition, the plan must provide a field screen barrier and/or other approved measures to prevent material from being released to the waterway during cleanup.

Testing and removal of the sandblast grit, soils, sediments, and metal slag shall be in accordance with all federal, state, and local requirements. Certainly a City of Tacoma Substantial Development Shorelines Management Permit will be needed. If cleanup below the mean high level is needed then a Washington State Department of Fish and Wildlife Project Hydraulic Approval, and likely a U.S. Army Corps of Engineers Nationwide Permit No. 38 (or equivalent) will be needed. Other permits may also be needed. The Respondent shall apply for

the necessary permit(s) as soon as possible. Ecology shall receive copies of any required permit applications. Any requirements from the permits shall be followed.

(c) The Respondent shall implement the Ecology-approved Cleanup Plan (including Ecology modifications, if any) such that waste removal is completed within sixty (60) days after the date of issuance of Ecology a Cleanup Plan approval letter or sixty (60) days after all required permits have been obtained, whichever comes later. Within two months of the removal completion, a brief report summarizing the removal effort shall be submitted to Ecology.

12. Other Requirements. This Order shall not relieve the Respondent from any TBC NPDES permit or companion order requirements.
13. Off-Site Disposal. The Respondent shall arrange for the transport and disposal of any material off-site in accordance with applicable federal, state or local laws or regulations, and Ecology must make an affirmative statement as to whether the disposal facility is acceptable prior to disposal.
14. Unless listed otherwise, within fifteen (15) days of receiving Ecology's comments on the draft plans referenced in this Scope of Work (Section IV), the Respondent shall respond to the comments by incorporating them and resubmitting the plans, subject to their right of dispute resolution, per Section X of this Order. Ecology may extend the fifteen day period by written agreement, per Section IX of this Order.

V.

OTHER ACTIONS

Ecology reserves its rights to institute remedial action(s) at this site and subsequently pursue cost recovery, and Ecology reserves its rights to issue orders and/or penalties or take any other enforcement action pursuant to available statutory authority.

Ecology reserves the right to take any enforcement action whatsoever, including a cost recovery action, against persons not party to this Order.

VI.

PROGRESS REPORTS AND REPORTING

The Respondent shall carry out the scope of work agreed to herein in a timely manner and shall comply with the compliance schedule set out herein. The Respondent shall provide monthly progress reports during the pendency of this Order which shall: (1) state the deadlines and other terms of this Order which the Respondent was required to meet during that period; (2) state whether the Respondent has met these deadlines and requirement(s); and (3) describe any other matters relevant to the status of the Respondent's compliance with this Order. Each monthly report shall be signed by a duly authorized representative of the Respondent having knowledge of the report's contents and shall be admissible as evidence in any proceeding to enforce this Order. Submit the first report by thirty (30) days after this Order is signed.

VII.

ACCESS

Ecology or any Ecology authorized representatives shall have the authority to enter and freely move about all property at the Site at all reasonable times for the purpose of, inter alia: inspecting records, operation logs, and contracts related to the work being performed pursuant to this Order; reviewing the Respondent's progress in carrying out the terms of this Order; conducting such tests or collecting such samples as Ecology may deem necessary; using a camera, sound recording, or other documentary type equipment to record work done pursuant to this Order; and verifying the data submitted to Ecology by the Respondent. Upon request, Ecology shall split any samples taken during an inspection unless the Respondent fails to make available a representative for the purpose of splitting samples. All parties with access to the Site pursuant to this paragraph shall comply with approved health and safety plans.

VIII.

SAMPLING, DATA REPORTING, AND AVAILABILITY

With respect to the implementation of this Order, the Respondent shall make the results of all sampling, laboratory reports, and/or test results generated by it, or on its behalf available to Ecology and shall submit these results in accordance with Section VI of this Order.

If requested by Ecology, the Respondent shall allow split or duplicate samples to be taken by Ecology and/or its authorized representatives of any samples collected by the Respondent pursuant to the implementation of this Order. Unless otherwise agreed to by the parties, the Respondent shall notify Ecology seven (7) calendar days in advance of any sample collection or work activity at the Site. Ecology shall, upon request, allow split or duplicate samples to be taken by the Respondent or authorized representatives of any samples collected by Ecology pursuant to the implementation of this Order.

provided it does not interfere with Ecology's sampling. Without limitation on Ecology's rights under Section VII, Ecology shall endeavor to notify the Respondent prior to any sample collection activity.

IX.

EXTENSION OF SCHEDULES

Time extensions for deliverables shown in Section IV, WORK TO BE PERFORMED, shall be granted only when request(s) for extensions are submitted in a timely fashion and good cause exists for granting the extension. All extensions shall be requested in writing. The request shall specify the reason(s) the extension is needed. Extension shall only be granted for such period of time as Ecology determines is reasonable under the circumstances. A requested extension is not effective until approved by Ecology in writing.

The burden shall be on the Respondent to demonstrate to the satisfaction of Ecology that the request for extension has been submitted in a timely fashion (before the expiration of the time period in question) and that good cause exists for granting the extension. Good cause shall include, but not be limited to the following:

1. Circumstances beyond the reasonable control and despite the due diligence of the Respondent, including delays caused by Ecology; and
2. An Act of God, fire, flood, blizzard, or other unavoidable casualty.

Neither increased costs of performance of the terms of this Order or changed economic circumstances may be considered circumstances beyond the reasonable control of the Respondent.

Failure of the Respondent to monitor its contractor(s) and notify Ecology of problems with that contractor(s) and to request an extension of time shall not be considered good cause for an extension.

The Respondent may obtain relief from their obligations to obtain formal extension of time only by written permission from Ecology.

X.

RESOLUTION OF DISPUTES

The Respondent may request Ecology to resolve disputes which may arise during the implementation of this Order. Such request shall be in writing and directed to the signatory, or his/her successor(s), to this Order. Ecology resolution of the dispute shall be binding and final. The Respondent is not relieved of any requirement of this Order during the pendency of the dispute and remain responsible for timely compliance with the terms of the Order unless otherwise provided by Ecology in writing.

XI.

EFFECTIVE DATE

This Order is effective upon the date Ecology's Southwest Region Toxics Cleanup Program Supervisor signs it.

Failure to comply with this Order may result in the issuance of civil penalties, Cease and Desist Orders or other actions, including revocation of the facility's NPDES permit, whether administrative or judicial, to enforce the terms of this Order.

This Order may be appealed. Your appeal must be filed with the Pollution Control Hearings Board, P.O. Box 40903, Olympia, Washington 98504-0903 within thirty (30) days of your receipt of this Order. At the same time, your appeal must also be served to the Department of Ecology c/o The Enforcement Officer, P.O. Box 47775, Olympia, Washington 98504-7600. Your appeal alone will not stay the effectiveness of this Order. Stay requests must be submitted in accordance with RCW 43.21B.320. These procedures are consistent with Chapter 43.21B RCW.

DEPARTMENT OF ECOLOGY
TOXICS CLEANUP PROGRAM

A handwritten signature in black ink, appearing to read 'David Jansen', is written over a horizontal line.

David Jansen, P.E.
Southwest Region Supervisor
Toxics Cleanup Program

Effective Date: October 2, 1996