

Tacoma Coal Gasification  
WSDOT  
FS 12419

STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

In the Matter of Remedial Action by: )  
)  
Washington State Department of ) AGREED ORDER  
Transportation, Olympic Region )  
5720 Capitol Boulevard ) No. DE 95TC-S167  
Tumwater, Washington 98504 )

To: Washington State Department of Transportation

I

Jurisdiction

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

II

Findings of Fact

Ecology makes the following Findings of Fact, without admission of such  
facts by Washington State Department of Transportation.

1. A coal gasification plant was operated on portions of property now  
known as the Tacoma Coal Gasification Site ("TCG Site"), bounded by South 21st  
and South 24th Streets, and A Street and Thea Foss Waterway, Tacoma,  
Washington. (The legal description of the TCG Site is: Blocks 57, 2200, 2300,  
2101, 2201, and 2301 of Tacoma Land Company's Second Addition to Tacoma, W.T.)  
The plant was in operation from 1884 until 1924. Coal gasification plants  
commonly produce waste products, some of which have been found to be hazardous  
to human health or the environment, particularly coal tar wastes, which  
contain Polynuclear Aromatic Hydrocarbons (PAHs) and other hazardous  
chemicals.

2. The Washington State Department of Transportation ("WSDOT") owns portions of the TCG Site, consisting of the right-of-way ("ROW") for the SR 705 Spur approach ramps to the SR 509 bridge and the ROW for the SR 509 bridge, also known as the 21st Street ROW. Some portions of the property affected by the WSDOT project are within the established confines of the TCG Site and some portions are outside the TCG Site.

3. WSDOT owns portions of the storm drainage system consisting of french drain structures beneath the street on-grade known as the DA-1 Line, and connections to the City of Tacoma ("City") owned storm system.

4. In October, 1993 Ecology issued an Agreed Order, DE 93TC-S166, to a group of potentially liable parties (PLPs), including WSDOT, to perform interim actions to investigate and remediate sources and potential sources of contamination to Thea Foss Waterway that are the result of the former coal gasification plant activities. An initial remedial investigation (RI) has been performed on the TCG Site and a draft report issued for Ecology's review.

5. The initial RI has found that soil and groundwater contamination exist at elevated levels in various areas within the TCG Site. Contaminants include Polynuclear Aromatic Hydrocarbons (PAHs), Total Petroleum Hydrocarbons (TPH), benzene, toluene, ethylbenzene, xylene (BTEX), and cyanide.

6. Since that time, WSDOT has begun a project to build a cable stayed bridge over the head of Thea Foss Waterway. Previously constructed roadways that were part of the SR 705 project have been demolished and will be replaced with new roadways that will provide the approaches to the SR 509 bridge

7. Pier footings for the approach ramps and bridge abutments to be constructed for the SR 509 Cable Stayed Bridge Project are to be constructed in areas documented to contain the contaminants noted above. Construction of

pier footings will require excavation and removal of contaminated soils. While footing excavations are open, de-watering of groundwater or rainwater seeping into the excavations is expected to generate contaminated water.

8. By letter dated January 6, 1995, Ecology gave approval to WSDOT to undertake drilling and test pit sampling to further define the level and extent of contamination at each pier location. The results of that investigation have been reviewed by Ecology. Test results indicate that construction of ramp piers 1, 2, 3, 4, and bridge pier 3 will require excavation of soils contaminated above MTCA Method B cleanup levels.

9. A water quality modification was provided to Max J. Kuney Company, a contractor for WSDOT, under Ecology Order No. DE 94WQ-S373, to provide temporary modification of water quality criteria for Thea Foss Waterway. This Order was originally drafted to address the discharge of water from dewatering activities on this portion of the project to the surface waters of the waterway. The Order has been amended to take into account the fact that the work is being done in a contaminated area, and that water quality will be monitored for chemical parameters prior to discharge. Water not meeting the chemical standards for discharge to surface waters will be required to be treated and discharged to sanitary sewer, rather than surface waters.

10. By letter dated January 17, 1995, Ecology gave approval to WSDOT to undertake some construction activities that were not remedial actions and were not expected to preclude the remedial work under this or the previous Order nor be in conflict with the existing Agreed Order for the Coal Gasification Site. These activities included excavating in areas where preliminary testing indicated no visible contamination of soil or groundwater; clearing of demolition debris and rubble on the surface of the Site; and

driving of sheet piling and falsework that is consistent with construction requirements, as long as contaminated soil is not removed. The letter required WSDOT to halt work and notify Ecology if WSDOT discovered any unexpected contamination.

11. The PLP named above has agreed to perform interim remedial actions, during the course of highway construction, which shall involve:

- A. Implementation of an Interim Action Plan meeting the requirements of WAC 173-340-430(6) and addressing the methods to be used in performing the following activities.
- B. Excavation and removal of soils contaminated above MTCA Method B cleanup levels at locations where pier footings are to be constructed.
- C. Treatment of contaminated soils in compliance with local, state, and federal regulations.
- D. Dewatering excavations that will generate contaminated water.
- E. Treating the contaminated water to meet the discharge requirements of Tacoma Sewer Utility prior to discharging to the sanitary sewer system.
- F. Replacement of any monitoring wells or storm drain structures destroyed during demolition or construction activities consistent with their previous condition.

### III

#### Ecology Determinations

1. The Washington State Department of Transportation is an "owner or operator" as defined at RCW 70.105D.020(7) of a "facility" as defined in RCW

70.105D.020(4).

2. Under this Agreed Order, WSDOT will be conducting interim actions on the facility/site. The facility is known as the Tacoma Coal Gasification Site and is located between South 21st and South 24th Streets, and A Street and Thea Foss Waterway. A map of the Site is attached as Exhibit A. Any remedial actions taken by WSDOT in areas outside of the Site boundary are independent actions and are not covered by this Agreed Order.

3. The substances found at the facility as described above are "hazardous substances" as defined at RCW 70.105D.020(6).

4. Based on the presence of these hazardous substances at the facilities and all factors known to the Department, there is a release or threatened release of hazardous substances from the facilities, as defined at RCW 70.105D.020(11).

5. By letter dated March 3rd, 1993, Ecology notified WSDOT of its status as a "potentially liable person" for the TCG Site under RCW 70.105D.040, after notice and opportunity for comment.

6. 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.

7. This Agreed Order addresses certain interim remedial actions to be taken in connection with WSDOT's SR 509 Cable Stayed Bridge Project. The actions taken do not constitute final cleanup of the site.

8. Based on the foregoing facts, Ecology believes the interim remedial actions required by this Order are in the public interest.

IV

Work to be Performed

Based on the foregoing Facts and Determinations, it is hereby ordered that WSDOT conduct the following remedial actions and that these actions be conducted in accordance with Chapter 173-340 WAC and with Exhibit C, the Substantive Requirements for Permits, unless otherwise specifically provided for herein.

1. Implement and complete the tasks as designated in Exhibit B, the final Interim Action Plan (IAP) previously submitted to and approved by Ecology, in accordance with the schedule in the IAP. The final IAP incorporates comments from Ecology on the draft IAP and includes:

- A. A description of the site and its current condition, including an evaluation of data previously developed for the site.
- B. An evaluation of alternative remedial actions being considered and the rationale for choosing the selected alternative.
- C. A description of the construction activities expected to occur in implementing the selected alternative.
- D. A schedule of activities and milestones for the project.

2. Submit an As Built Report, describing the interim remedial actions taken and the design aspects of construction that will prevent foreclosure of additional future cleanup remedies for the Site. In particular, the final configuration and expected performance of the backfill, liners, and possible footing seals installed during pier construction shall be included. The report shall be submitted no later than 30 calendar days after completion of

construction that has been affected by contamination.

3. All work shall be conducted according to the Sampling and Analysis Plan, including a QA/QC Project Plan and the Safety and Health Plan, previously submitted to and approved by Ecology.

All exhibits are hereby incorporated into this Order by reference and are integral and enforceable parts of this Order.

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 meaning of the terms used in this Order.

2. Public Notices

RCW 70.105D030(2)(a) requires that, at a minimum, this Order be subject to concurrent public notice. Ecology 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 Ecology that the Order is inadequate or improper in any respect.

3. Remedial Action Costs

WSDOT shall pay to Ecology costs incurred by Ecology pursuant to this Order. These costs shall include work performed by Ecology or its contractors for investigations, remedial actions, and Order preparation, oversight and administration. Ecology costs shall include costs of direct activities and support costs of direct activities as defined in WAC 173-340-550(2). WSDOT shall pay the required amount within 90 days of receiving from Ecology an itemized statement of costs that includes a summary of costs incurred, an

identification of involved staff, and the amount of time spent by involved staff members on the project. A general description of work performed will be provided upon request. Itemized statements shall be prepared quarterly. Failure to pay Ecology's costs within 90 days of receipt of the itemized statement of costs will result in interest charges.

4. Designated Project Coordinators

The project coordinator for Ecology is:

Marv Coleman, Inspector/Site Manager  
Ecology Southwest Regional Office  
510 Desmond Drive S.E.  
Lacey, WA 98503-7775  
(206) 586-4689

JIN 10  
8545

The project coordinator for WSDOT is:

Kenneth Stone, Regional Environmental Manager  
WSDOT, Olympic Region  
5720 Capitol Boulevard  
Tumwater, Washington 98504  
(206) 357-2660

The project coordinator(s) shall be responsible for overseeing the implementation of this Order. To the maximum extent possible, communications between Ecology and WSDOT, 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(s). Should Ecology or WSDOT change project coordinator(s), written notification shall be provided to Ecology or WSDOT at least ten (10) calendar days prior to the change.



5. Performance

All work performed pursuant to this Order shall be under the direction and supervision, as necessary, of a professional engineer or hydrogeologist, or similar expert, with appropriate training, experience and expertise in hazardous waste site investigation and cleanup. WSDOT 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. WSDOT shall provide a copy of this Order to all agents, contractors and subcontractors retained to perform work required by this Order and shall ensure that all work undertaken by such agents, contractors and subcontractors will be in compliance with this Order.

Except where necessary to abate an emergency situation, WSDOT shall not perform any remedial actions at the Site outside that required by this Order unless Ecology concurs, in writing, with such additional remedial actions.

WAC 173-340-400(7)(b)(i) requires that "construction" performed on the Site must be under the supervision of a professional engineer registered in Washington.

6. Access

Ecology or any Ecology authorized representative shall have the authority to enter and freely move about 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 the 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 WSDOT. By signing this Agreed Order, WSDOT agrees that this Order constitutes reasonable notice of access, and agrees to allow access to the Site at all reasonable times for purposes of overseeing work performed under this Order. Ecology shall allow split or replicate samples to be taken by WSDOT during an inspection unless doing so interferes with Ecology's sampling. WSDOT shall allow split or replicate samples to be taken by Ecology and shall provide seven (7) days notice before any sampling activity.

7. Public Participation

WSDOT has prepared and Ecology has approved a Public Participation Plan for the site. Ecology shall maintain the responsibility for public participation at the site. WSDOT shall help coordinate and implement public participation for the site.

8. Retention of Records

WSDOT 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 be undertaken through contractors or agents of WSDOT, then WSDOT agrees to include in its contract with such contractors or agents a record retention requirement meeting the terms of this paragraph.

9. Dispute Resolution

WSDOT 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. WSDOT 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.

10. Reservation of Rights/No Settlement

This Agreed Order is not a settlement under Chapter 70.105D RCW. Ecology's signature on this Order in no way constitutes a covenant not to sue or a compromise of any Ecology rights or authority. Ecology will not, however, bring an action against WSDOT to recover remedial action costs paid to and received by Ecology under this Agreed Order. In addition, Ecology will not take additional enforcement actions against WSDOT to require those remedial actions required by this Agreed Order, provided WSDOT complies with this Agreed Order.

Ecology reserves the right, however, to require additional remedial actions at the Site should it deem such actions necessary.

Ecology also reserves all rights regarding the injury to, destruction of, or loss of natural resources resulting from the releases or threatened releases of hazardous substances from the Site.

In the event Ecology determines that conditions at the Site 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 WSDOT to stop further implementation of this Order for such period of time as needed to abate the danger.

11. 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 WSDOT 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 WSDOT may have in the site or any portions thereof, WSDOT 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, WSDOT shall notify Ecology of the contemplated transfer.

12. Compliance With Applicable Laws

A. All actions carried out by WSDOT pursuant to this Order shall be done in accordance with all applicable federal, state, and local requirements, including requirements to obtain necessary permits, except as provided in paragraph B of this section.

B. Pursuant to RCW 70.105D.090(1), the substantive requirements of Chapters 70.94, 70.95, 70.105, 75.20, 90.48, and 90.58 RCW and of any laws requiring or authorizing local government permits or approvals for the remedial action under this Order that are known to be applicable at the time of issuance of the Order have been included in Exhibit C, Substantive Requirements for Permits, and are binding and enforceable requirements of the Order.

WSDOT has a continuing obligation to determine whether additional permits or approvals addressed in RCW 70.105D.090(1) would otherwise be required for the remedial action under this Order. In the event WSDOT

determines that additional permits or approvals addressed in RCW 70.105D.090(1) would otherwise be required for the remedial action under this Order, it shall promptly notify Ecology of this determination. Ecology shall determine whether Ecology or WSDOT shall be responsible to contact the appropriate state and/or local agencies. If Ecology so requires, WSDOT shall promptly consult with the appropriate state and/or local agencies and provide Ecology with written documentation from those agencies of the substantive requirements those agencies believe are applicable to the remedial action. Ecology shall make the final determination on the additional substantive requirements that must be met by WSDOT and on how WSDOT must meet those requirements. Ecology shall inform WSDOT in writing of these requirements. Once established by Ecology, the additional requirements shall be enforceable requirements of this Order. WSDOT shall not begin or continue the remedial action potentially subject to the additional requirements until Ecology makes its final determination.

Ecology shall ensure that notice and opportunity for comment is provided to the public and appropriate agencies prior to establishing the substantive requirements under this section.

C. Pursuant to RCW 70.105D.090(2), in the event Ecology determines that the exemption from complying with the procedural requirements of the laws referenced in RCW 70.105D.090(1) would result in the loss of approval from a federal agency which is necessary for the State to administer any federal law, the exemption shall not apply and WSDOT shall comply with both the procedural and substantive requirements of the laws referenced in RCW 70.105D.090(1), including any requirements to obtain permits.

VI

Satisfaction of this Order

The provisions of this Order shall be deemed satisfied upon WSDOT's receipt of written notification from Ecology that WSDOT has completed the remedial activity required by this Order, as amended by any modifications, and that all other provisions of this Agreed Order have been complied with.

VII

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 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 WSDOT refuses, without sufficient cause, to comply with any term of this Order, WSDOT 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.

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 70.105D RCW.

Effective date of this order: 3/6/1995

STATE OF WASHINGTON

STATE OF WASHINGTON

DEPARTMENT OF TRANSPORTATION

DEPARTMENT OF ECOLOGY

BY *Larry R. Smith*

BY *[Signature]*

Approved as to form:

*Deborah R. Lade*

Assistant Attorney General

EXHIBIT A

AREA COVERED BY AGREED ORDER

Current TCG Site

TCG RI Areas



South 21st Street

E-1 1.59/-

E-6 1.33/-

Street

EW-S A Street

Coal Gasification Plant Site

E-10 1.00/-

Gasoline Service Station Site R/W

E-16 1.62/-

E-15 3.00/-

E-24 7.26/-

E-18 3.00/-

E-20 2.30/-

E-3 2.10/0.00 2.30/-

E-4 3.67/-

E-17 2.99/-

E-20 2.57/-

E-22 2.05/36

E-13 3.37/27

E-10 19.87/14

E-9 3.60/-

E-11 10.8/-

Fuel Storage Tanks

E-5 2.10/-

City Waterway

Puyallup Avenue

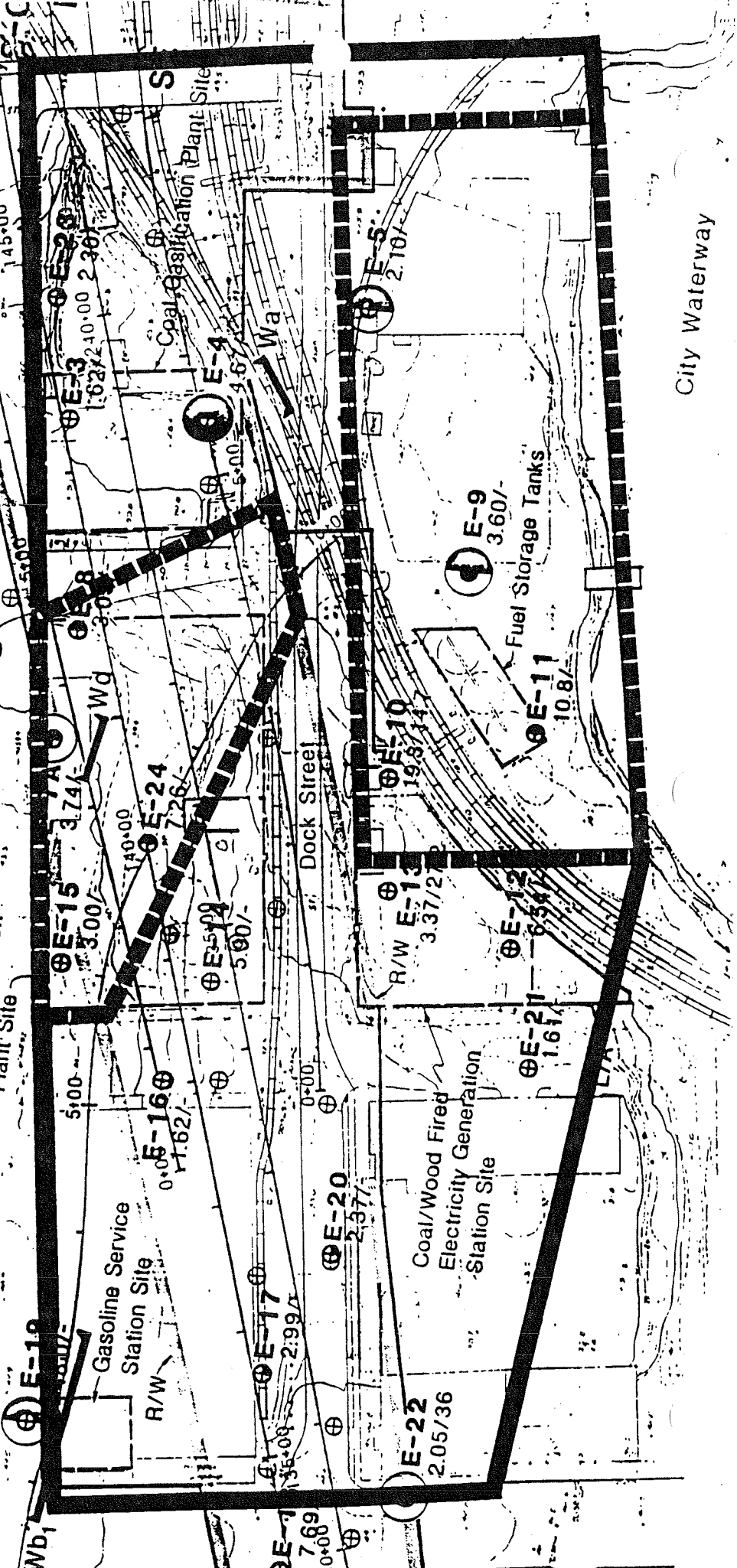
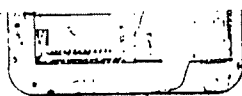




EXHIBIT B  
(ATTACHED)

INTERIM ACTION PLAN

I-705 URBAN EXCHANGE

FORMER COAL GASIFICATION SITE

EXHIBIT C

WSDOT SR 509 PROJECT AT

TACOMA COAL GASIFICATION SITE

SUBSTANTIVE REQUIREMENTS FOR PERMITS

Substantive requirements for state and local permits that have been identified as pertinent to this project and that shall be complied with in the process of completing the interim remedial action:

City of Tacoma, Chapter 13.10, Shoreline Regulations

- Construction design shall include measures to minimize erosion during and after construction and for the replanting of the Site after construction.
- Construction design shall include measures to minimize the problems of contamination of surface waters, depletion and contamination of ground water, and the generation of increased surface water runoff.
- Construction design shall include provision for facilities or appurtenances for disposal of sanitary waste and shall monitor the use of chemicals, fertilizers and other pollutants in such a manner so as to not degrade existing levels of surface water and ground water quality.
- Signs required for safety and security shall be allowed.
- All signs shall be of permanent materials.
- Dust control measures, including plants and vegetation where feasible, shall be taken.

Puget Sound Air Pollution Control Agency,

Regulation I of the Puget Sound Air Pollution Control Agency

- Remedial action shall be performed so as to not allow the emission of any air contaminants in violation of the visual standard established by Section 9.03 of the regulation.
- Remedial action shall be performed so as to not allow the emission of particulate matter in violation of Section 9.04 of the regulation.
- Remedial action shall be performed so as to not allow the emission of any air contaminants in violation of Section 9.11 of the regulation.
- Remedial action shall be performed so as to not allow the emission of fugitive dust in violation of Section 9.15 of the regulation.
- Equipment utilized on-site for the remedial action shall be maintained in such a manner as to not be in violation of Section 9.20(b) of the regulation.

Regulation III of the Puget Sound Air Pollution Control Agency

- The numerical standards for compliance with the air emissions regulations that apply to remedial action on the Site are those listed in Appendix A, Acceptable Source Impact Levels, of the regulation.

State of Washington, Chapter 90.48 RCW, Water Pollution Control

- Construction design and implementation shall include measures to prevent any discharge into any of the waters of the state any organic or inorganic matter that shall cause or tend to cause pollution of such waters according to the determination of Ecology.

State of Washington, Chapter 70.105 RCW, Hazardous Waste Management

- Remedial action shall not allow for management or disposal of dangerous wastes or hazardous wastes in any manner not in compliance with regulations under Chapter 173-303 WAC.

The above referenced substantive requirements apply to Site remedial action activities only. Site construction activities may necessitate compliance with the procedural requirements of state and local permits, as well.

EXHIBIT D

REFERENCES

1. Agreed Order No. DE 93TC-S166, for the Tacoma Coal Gasification Site, Ecology, October, 1993.
2. Hart Crowser & Associates, Soil and Ground Water Quality Evaluation SR 705 Tacoma Spur, Tacoma, Washington, Report No. J-1210-09, prepared for WSDOT, 1984.
3. Black & Veatch Waste Science, Inc., Draft Focused Site Characterization and Interim Remedial Action Evaluation Report for the Tacoma Coal Gasification Site, Volume I and Volume II, prepared for the City of Tacoma Department of Public Works, April, 1994.
4. WSDOT, SR 509 - Thea Foss Waterway Bridge, Preliminary Borings/Sampling at Piers 3 and 5, November, 1994.
5. WSDOT, SR 509 - Pacific Avenue to Dock Street, Preliminary Borings/Sampling at Pier Excavation, (including SAAP and QAPP), January, 1995.
6. Progressive Contractors, Inc., Safety Plan for Pacific Avenue to Dock Street Project, prepared for WSDOT, November, 1994.
7. WSDOT, SR 509 East-West Corridor, I 705 to East 11th Street and Marine View Drive Environmental Impact Statement, Volume I and Volume II, October, 1990.
8. EMCON, Interim Action Report, I 705 Urban Interchange, Former Coal Gasification Site, prepared for WSDOT, February, 1995.