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Boomsnub  
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STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

*Enforcement*

In the Matter of the )  
 )  
Boomsnub Corporation/ )  
Pacific Northwest Plating )  
7608 Northeast 47th Avenue )  
Vancouver, Washington 98661 )

[Remedial Action] Order

No. DE 90-S151

I.

Jurisdiction

This Order is issued pursuant to the authority of RCW  
70.105D.050(1).

II.

Statement of Facts

1. The Boomsnub Corporation/Pacific Northwest Plating is an "owner or operator" as defined at RCW 70.105D.020(6).
2. On June 24, 1982, Ecology issued an Order for enforcement action to be taken against Pacific Northwest Plating (PNWP) for unlawful discharge of wastes in public water, RCW 90.48.080, and Water Quality Regulatory Order, RCW 90.48.120(2). The action taken was a Regulatory Order which required PNWP to cease the discharge of process wastewater containing hexavalent chromium to ground and ground water. Violations were verified on April 28, 1982, and June 7, 1982, site inspections.
3. On August 1, 1982, PNWP was placed on the Environmental Protection Agency (EPA) potential Hazardous Waste Site list of Washington State.
4. On May 24, 1985, Ecology submitted to the Environmental Protection Agency (EPA) a Potential Hazardous Waste Site Preliminary

Assessment for PNWP with an inspection priority of medium, which indicated that a Site Inspection (SI) was required.

5. On August 11, 1986, Ecology conducted a PA/SI Phase I Site Inspection.

6. On October 21, 1986, Ecology conducted a PA/SI Phase II Site Inspection.

7. On November 3, 1986, Ecology submitted a letter to PNWP which required the installation of one upgradient and three downgradient monitoring wells and quarterly sampling and analysis of ground water for hexavalent chromium.

8. On January 13, 1987, Ecology concurred with PNWP on a proposal for the installation of four sets of monitoring wells with each set screened at three levels within the alluvial aquifer.

9. Monitoring wells MW2A, 2B, and 2C were installed on January 22 through 26, 1987. Sampling indicated that ground water was contaminated throughout entire depth of alluvial aquifer. Levels of contamination in monitoring wells were: .55 ppm of hexavalent chromium in MW2A, .05 ppm in MW2B, and .03 ppm in MW2C.

10. In late March 1987, Ecology completed a Site Inspection Report (PA/SI), for Pacific Northwest Plating. Ecology recommended that any Hazard Ranking System (HRS) scoring of this site be held in abeyance until ground water analytical results from proposed ground water monitoring locations were available.

11. Between March 31 and April 3, 1987, the remaining sets of monitoring wells, MW1, MW3, and MW4, were installed. MW3A showed 9.98 ppm of total chromium in ground water. All monitoring wells screened

over the depth of the alluvial aquifer showed detectable levels of total chromium in ground water. Also, composite sampling of soils from borings showed up to 37.7 ppm of total chromium (MW2 series). Ecology received PNWP report documenting above results on September 17, 1987.

12. In March and August of 1988, ground water sampling of monitoring wells continued. Concentrations of hexavalent chromium ranged between 2.03 to 5.43 ppm in wells MW3A and MW4A.

13. On December 20, 1988, Ecology issued an Order under the provisions of RCW 70.105.095 and Penalty under the provisions of RCW 70.105.080 for dangerous waste violations.

14. Between January and October 1989, laboratory analyses for hexavalent chromium indicated between 1.5 to 24.4 ppm in ground water at well locations MW2A, MW3A, and MW4A.

15. Between November 7-8, 1989, an off-site downgradient monitoring well, MW5A, was installed and ground water was sampled. Laboratory analytical results indicated off-site migration of total and hexavalent chromium (4.08 and 2.86 ppm respectively) in ground water.

16. On March 5, 1990, Ecology received first quarter 1990 ground water analytical results from the January 3 through 4, 1990, sampling event. Boomsnub Corporation/Pacific Northwest Plating reported elevated levels of total chromium and hexavalent chromium in monitoring well MW4B (749 ppm and 720 ppm, respectively) at a depth of approximately 50-55 feet below ground surface.

17. On March 9, 1990, Ecology issued a letter which requested several actions on the part of the Boomsnub Corporation/Pacific Northwest Plating: (a) begin immediate withdrawal of ground water

through monitoring well MW4B as an emergency measure, (b) increase the MW4B pumping rate to a minimum of five (5) gpm, (c) store effluent within surface located tanks, (d) apply to the Vancouver Public Works Department for permits to discharge to the sanitary sewer, (e) apply to Ecology for an emergency water right permit.

18. Weekly sampling of MW4B conducted between March 10, 1990, and April 18, 1990, indicated that hexavalent chromium levels fluctuated between 510 ppm to 920 ppm since pumping of the alluvial aquifer began on March 9, 1990.

19. On April 12, 1990, Mr. Kim Marcus, consultant to Boomsnub Corporation/Pacific Northwest Plating, informed Ecology that a membrane/ion-exchange system would be on-site at Boomsnub Corporation, Pacific Northwest Plating on April 13, 1990. According to Mr. Marcus, the treatment system is capable of reducing hexavalent chromium concentration levels to less than 50 ppb in treated ground water.

20. The Washington State Board of Health currently regulates total chromium levels in drinking water at 0.05 ppm [Maximum Contaminant Level (MCL)]. Total and hexavalent chromium levels have been identified in the ground water in excess of 900 ppm or nearly four and one-half order-of-magnitude greater than the MCL.

21. Total and hexavalent chromium have been identified within the alluvial aquifer which overlies a regional aquifer system, the Troutdale Formation. Domestic and private community drinking water systems are located within 1/3 mile of the Boomsnub Corporation/Pacific Northwest Plating. Also, the City of Vancouver and Clark County Public

Utilities Department (PUD) drinking water wells are located within three miles of this site and serve approximately 100,000 people.

### III.

#### Ecology Determinations

1. The Boomsnub Corporation/Pacific Northwest Plating is an "owner and operator" as defined at RCW 70.105D.020(6), of a "facility," as defined in RCW 70.105D.020(3)
2. The facility is known as Boomsnub Corporation/Pacific Northwest Plating, and is located at 7608 Northeast 47th Avenue, Vancouver, Washington, 98661.
3. The substances found at the facility and as described above are "hazardous substances" as defined at RCW 70.105D.020(5).
4. Based on the presence of these hazardous substances at the facility and all factors known to Ecology, there is a release or threatened release of hazardous substances from the facility, as defined at RCW 70.105D.020(10).
5. Pursuant to RCW 70.105D.030(1) and 70.105D.050, the Department may require potentially liable persons to investigate or conduct other remedial actions with respect to the release or threatened release of hazardous substances, whenever it believes such action to be in the public interest.
6. This Enforcement Order is issued on an emergency basis due to the imminent threat to domestic, private community, City of Vancouver and Clark County PUD drinking water aquifers.

7. Based on the emergency nature of the release as referenced in the Statement of Facts and in accordance with WAC 173-340-540, the Department has issued to the Boomsnub Corporation/Pacific Northwest Plating a Potentially Liable Person Status letter concurrently with issuance of this Enforcement Order.

8. Based on the forgoing facts, the Department believes the remedial action required by this Order is in the public interest.

#### IV.

##### Work to be Performed

Based on the foregoing facts and determinations, it is hereby ordered that Boomsnub Corporation/Pacific Northwest Plating take the following remedial actions.

1. Continue to monitor for total and hexavalent chromium at monitoring wells 3A, 3B, 3C, 4A, 4B, 4C, 5A, Hastay Water System at 7301 N.E. 43rd Avenue, and Fitzgerald domestic well at 7219 N.E. 47th Avenue on a weekly basis. Weekly sampling shall include a QA/QC laboratory blank and duplicate sample from one monitoring well on-site. Also, the treated ground water effluent shall be sampled prior to discharge to the City of Vancouver Sewage Treatment Plant as directed by the City of Vancouver. Data to be submitted to Ecology shall be reported in a technical memorandum and mailed to Ecology on a weekly basis. The technical memorandum shall include the following: date of samples, MW4B pumping rate, concentrations of total and hexavalent chromium for above listed wells, total and hexavalent chromium levels in treated effluent

and quantity discharged to the City of Vancouver Sewage Treatment Plant, and water level elevations of all monitoring wells.

2. Conduct an aquifer test to determine optimum ground water pumping rate, cone-of-depression, and hydrologic characteristics of the alluvial aquifer in the vicinity of MW4B. Prior to implementation of this test, cease pumping from MW4B until water level elevations in the MW3, MW4 and MW5 series wells return to levels representative of past quarterly monitoring water level elevations or for a period no greater than twenty-four (24) hours, whichever occurs first. The duration of the aquifer test shall continue until steady-state conditions have been met at a constant pumping rate of five (5) gpm or three (3) days, whichever occurs first. Both drawdown and recovery phases of the aquifer test shall be monitored and analyzed. An aquifer test work plan shall be submitted and approved by Ecology prior to implementation of the aquifer test. This test will be completed and results analyzed within thirty (30) days from the date of issuance of this Order.

3. Upon completion of the aquifer test, the Boomsnub Corporation/Pacific Northwest Plating shall continue to pump ground water from MW4B at a rate of no less than five (5) gpm.

4. Submit to Ecology comments on the ability of MW4B to adequately remediate the site. If it is determined that pumping of MW4B cannot adequately control the total and hexavalent contaminated ground water plume, then propose enhancements to the remediation. These comments and, if necessary, the proposed enhancements to the remediation system will be submitted to Ecology within forty-five (45) days from the date of issuance of this Order.

5. Submit to Ecology history of pumping rates, ground water elevations at monitoring wells, quantity of treated ground water discharged to City of Vancouver Sewage Treatment Plant, and total and hexavalent chromium levels in monitoring wells since pumping of the alluvial aquifer began on March 9, 1990.

6. Obtain all necessary and applicable federal, state, and local permits and approvals prior to the discharge of effluent from on-site membrane/ion-exchange treatment facility to City of Vancouver Sewage Treatment Plant.

V.

Terms and Conditions of Order

1. Definitions

Unless otherwise specified, the definitions set forth in Chapter 70.105D RCW and Chapter 173-340 WAC shall control the meanings of the terms used in this Order.

2. Public Notice

Chapter 70.105D RCW [and rules adopted thereunder] requires that, at a minimum, this Order be subject to concurrent public notice. RCW 70.105D.030(2)(a). The Department shall be responsible for providing such public notice and reserves the right to modify or withdraw any provisions of this Order should public comment disclose facts or considerations which indicate to the Department that the Order is inadequate and improper in any respect.

2. Oversight Costs

The Boomsnub Corporation/Pacific Northwest Plating shall pay to Ecology those costs reasonably attributable to the site incurred by the Department for investigative, remedial actions and orders, including costs incurred by Ecology in the oversight or administration of this Order. Boomsnub Corporation/Pacific Northwest Plating shall pay the required amount within 90 days of receiving summary statement of Ecology's expenses, payable to the State Toxics Control Account.

4. Designated Project Coordinators

Within ten (10) days of the effective date of this Order, the Boomsnub Corporation/Pacific Northwest Plating shall designate a project coordinator. The project coordinator shall be responsible for overseeing the implementation of this Order. To the maximum extent possible, communications between Ecology and the Boomsnub Corporation/Pacific Northwest Plating and all documents, including reports, approvals, and other correspondence concerning the activities performed pursuant to the terms and conditions of this Order, shall be directed through the project coordinators. Should Boomsnub Corporation/Pacific Northwest Plating change its project coordinator, written notification shall be given to Ecology at least ten (10) calendar days prior to the change.

Ecology's project coordinator is James P. Hanson, (206) 586-5561.

5. Performance

All remedial work performed pursuant to this Order shall be under the direction and supervision, as necessary, of a professional engineer or certified hydrogeologist, or equivalent, with experience and expertise in hazardous waste site investigation and cleanup. The Boomsnub Corporation/Pacific Northwest Plating shall notify Ecology as to the identity of such engineer(s) or hydrogeologist(s), and of any contractors and subcontractors to be used in carrying out the terms of this Order, in advance of their involvement at the site.

6. Access

Ecology or any Ecology authorized representative shall have the authority to enter and freely move about all property at the site at all reasonable times for the purposes of, inter alia: inspecting records, operation logs, and contracts related to the work being performed pursuant to this Order; reviewing the progress in carrying out the terms of this Order; conducting such tests or collecting samples as Ecology or the project coordinator 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 Boomsnub Corporation/Pacific Northwest Plating. Ecology shall provide reasonable notice before entering property unless an emergency prevents notice. Ecology shall allow split or replicate samples to be taken by Boomsnub Corporation/Pacific Northwest Plating during an inspection unless such activity would interfere with Ecology's sampling. Boomsnub Corporation/Pacific Northwest Plating shall allow split or

replicate samples to be taken by Ecology and shall provide Ecology seven (7) days notice before any sampling activity.

7. Retention of Records

The Boomsnub Corporation/Pacific Northwest Plating shall preserve in a readily retrievable fashion, during the pendency of this Order and for ten (10) years from the date of completion of the work performed pursuant to this Order, all records, reports, documents, and underlying data in its possession relevant to this Order. Should any portion of the work performed hereunder to be undertaken through contractors or agents of the Boomsnub Corporation/Pacific Northwest Plating, a record retention requirement meeting the terms of this paragraph shall be required of such contractors and/or agents.

8. Dispute Resolution

The Boomsnub Corporation/Pacific Northwest Plating may request Ecology to resolve factual or technical disputes which may arise during the implementation of this Order. Such request shall be in writing and directed to the signatory of this Order. Ecology resolution of the dispute shall be binding and final. The Boomsnub Corporation/Pacific Northwest Plating is not relieved of any requirement of this Order during the pendency of the dispute and remains responsible for timely compliance with the terms of the Order unless otherwise provided by Ecology in writing.

9. Reservation of Rights

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

In the event Ecology determines or concurs in a determination by another local, state, or federal agency that activities implementing or in noncompliance with this Order, or any other circumstances or activities, are creating or have the potential to create a danger to the health or welfare of the people on the site or in the surrounding area or to the environment, Ecology may order Boomsnub Corporation/Pacific Northwest Plating to stop further implementation of this Order for such period of time as needed to abate the danger.

10. Transference of Property

No voluntary or involuntary conveyance or relinquishment of title, easement, leasehold, or other interest in any portion of the site shall be consummated by Boomsnub Corporation/Pacific Northwest Plating without provision for continued implementation of all requirements of this Order and implementation of any remedial actions found to be necessary as a result of this Order.

Prior to transfer of any legal or equitable interest Boomsnub Corporation/Pacific Northwest Plating may have in the site or any portions thereof, Boomsnub Corporation/Pacific Northwest Plating shall

serve a copy of this Order upon any prospective purchaser, lessee, transferee, assignee, or other successor in such interest. At least thirty (30) days prior to finalization of any transfer, Boomsnub Corporation/Pacific Northwest Plating shall notify Ecology of the contemplated transfer.

11. Compliance With Other Applicable Laws

All actions carried out by Boomsnub Corporation/Pacific Northwest Plating pursuant to this Order shall be done in accordance with all applicable federal, state, and local requirements.

VI.

Enforcement

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 state 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.

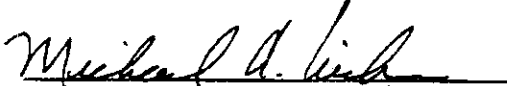
C. In the event Boomsnub Corporation/Pacific Northwest Plating refuses, without sufficient cause, to comply with any terms of this Order, Boomsnub Corporation/Pacific Northwest Plating will be liable for:

- (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 the Boomsnub Corporation/Pacific Northwest Plating refuses to comply.

~~D. This Order is not appealable to the Washington Pollution Control Hearings Board. This Order may be reviewed only as provided under Section 6 of Chapter RCW 70.105D RCW.~~

Effective date of this Order: MAY 7, 1990

DATED this 4<sup>th</sup> day of MAY, 1990.

  
Michael A. Wilson  
Southwest Region Supervisor  
Hazardous Waste Investigations  
and Cleanup Program  
Department of Ecology