

FS1436

STATE OF WASHINGTON

RECEIVED

DEPARTMENT OF ECOLOGY

'00 SEP 15 15 0

IN THE MATTER OF REMEDIAL ACTION BY:)
The Disclaimer Trust created under the Last)
Will and Testament of John J. O'Connell; and)
Atlantic Richfield Company)

AGREED ORDER
NO. DE 00TCPSR-1628

TO:

Mrs. Margaret O'Connell, Co-Trustee
Mr. Michael O'Connell, Co-Trustee
Mr. Bob May, Trust Representative
18047 NE 99th Court
Redmond, Washington 98052

and

Atlantic Richfield Company
Mr. Ralph Moran, Company Representative
4 Centerpointe Drive
La Palma, California 90623-1066

I. JURISDICTION

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

II. FINDINGS OF FACT

The Department of Ecology (Ecology) makes the following Findings of Fact, without admission of such facts by the Disclaimer Trust created under the Last Will and Testament of John J. O'Connell (Trust) and Atlantic Richfield Company (ARCO):

1 The property located at 1117 West Bay Drive, Olympia, Washington, is under the ownership and control of the Trust, and is known as the Industrial Petroleum Distributors (IPD) site, or West Bay Tank Farm. The Thurston County parcel numbers are 09030005000 (upland) and 09030003000 (adjacent to West Bay Drive).

Sam

2. In the early 1950's, the property was developed as a bulk fuel storage facility after Richfield Oil Corporation (now ARCO) acquired ownership. The facility consisted of eight (8) above ground storage tanks ranging in capacity from 20,000 to 150,000 gallons. The tanks were situated on a level area cut into a steep slope, at approximately forty (40) vertical feet above the elevation of the pumping rack at the bottom of the slope. The associated piping ran down the slope between the tanks and the pumping rack. An office/storage building is located on site.

3. In 1999, two employees of the local fire department reported that in approximately 1974 (during ARCO's ownership), a gasoline overflow spill occurred at the site during off loading into an above ground tank. No contemporaneous documentation of the spill has been discovered.

4. In 1977, ARCO sold the property to Darron Cole and Chester and Wilma Chaloupka (husband and wife), who reportedly leased the property to IPD, who used the facility to store waste oil in the late 1980's and early 1990's. The Property was sold to IPD in 1987. Ecology inspection records document improper storage of hazardous materials and observations of petroleum contaminated soil at the facility. The Trust reports that the property was sold by IPD to John J. O'Connell in 1997, and that following John J. O'Connell's death in March 1998, the ownership of the property was transferred by the Estate of John J. O'Connell to the Trust in November 1998.

5. The Thurston County Health Department conducted a Site Hazard Assessment in 1998, which resulted in a relative hazard ranking of one (1) (greatest concern) out of a possible five (5) (least concern). Hazardous substances detected in soil included diesel and heavy oil. The Site Hazard Assessment documented the poor condition and active leakage of the above ground tanks. Also in 1998, Ecology issued Order No. DE 98HW-S271, requiring the Estate of

John J. O'Connell to remove the waste stored on site. The requirements of the order were completed in late 1999.

6 In December 1999, the property owner (Estate of John J. O'Connell) demolished the above ground storage tanks, associated piping and pumping rack. Disturbance of the soil by use of heavy equipment on site plus heavy rainfall resulted in an erosion and storm water overflow event. Sediments were discharged into the adjacent marine water (Budd Inlet) via site storm drains, and storm water control steps were then taken to contain site sediments and keep petroleum from discharging to the drains. The city of Olympia ordered work to stop at the site until the rainy season passed.

7 Ecology has been advised by representatives of the Estate of John J. O'Connell that the property in question is currently owned by a Disclaimer Trust created under the Last Will and Testament of John J. O'Connell (Trust)

III. ECOLOGY DETERMINATIONS

Ecology makes the following Determinations, without admission of such determinations by the Trust or ARCO:

- 1 The Trust and ARCO are each an "owner or operator" as defined at RCW 70.105D.020(12) of a "facility" as defined in RCW 70.105D.020(4).
- 2 The facility is known as Industrial Petroleum Distributors, or West Bay Tank Farm, and is located at 1117 West Bay Drive, Olympia, Washington.
- 3 The substances found at the facility as described above are "hazardous substances" as defined at RCW 70.105D.020(7).
- 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(20).

5. By letter dated December 17, 1999, Ecology notified the Trust (then known as the Estate) of its status as a "potentially liable person" under RCW 70.105D.040 after notice and opportunity for comment. Ecology similarly notified ARCO on May 9, 2000.

6. Pursuant to RCW 70.105D.030(1) and 70.105D.050, Ecology 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 Order shall not be construed as evidence of liability or responsibility for any releases of hazardous substances or as an admission of any facts; provided, however, that the Trust and ARCO shall not challenge the jurisdiction of Ecology in any proceeding to enforce this Order.

8. Based on the foregoing facts, Ecology 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 the Trust and ARCO take the following remedial actions and that these actions be conducted in accordance with Chapter 173-340 Washington Administrative Code (WAC) unless otherwise specifically provided for herein.

1. Provide for reasonable site security by fencing or other appropriate means so that unauthorized persons cannot easily gain entry, in order to protect public safety

2. Maintain and regularly inspect the site storm water diversion system to prevent erosion of site soils and to prevent sediment or contaminant runoff.

3. Provide brief monthly written reports to Ecology summarizing progress made towards site cleanup and any problems or delays encountered.

4. Develop and implement a Remedial Investigation/Feasibility Study Work Plan, in accordance with Chapter 173-340-350 and -360 WAC. The Ecology-approved Work Plan will be appended to this Order and incorporated by reference and will be an integral and enforceable part of the Order.

5. Obtain sufficient ground water and soil samples to characterize the contamination present on site, both in areal extent and depth. The number and location of wells and sampling points as well as analytical parameters will be determined in consultation with Ecology, detailed in a Sampling and Analysis Plan, and are subject to Ecology approval.

6. Comply with the following schedule of deliverables, unless changes are agreed to in writing by Ecology:

Deliverable	Due to Ecology
Provide site security/fencing	Five (5) days after issue date of this Order.
Draft RI/FS Work Plan, including Sampling and Analysis Plan	Seven (7) days after issue date of this Order.
Final RI/FS Work Plan	Seven (7) days after Ecology written comments on draft Work Plan received.
Monthly Written Progress Reports including monitoring results, as applicable	Beginning ten (10) days after issue date of this Order.
Complete RI/FS Work Plan Field Work	Twenty-two (22) days after Ecology written approval of Final Work Plan
Draft RI Report	Sixty (60) days after completion of field work.
Draft RI/FS Report	Thirty (30) days after Ecology written comments on draft RI Report received.
Final RI/FS Report	Thirty (30) days after Ecology written comments received

7. If the Trust and ARCO cannot meet any component of the agreed upon schedule, the Trust and ARCO will provide Ecology with a timely written extension request. Ecology will approve all reasonable extension requests. It shall not be necessary to formally amend this Order when a schedule extension is granted by Ecology. Ecology will provide the Trust and ARCO with timely written notification of any extensions granted pursuant to this Order.

BJW

8 The burden shall be on the Trust and ARCO to demonstrate to the satisfaction of Ecology that good cause exists for granting the extension. Good cause includes, but is not limited to, the following:

- (a) Circumstances beyond the reasonable control and despite the due diligence of the Trust and ARCO, including delays caused by unrelated third parties or Ecology
- (b) Acts of God, including fire, flood, blizzard, extreme temperatures, storm, or other unavoidable casualty; or
- (c) Endangerment as described in Section V (10).

Neither increased costs of performance of the terms of the Order nor changed economic circumstances shall be considered circumstances beyond the reasonable control of the Trust or ARCO.

V. TERMS AND CONDITIONS OF ORDER

1. Definitions

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

2. Public Notices

RCW 70.105D.030(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

The Trust and ARCO shall pay to Ecology costs reasonably 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). The Trust and ARCO shall pay the required amount within ninety (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 (identified by task) 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 ninety (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:

Ms. Martha M. Maggi
Washington Department of Ecology
Toxics Cleanup Program
Southwest Regional Office
P.O. Box 47775
Olympia, WA 98504-7775

The project coordinator for the Trust is:

Mr. Peter J. Mintzer
Ogden Murphy Wallace, P.L.L.C.
1601 Fifth Avenue, Suite 2100
Seattle, WA 98101-1686

The project coordinator for ARCO is:

Mr. Ralph J. Moran
Atlantic Richfield Company
4 Centerpointe Drive
La Palma, CA 90623-1066

The project coordinator(s) shall be responsible for overseeing the implementation of this Order. To the maximum extent possible, communications between Ecology and the Trust and ARCO, 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 coordinator(s). Should Ecology or the Trust and ARCO change project coordinator(s), written notification shall be provided to Ecology or the Trust and ARCO 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. The Trust and ARCO 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. The Trust and ARCO 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, the Trust and ARCO 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.

6. Access.

Upon reasonable advance notice to the Trust, 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 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 Trust and ARCO. By signing this Agreed Order, the Trust 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 the Trust and ARCO during an inspection unless doing so interferes with Ecology's sampling. The Trust and ARCO shall allow split or replicate samples to be taken by Ecology and shall provide seven (7) days notice before any sampling activity. Analytical results of any split sampling will be shared among the three signatories to this Order.

7 Public Participation

Ecology shall prepare and/or update a public participation plan for the site. Ecology shall maintain the responsibility for public participation at the site. The Trust and ARCO shall help coordinate and implement public participation for the site.

8 Retention of Records.

The Trust and ARCO 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 submittals to Ecology, QA/QC memoranda and audits, final work plans, final reports, field notes and laboratory or testing reports and data in its possession relevant to this Order. Should any portion of the work performed hereunder be undertaken through contractors or agents of the Trust and ARCO, then the Trust and ARCO agree to include in their contract with such contractors or agents a record retention requirement meeting the terms of this paragraph.

9 Dispute Resolution.

The Trust and ARCO 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 Trust and ARCO 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. Notwithstanding the foregoing, nothing in this Order shall be construed as a waiver of any rights or defenses the PLPs may have under RCW

70.105D.060

10. Reservation of Rights/No Settlement.

This Agreed Order is not a settlement under Ch. 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 the Trust and ARCO 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 the Trust and ARCO to require those remedial actions required by this Agreed Order, provided the Trust and ARCO comply 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 this 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 the Trust and ARCO 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 the Trust 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 the Trust may have in the site or any portions thereof, the Trust 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, the Trust shall notify Ecology of the contemplated transfer.

12. Compliance With Applicable Laws.

(a) All actions carried out by the Trust and ARCO 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 Attachment A and are binding and enforceable requirements of the Order. (Attachment A will include the substantive requirements of the excavation and grading permit issued by city of Olympia.)

The Trust and ARCO have 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 the Trust and ARCO determine that additional permits or approvals addressed in RCW 70.105D.090(1) would otherwise be required for the remedial action under this Order, they shall promptly notify Ecology of this determination. Ecology shall determine whether Ecology or the Trust and ARCO shall be responsible to contact

the appropriate state and/or local agencies. If Ecology so requires, the Trust and ARCO 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 the Trust and ARCO and on how the Trust and ARCO must meet those requirements. Ecology shall inform the Trust and ARCO in writing of these requirements. Once established by Ecology, the additional requirements shall be enforceable requirements of this Order. The Trust and ARCO 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 the Trust and ARCO 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 receipt by the Trust and ARCO of written notification from Ecology that the Trust and ARCO 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 the Trust and ARCO refuses, without sufficient cause, to comply with any term of this Order, the Trust and ARCO may be liable for:
- (1) up to three (3) times the amount of any costs incurred by the state of Washington as a result of their refusal to comply; and
 - (2) civil penalties of up to twenty-five thousand dollars (\$25,000) per day for each day they refuse 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 Ch 70 105D RCW.

Effective date of this Order: 9/15/00

WASHINGTON STATE DEPARTMENT OF ECOLOGY

Mr. David B. Jansen, Toxics Cleanup Program

By 

Disclaimer Trust created under the Last Will and Testament of John J. O'Connell (Trust)
Mr. Michael O'Connell, Co-Trustee

By 

ARCO Products Company
Mr. Ralph Moran, Company Representative

By 



WORK MUST COMMENCE WITHIN 100 DAYS FROM THE DATE OF
 issuance and/or must have a valid inspection at least
 every 180 days or this permit will expire by
 limitation.

City of
OLYMPIA

CW 16361 R85280

Department of Community Planning & Development

Application Number 00-00000900 Date 8/16/00
 Property Address 1117 NW WEST BAY DR
 LAND ID NUMBER 30877
 Tax Parcel Number 09030003000
 Tenant nbr, name EROSION CONTROL
 Application description SITE- GRADING (FILL AND/OR EXCAV)
 Subdivision Name AUSTIN DLC #49
 Property Use
 Property Zoning PROF OFFICE/RESIDENTIAL
 Application valuation 0

Owner
 O CONNELL, JOHN J TRUST
 614 N J ST
 TACOMA WA 984032018

Contractor
 ASSOCIATED ENVIRONMENTAL
 GROUP LLC
 120 UNION AV SE STE 210
 OLYMPIA WA 98501
 (360) 352-9835

Permit GRADING PERMIT
 Additional desc
 Permit Fee 37.00 Plan Check Fee00
 Issue Date 8/16/00 Valuation 0
 Expiration Date 2/09/02

Qty	Unit	Charge	Per	Extension
			BASE FEE	37.00

Special Notes and Comments
 PERMIT ISSUED AND APPROVED PER STEVE
 WISE.

Fee summary	Charged	Paid	Credited	Due
Permit Fee Total	37.00	.00	.00	37.00
Plan Check Total	.00	.00	.00	.00
Grand Total	37.00	.00	.00	37.00

CONTRACTOR AFFIDAVIT
 I certify that I am a currently registered contractor in the State of Washington and the City of Olympia.
 I am aware of the ordinance requirements regulating the work for which the permit is issued and all work will be done in conformance therewith.
 Firm *Associated Environmental Group LLC*
 By _____ Date _____

OWNER
 I hereby certify that I am owner of the property for which this permit is issued, and that all work done will be in conformance with City of Olympia ordinances and as noted on this permit.
 X _____
 SIGNATURE DATE

WATER
 (Note: Water billing charges commence on date of installation of meter and all deposits will be adjusted to actual cost.)
 APPLICANT _____ Date _____

- RIGHT OF WAY WORK**
- PRIOR TO COMMENCING WORK WITHIN RIGHT-OF-WAY**
- 1 Arrange with the city inspector to have permit card issued on the job site which will authorize work to begin. This can be scheduled by calling 753-8314 between 7 am and 8 am. A minimum of 72 hours notice is required. Failure to comply will be cause for issuance of a "STOP WORK" order on the project.
 - 2 Notify underground location assistance 48 hours prior to any excavation (1-800-424-5555).
 3. Notify Metro traffic control 48 hours prior to obstruction of city right of way (753-8001).
 - 4 The attached plan check letter is made a part of the permit condition.

Regular inspections must be scheduled 24 hours in advance.
 Final inspections must be scheduled 11 hours in advance.
 Phone # (360)753-4444 ext.3050

ATTACHMENT A



Associated
Environmental
Group, LLC

Inspector

SAMPLING & ANALYSIS PLAN

**CITY OF OLYMPIA
AUTHORIZED**
SUBJECT TO THE **CONDITIONS SET FORTH IN**
THE ATTACHED **PLAN CHECK LETTER AND IS**
HEREBY MADE A **PART OF THE PLANS AND**
SPECIFICATIONS:
TO PROCEED ON 4-27-00
EXPIRES ON 10-07-00
REVIEWED BY S. Wise
**COMMUNITY PLANNING & DEVELOPMENT
DEVELOPMENT ENGINEERING SECTION**

Prepared for

West Bay Tank Farm
Independent Petroleum Distributors

1117 West Bay Drive
Olympia, WA 98501

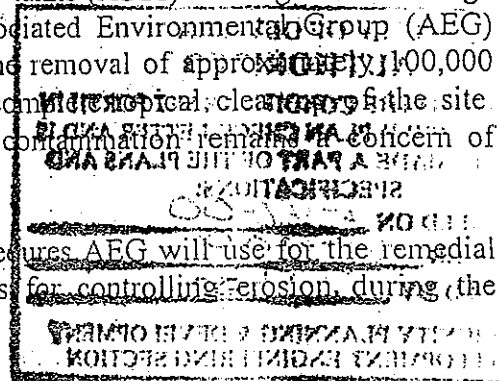
April 20, 2000

1.0 INTRODUCTION

The West Bay Tank Farm, (hereafter referred to as Independent Petroleum Distributors (IPD)) is located on the west side of Budd Bay, at 1117 West Bay Drive, Olympia, Thurston County, Washington. The property is the subject of an Administrative Order from the Washington Department of Ecology ("Ecology") for clean up of a hazardous waste site.

The property had been used as a bulk petroleum storage facility from 1951 to the 1990s. The property contained eight above ground storage tanks (ASTs) totaling a total storage capacity of about 379,000 gallons. In 1998, Associated Environmental Group (AEG) coordinated the removal of the ASTs, including the removal of approximately 1100,000 gallons of petroleum products from them and a complete cleanup of the site. Although the ASTs are no longer in place, soil contamination remains a concern of Ecology.

This sampling and analysis plan outlines the procedures AEG will use for the remedial investigation of the property, including measures for controlling erosion during the investigation activities



2.0 EROSION CONTROL

Soil erosion is a concern at the IPD site due to site work at the property during the removal of the tanks. Vegetation has been removed from some parts of the property thus rendering the soils susceptible to erosion during heavy rains. The silt from the erosion flows via storm water systems into Budd Bay, thus potentially creating a hazard for marine life in the bay. The site currently has erosion controls in place, consisting of plastic sheeting and drains over the point sources and sediment ponds for the runoff collected from the plastic.

Soil sampling activities will be accomplished using an excavator because the terrain is not conducive to access by a vehicle other than a track-type excavator. AEG estimates the sampling and well installation procedure should not take more than two weeks to accomplish, barring any unforeseen incidents. Monitoring well installation activities are minimally disturbing to the soil, and therefore should not pose a large threat to the contribution of erosion of the soils. AEG recognizes the importance for minimizing erosion potentials and in addition to the current erosion control plan; the following steps will be taken to minimize impact the investigation will have on erosion concerns:

- Sampling activities will be conducted during the summer months when there is less rain. In the event of a heavy rain, sampling activities will be halted and the exposed areas covered with plastic.
- The erosion controls currently in place, such as interceptor ditches and directional tubing, will be disrupted as little as possible and restored to their original or an improved condition as soon as practicable.

- The plastic covering will be removed only where necessary for access by equipment.
- The plastic will not be removed more than one day prior to the sampling activities. The plastic will be spot removed for sampling and well installation.
- The plastic will be replaced when the sampling and well installation activities are completed.
- Test pits will be filled immediately after the last sample is taken from that test pit. If any pit is to remain open, the stockpiled soils will be covered with plastic
- All erosion controls will be returned to their original or an improved condition upon completion of sampling and
- City of Olympia inspection and approval by Steve ^{WSE} Weis will be requested

3.0 SAMPLE LOCATIONS

AEG recommends soil samples to be taken in 24 locations on the property using a matrix-type approach for locations. Sample locations around the perimeter of the property will show if and where the contamination plume has migrated off the property. Sample locations in the middle of the property will show the extent of vertical migration of the plume. See Appendix 1 for sample locations.

4.0 MONITORING WELL LOCATIONS

The direction of groundwater flow is presumed to be east towards Budd Bay. AEG recommends installing two monitoring wells in the area between the existing building and the hill where the ASTs were located, and three monitoring wells along the side of the property adjacent to West Bay Drive. See the map in Appendix 1 for details of recommended well locations. To minimize the potential of dry wells during the dry season, AEG recommends the wells be a minimum of twenty feet deep. Groundwater is not expected to be in the higher elevation of the property, therefore no wells are recommended for that area.

The monitoring wells will be used to determine the soil characteristics such as permeability, and hydraulic conductivity, and to determine the vadose zone, contamination smear and tidal influence.

Monitoring Wells will be installed in accordance with the requirements set forth in WAC 173-160 *Minimum Standards for Construction and Maintenance of Wells*. Waste generated from monitoring well installation shall be handled in accordance with WAC 173-304-200 *On-Site Containerized Storage, Collection and Transportation Standards for Solid Waste*.

5.0 SAMPLING AND ANALYSIS

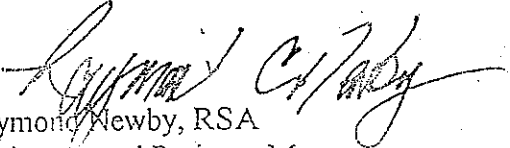
Soil samples will be collected using the backhoe and hand tools technique. Soil samples will be collected where field instrumentation indicated contamination exists.

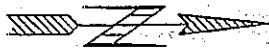
Soil & groundwater sampling and laboratory analysis protocols are established in the WDOE publications *Data Gathering and Sampling Analysis Methods and Guidance for Remediation of Releases from Underground Storage Tanks*.

Based on past uses and products, the following analysis of soil and water samples is recommended:

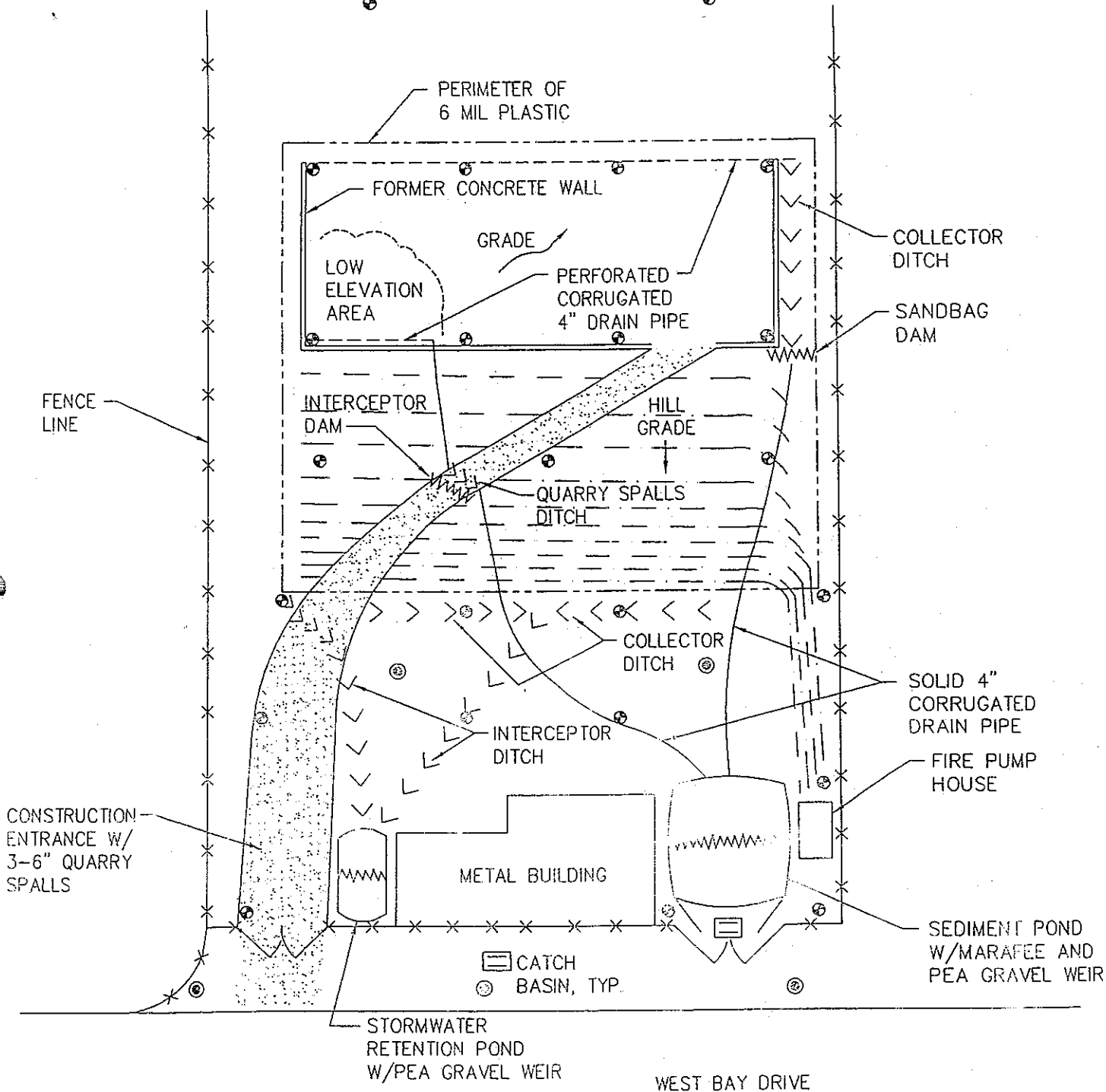
- TPH
- BTEX
- Volatile Organics
- Heavy Metals in soil

Associated Environmental Group, LLC


Raymond Newby, RSA
Environmental Projects Manager




SCALE: N.T.S.



⊙ PROPOSED MONITORING WELL LOCATION

⊙ PROPOSED SOIL SAMPLE LOCATION

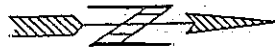
No.	Revision/Issue	Date


ASSOCIATED ENVIRONMENTAL GROUP, LLC
 Environmental Consulting and Contracting
 120 East Union Avenue, Suite 210
 Olympia, WA 98513
 (360) 352-9835 Fax (360) 352-8164

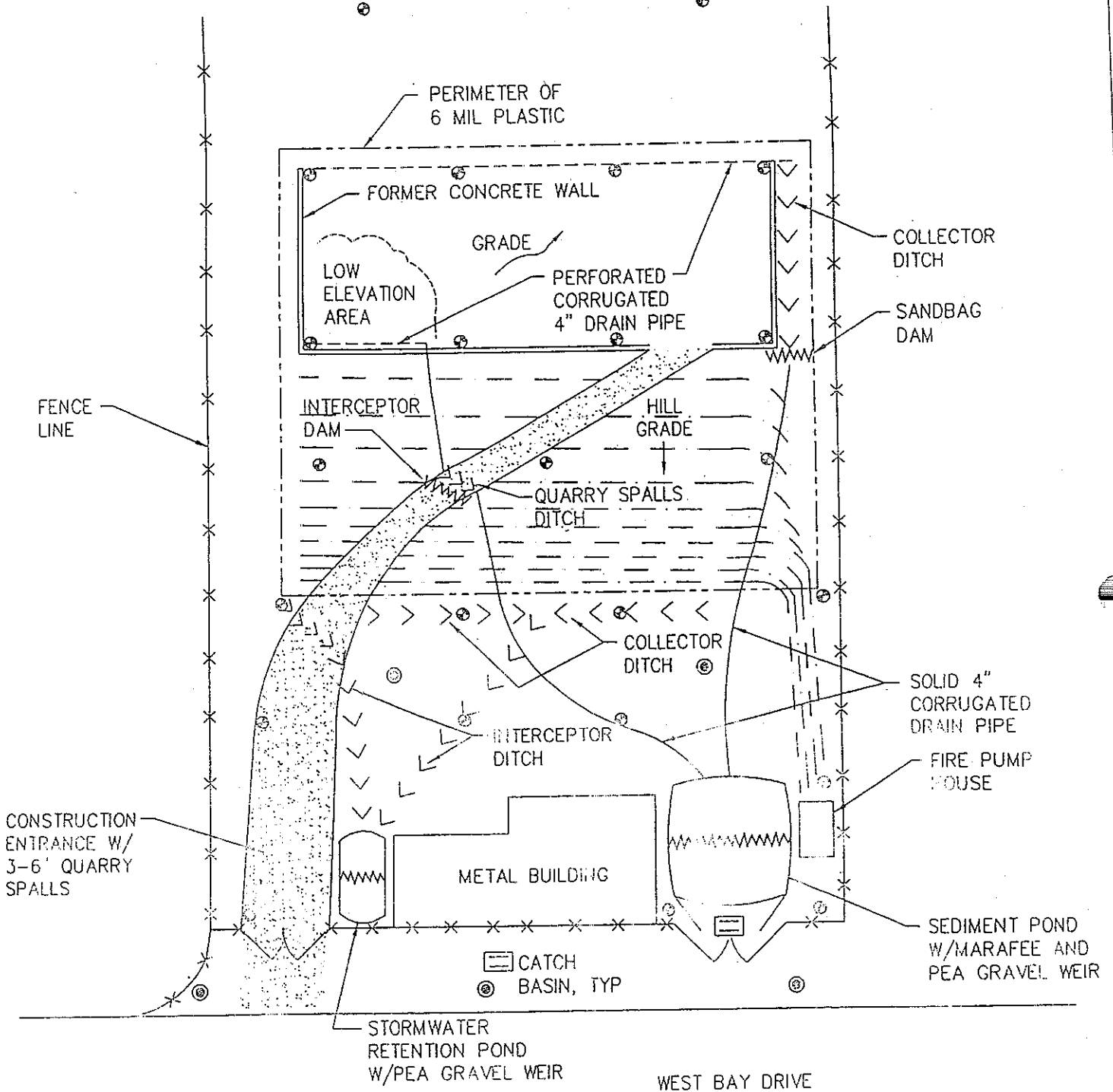
EROSION CONTROL PLAN

IPD SITE

Project #	Date: 4/18/2014
File: IPO-SAMPLE	Sheet 1 of 1



SCALE: N.T.S



⊙ PROPOSED MONITORING WELL LOCATION

⊙ PROPOSED SOIL SAMPLE LOCATION

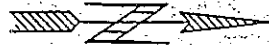
No.	Revision/Issue	Date

ASSOCIATED ENVIRONMENTAL GROUP, LLC
 Environmental Consulting Contracting
 120 E. Union Avenue, Ste 210
 Puyallup, WA 98443
 (360) 835-7755 Fax (360) 835-0164

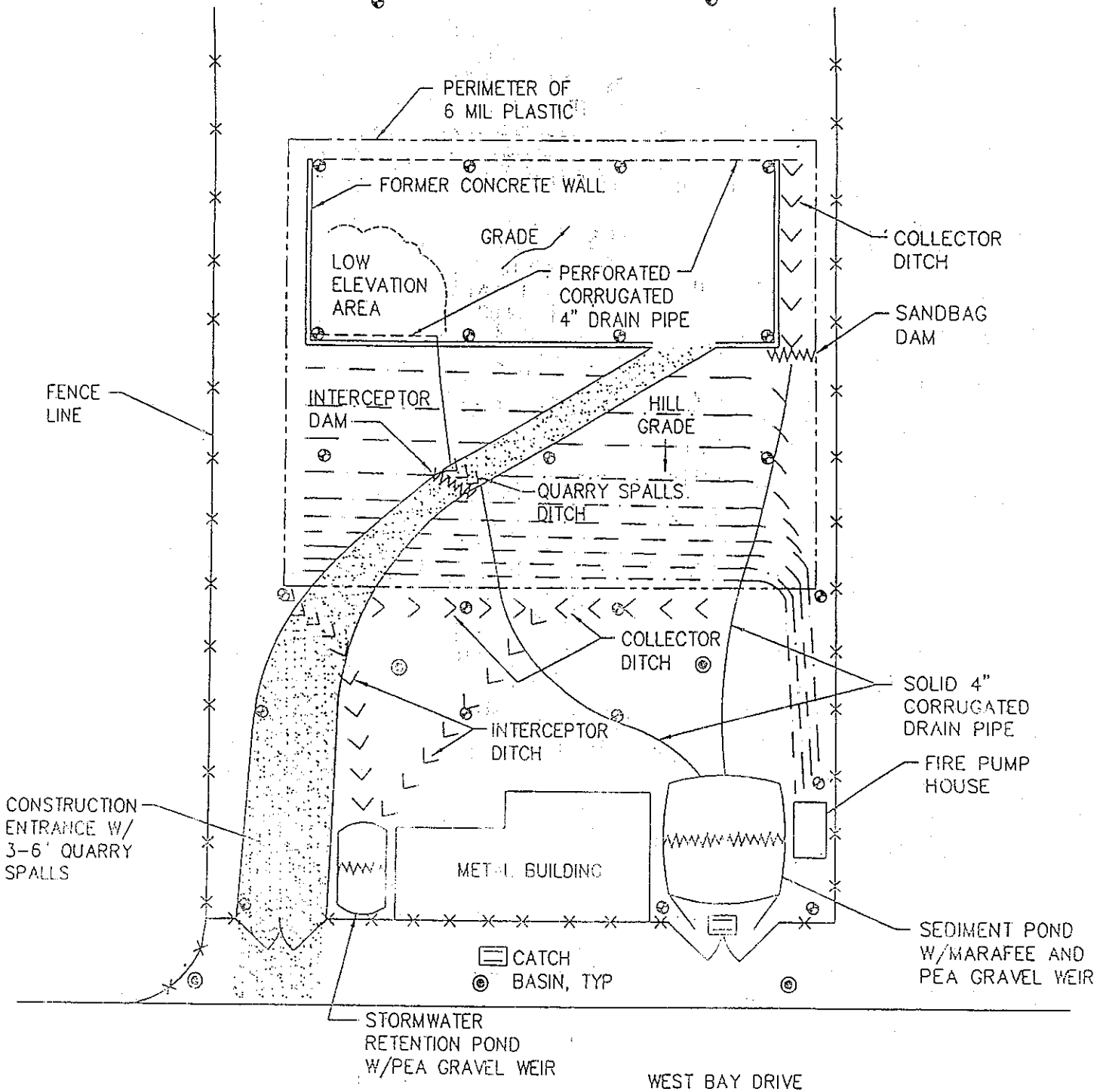
EROSION CONTROL PLAN

IPD SITE

Project #	Date: 5/18/2007
File # PD-SAMPLE	Sheet 1 of 1




SCALE: N.T.S



- ⊙ PROPOSED MONITORING WELL LOCATION
- ⊗ PROPOSED SOIL SAMPLE LOCATION

No.	Revision/Issue	Date


ASSOCIATED ENVIRONMENTAL GROUP, LLC
 Environmental Consulting and Contracting
 120 East Union Avenue, Suite 210
 Olympia, WA 98501
 (360) 352-9835 Fax (360) 352-8164

EROSION CONTROL PLAN

IPD SITE

Project #	Date: 4/18/2005
File: IPD-SAMPLE	Sheet 1 of 1