

**STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY**

In the Matter of Remedial Action by:

Chevron U.S.A. Inc. dba Chevron  
Products Company

RE: Chevron Service Station #9-6590  
232 East Woodin Avenue  
Chelan, WA 98816

AGREED ORDER

No. DE 10629

TO: Chevron Environmental Management Company  
6101 Bollinger Canyon Road  
BR1X - Room 5315  
San Ramon, CA 94583  
c/o Mr. Eric Hetrick

**TABLE OF CONTENTS**

I.	INTRODUCTION.....	2
II.	JURISDICTION.....	2
III.	PARTIES BOUND.....	2
IV.	DEFINITIONS.....	2
V.	FINDINGS OF FACT.....	3
VI.	ECOLOGY DETERMINATIONS.....	5
VII.	WORK TO BE PERFORMED.....	7
VIII.	TERMS AND CONDITIONS OF ORDER.....	10
	A. Remedial Action Costs.....	10
	B. Implementation of Remedial Action.....	11
	C. Designated Project Coordinators.....	11
	D. Performance.....	12
	E. Access.....	12
	F. Sampling, Data Submittal, and Availability.....	13
	G. Public Participation.....	14
	H. Retention of Records.....	15
	I. Resolution of Disputes.....	16
	J. Extension of Schedule.....	16
	K. Amendment of Order.....	18
	L. Endangerment.....	18
	M. Reservation of Rights.....	19
	N. Transfer of Interest in Property.....	20
	O. Compliance with Applicable Laws.....	20
	P. Indemnification.....	22
IX.	SATISFACTION OF ORDER.....	22
X.	ENFORCEMENT.....	22
	EXHIBIT A. Site Diagram	
	EXHIBIT B. Ecology letter dated November 1, 2012, evaluation of the 2006 RI/FS deficiencies	
	EXHIBIT C. Schedule	

## I. INTRODUCTION

The mutual objective of the State of Washington, Department of Ecology (Ecology) and Chevron Environmental Management Company (Chevron) under this Agreed Order (Order) is to enable a cleanup action to be selected for a facility where there has been a release or threatened release of hazardous substances. This Order requires Chevron to perform a Supplemental Remedial Investigation to fill data gaps, and prepare a Supplemental Feasibility Study to develop and evaluate cleanup action alternatives. Ecology believes the actions required by this Order are in the public interest.

## II. JURISDICTION

This Agreed Order is issued pursuant to the Model Toxics Control Act (MTCA), RCW 70.105D.050(1).

## III. PARTIES BOUND

This Agreed Order shall apply to and be binding upon the Parties to this Order, their successors and assigns. The undersigned representative of each party hereby certifies that he or she is fully authorized to enter into this Order and to execute and legally bind such party to comply with this Order. Chevron agrees to undertake all actions required by the terms and conditions of this Order. No change in ownership or corporate status shall alter Chevron's responsibility under this Order. Chevron 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 complies with this Order.

## IV. DEFINITIONS

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

A. Site: The Site is referred to as the area generally west of and including Chevron Service Station #9-6590 (Chevron Station) located at 232 East Woodin Avenue, Chelan, Washington, where gasoline range petroleum hydrocarbon contamination has been identified in

soil and groundwater in the Chelan business district, as more particularly described in the Site Diagram (Exhibit A). The Site is defined by the extent of contamination resulting from the release of hazardous substances at the Site. The Site constitutes a Facility under RCW 70.105D.020(5).

B. Parties: Refers to the State of Washington, Department of Ecology and Chevron Environmental Management Company. Chevron Environmental Management Company is a party for itself and as attorney-in-fact representing Chevron U.S.A. Inc., a California corporation for purposes of this Agreed Order.

C. Potentially Liable Person (PLP): Refers to Chevron Products Company.

D. Agreed Order or Order: Refers to this Order and each of the exhibits to this Order. All exhibits are integral and enforceable parts of this Order. The terms "Agreed Order" or "Order" shall include all exhibits to this Order and all work plans approved by Ecology under this Order, which will become integral and enforceable parts of the Order upon approval.

E. Light non-aqueous phase liquids (LNAPL): A hazardous substance that is present in the soil, bedrock, ground water or surface water as a liquid not dissolved in water. An LNAPL is one of a group of organic substances that are relatively insoluble in water and are less dense than water. LNAPLs, such as oil, tend to spread across the surface of the water table and form a layer on top of the water table.

F. Supplemental Feasibility Study (SFS): Is a supplement to Chevron's 2006 Feasibility Study, to include updated Site information and the evaluation of additional potential remedial action alternatives at the Site.

## V. FINDINGS OF FACT

Ecology makes the following findings of fact, without any express or implied admissions of such facts by Chevron:

A. Since 1931, a gasoline station has continuously occupied the property at 232 East Woodin Avenue, Chelan, Washington. Chevron USA Inc., (formerly Standard Oil), owned the service station from the early 1950s until January 1988. During these years, the property itself

was owned by a Chelan resident, who leased the property to Chevron, which in turn subleased the business to various dealers. Since January 1988 Chevron has acted only as a fuel supplier to the station owners.

B. In 1987, the UST system reportedly failed a leak test and it was discovered that a gasoline vent line had been leaking for an unknown period of time.

C. In 1988, gasoline-range petroleum hydrocarbons (also known as LNAPL) were discovered within monitoring wells on the property, and later in monitoring wells off-property.

D. By letter dated March 27, 2002, Ecology issued a Notice of Potential Liability letter to Chevron U.S.A. Products.

E. By letter dated April 24, 2002, Chevron Products Company accepted the status as a PLP at the Chelan Chevron Station.

F. By letter dated May 2, 2002, Ecology notified Chevron Products Company of its status as a "Potentially Liable Person" for the release of hazardous substances at the Chelan Chevron Station.

G. In October 2002, Chevron Products Company, a division of Chevron U.S.A. Inc., and Ecology entered into Agreed Order No. DE 02TCPCR-4905 to conduct a Remedial Investigation / Feasibility Study (RI/FS) at the Site. Remedial investigation data collection was performed from 2003 to 2006 and a Final RI/FS report was submitted to Ecology in December 2006. After public notice and opportunity to comment, Ecology accepted the Final RI/FS, and the Agreed Order was deemed complete on September 6, 2007.

H. Based on specific data obtained during the RI, and an analysis of this data comparing alternative cleanup options, the 2006 Final RI/FS:

i. evaluated, characterized, and delineated petroleum impacts and/or potential risk for soil vapor, soil, and dissolved and LNAPL plumes, as well as potential for monitored natural attenuation.

ii. concluded that a number of other local sources may or are likely to have contributed to additional petroleum releases in the vicinity of the Chelan Chevron station.

iii. identified natural attenuation of soil, periodic LNAPL removal by bailing and absorbent socks, and monitored natural attenuation of ground water in the shallow perched aquifer at the Site to be protective of human health and the environment.

I. Chevron prepared a draft Cleanup Action Plan (CAP) for implementation of the preferred remedy and continued to conduct product bailing, monitoring, water level and free product measurements, and annual reporting.

J. By letter dated November 1, 2012, after further review of the Site information and the Draft CAP, Ecology rescinded approval of the 2006 Final RI/FS because it subsequently determined that the Draft CAP as written did not satisfy MTCA (Exhibit B).

K. In its November 1, 2012 letter, Ecology stated that, before a CAP can be approved, a Supplemental Feasibility Study (SFS) be completed to include updated site information, and that additional remediation alternatives be evaluated, including alternatives that result in a shorter restoration timeframe.

## **VI. ECOLOGY DETERMINATIONS**

Ecology makes the following determinations, without any express or implied admissions of such determinations (and underlying facts) by Chevron.

A. Chevron U.S.A. Inc. is a former "owner or operator" as defined in RCW 70.105D.020(17) of a "facility" as defined in RCW 70.105D.020(5).

B. Based upon all factors known to Ecology, a "release" or "threatened release" of "hazardous substance(s)" as defined in RCW 70.105D.020(25) and RCW 70.105D.020(10), respectively, has occurred at the Site.

C. Based upon credible evidence, Ecology issued a Notice of Potential Liability letter to Chevron U.S.A. Products dated March 27, 2002, pursuant to RCW 70.105D.040, -.020(21) and WAC 173-340-500. By letter dated April 24, 2002, Chevron Products Company voluntarily waived its rights to notice and comment and accepted Ecology's determination that Chevron Products Company is a PLP under RCW 70.105D.040. Ecology issued a determination

that Chevron Products Company is a PLP under RCW 70.105D.040 and notified Chevron Products Company of this determination by letter dated May 2, 2002.

D. Pursuant to RCW 70.105D.030(1) and -.050(1), Ecology may require PLPs to investigate or conduct other remedial actions with respect to any release or threatened release of hazardous substances, whenever it believes such action to be in the public interest. Based on the foregoing facts, Ecology believes the remedial actions required by this Order are in the public interest.

E. Under WAC 173-340-430, an interim action is a remedial action that is technically necessary to reduce a threat to human health or the environment by eliminating or substantially reducing one or more pathways for exposure to a hazardous substance, that corrects a problem that may become substantially worse or cost substantially more to address if the remedial action is delayed, or that is needed to provide for completion of a site hazard assessment, remedial investigation/feasibility study or design of a cleanup action. Ecology or Chevron may propose additional interim actions at the Site. After consulting with Chevron, Ecology will determine if the interim action(s) are warranted under WAC 173-340-430. Any interim action must be approved by Ecology under Section VII.F.

F. Ecology rescinded approval of the 2006 Final RI/FS and determined that the Draft CAP as written did not satisfy MTCA for reasons outlined in Ecology's November 1, 2012 letter (Exhibit B).

G. Before a CAP can be approved, which selects a remediation alternative for the site, a Supplemental Remedial Investigation and Supplemental Feasibility Study must be completed to evaluate a range of remediation alternatives, including alternatives that result in a shorter restoration timeframe [WAC 173-340-360(4)] and are permanent to the maximum extent practicable [WAC 173-340-360(3)]. See Exhibit B. The Supplemental Remedial Investigation and Supplemental Feasibility Study should include updated site information to address the following data gaps:

- i. Indoor air – the soil vapor data indicates potential risk to indoor air.

- ii. Soil – contaminant concentrations in shallow soil (less than 15 feet below ground surface) in the vicinity of MW-5 exceeded cleanup levels.
- iii. Dissolved groundwater plume – the dissolved groundwater plume may not be fully delineated at the downgradient end of the inferred plume (Exhibit A). Ecology has determined that either:
  - a. additional work is needed to delineate the plume and evaluate fate, transport, and risk to confirm adequate delineation and protectiveness or aid in remediation design; and/or
  - b. remediation alternatives be evaluated and implemented to prevent migration and provide protectiveness.
- iv. Monitored natural attenuation (MNA) – although MNA was selected as a component of the preferred remedy, the 2006 Final RI/FS evaluation of MNA did not adequately follow Ecology guidance or include data to support an estimate or rationale for determining reasonable restoration timeframe of the dissolved hydrocarbon plume.

## **VII. WORK TO BE PERFORMED**

Based on the Findings of Fact and Ecology Determinations, it is hereby ordered that Chevron take the following remedial actions at the Site and that these actions be conducted in accordance with Chapter 173-340 WAC unless otherwise specifically provided for herein.

A. Chevron shall perform a Supplemental Remedial Investigation to confirm protection of receptors, update the conceptual site model, and provide information to design a workable remedy. Chevron shall prepare draft and final work plans and reports, each requiring approval by Ecology. The following investigative components shall be performed as part of the Supplemental Remedial Investigation:

- i. A Tier 2 vapor intrusion evaluation shall be conducted to evaluate risk. If determined necessary based on the results of the Tier 2 evaluation, mitigation measures will be designed and implemented as an interim action.

ii. Monitoring and evaluation of groundwater contaminants and additional attenuation parameters shall be conducted to determine the feasibility of monitored natural attenuation as a remedial action component.

iii. Additional shallow soil samples (less than 15 feet below ground surface) in the area around MW-5 shall be analyzed for contaminants of concern to confirm that natural attenuation has effectively achieved screening levels.

iv. The conceptual site model shall be updated.

B. Chevron shall perform a Supplemental Feasibility Study (SFS) to develop and evaluate cleanup action alternatives for the Site. Chevron shall work with Ecology to identify cleanup action alternatives to be evaluated in the SFS. Upon receiving Ecology input on cleanup action alternatives to include in the SFS, Chevron shall submit the draft SFS to Ecology for review and approval. The SFS is required to address all relevant issues, but at a minimum shall address the following:

i. A complete array of technologies will be evaluated including an evaluation of aggressive cleanup measures, that treat, remove, contain or break up the dissolved hydrocarbons and mobile and stationary LNAPL plumes.

ii. Cleanup options should use permanent solutions to the maximum extent practicable, provide a reasonable restoration timeframe, and consider public concerns [WAC 173-340-360(2)].

iii. Relevant parameters or Site specific considerations that impact the selection of remediation alternatives must be evaluated and supported by data.

iv. If Monitored Natural Attenuation (MNA) is proposed as a component of the cleanup action, its use must be evaluated in accordance with Ecology guidance or other relevant and current guidance.

v. Reasonable restoration timeframes, that will be evaluated in accordance with MTCA.



vi. Contingency plans necessary for remediation alternatives evaluated in the SFS will be presented.

C. If Chevron and Ecology agree that other investigative work is necessary to inform the remedy decision and/or further characterize the Site - including but not limited to performing additional LNAPL assessment and investigation of potential sources - this work shall be included in work plans to be prepared by Chevron and submitted for review and approval by Ecology.

D. Following approval of the SFS by Ecology, Chevron will prepare a Draft Cleanup Action Plan (Draft CAP) for Ecology review and approval. After receiving Ecology's comments, Chevron will prepare a Draft Final CAP for Ecology's use in public involvement process (i.e. public review and comment).

E. The Schedule for implementing this Order is outlined in Exhibit C. The implementation schedule becomes effective on the effective date of this Order. In addition, Chevron shall provide a more detailed schedule for specific elements of the work to be performed and a minimum of 7 days notice to Ecology for any sample collection or field activity at the Site per Section VIII.F.

F. Chevron shall prepare and submit quarterly reports summarizing progress on meeting the requirements of this Agreed Order, including timelines on past and upcoming deliverables. Quarterly reports shall be submitted to Ecology by the 15th day of the month following the quarter being reported on.

G. If Ecology determines an interim action is warranted under Section VI.E., Chevron shall prepare and submit to Ecology an Interim Action Work Plan, including a scope of work and schedule, by the date determined by Ecology. Ecology will provide public notice and opportunity to comment on the Interim Action Work Plan in accordance with WAC 173-340-600(16). Chevron shall not conduct the interim action until Ecology approves the Interim Action Work Plan. Upon approval by Ecology, the Interim Action Work Plan becomes an integral and enforceable part of this Order, and Chevron is required to conduct the interim action in accordance with the approved Interim Action Work Plan.

H. If, at any time after the first exchange of comments on drafts, Ecology determines that insufficient progress is being made in the preparation of any of the deliverables required by this section, Ecology may complete and issue the final deliverable.

I. All work plan(s), report(s), and associated schedules approved by Ecology under this Order become an integral and enforceable part of this Order (per Section IV.D).

## **VIII. TERMS AND CONDITIONS OF ORDER**

### **A. Remedial Action Costs**

Chevron shall pay to Ecology costs incurred by Ecology pursuant to this Order and consistent with WAC 173-340-550(2). These costs shall include work performed by Ecology or its contractors for, or on, the Site under Chapter 70.105D RCW, including remedial actions and Order preparation, negotiation, oversight, and administration. These costs shall include work performed both prior to and subsequent to the issuance of this Order. Ecology's costs shall include costs of direct activities and support costs of direct activities as defined in WAC 173-340-550(2). Ecology has accumulated \$10,191.49 in remedial action costs related to this facility as of March 31, 2014. For all costs incurred subsequent to March 31, 2014, Chevron shall pay the required amount within thirty (30) 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 statement of work performed will be provided upon request. Itemized statements shall be prepared quarterly. Pursuant to WAC 173-340-550(4), failure to pay Ecology's costs within ninety (90) days of receipt of the itemized statement of costs will result in interest charges at the rate of twelve percent (12%) per annum, compounded monthly.

In addition to other available relief, pursuant to RCW 19.16.500, Ecology may utilize a collection agency and/or, pursuant to RCW 70.105D.055, file a lien against real property subject to the remedial actions to recover unreimbursed remedial action costs.

**B. Implementation of Remedial Action**

If Ecology determines that Chevron has failed without good cause to implement the remedial action, in whole or in part, Ecology may, after notice to Chevron, perform any or all portions of the remedial action that remain incomplete. If Ecology performs all or portions of the remedial action because of Chevron's failure to comply with its obligations under this Order, Chevron shall reimburse Ecology for the costs of doing such work in accordance with Section VIII.A (Remedial Action Costs), provided that Chevron is not obligated under this Section to reimburse Ecology for costs incurred for work inconsistent with or beyond the scope of this Order.

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

**C. Designated Project Coordinators**

The project coordinator for Ecology is:

Laura Klasner  
State of Washington, Department of Ecology  
Toxics Cleanup Program – Central Regional Office  
15 West Yakima Avenue  
Yakima, WA 98902  
(509)454-7833  
laura.klasner@ecy.wa.gov

The project coordinator for Chevron is:

Eric Hetrick  
Project Manager  
Chevron Environmental Management Company  
Marketing Business Unit  
6101 Bollinger Canyon Road  
San Ramon, CA 94583  
(925)790-6491  
ehetrick@chevron.com

Each project coordinator shall be responsible for overseeing the implementation of this Order. Ecology's project coordinator will be Ecology's designated representative for the Site. To the maximum extent possible, communications between Ecology and Chevron, 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. The project coordinators may designate, in writing, working level staff contacts for all or portions of the implementation of the work to be performed required by this Order.

Any party may change its respective project coordinator. Written notification shall be given to the other party at least ten (10) calendar days prior to the change.

**D. Performance**

All geologic and hydrogeologic work performed pursuant to this Order shall be under the supervision and direction of a geologist or hydrogeologist licensed in the State of Washington or under the direct supervision of an engineer registered in the State of Washington, except as otherwise provided for by Chapters 18.220 and 18.43 RCW.

All engineering work performed pursuant to this Order shall be under the direct supervision of a professional engineer registered in the State of Washington, except as otherwise provided for by RCW 18.43.130.

All construction work performed pursuant to this Order shall be under the direct supervision of a professional engineer or a qualified technician under the direct supervision of a professional engineer. The professional engineer must be registered in the State of Washington, except as otherwise provided for by RCW 18.43.130.

Any documents submitted containing geologic, hydrologic or engineering work shall be under the seal of an appropriately licensed professional as required by Chapters 18.220 RCW and 18.43 RCW.

Chevron shall notify Ecology in writing of the identity of any engineer(s) and geologist(s), contractor(s) and subcontractor(s), and others to be used in carrying out the terms of this Order, in advance of their involvement at the Site.

**E. Access**

Ecology or any Ecology authorized representative shall have access to enter and freely move about all property at the Site that Chevron either owns, controls, or has access rights to 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 Chevron'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 Chevron. Chevron shall make all reasonable efforts to secure access rights for those properties within the Site not owned or controlled by Chevron where remedial activities or investigations will be performed pursuant to this Order. Ecology or any Ecology authorized representative shall give reasonable notice before entering any Site property owned or controlled by Chevron unless an emergency prevents such notice. All persons who access the Site pursuant to this Section shall comply with any applicable Health and Safety Plan(s). Ecology employees and their representatives shall not be required to sign any liability release or waiver as a condition of Site property access.

**F. Sampling, Data Submittal, and Availability**

With respect to the implementation of this Order, Chevron shall make the results of all sampling, laboratory reports, and/or test results generated by it or on its behalf available to Ecology. Pursuant to WAC 173-340-840(5), all sampling data shall be submitted to Ecology in both printed and electronic formats in accordance with Section VI (Work to be Performed), Ecology's Toxics Cleanup Program Policy 840 (Data Submittal Requirements), and/or any subsequent procedures specified by Ecology for data submittal.

If requested by Ecology, Chevron shall allow Ecology and/or its authorized representative to take split or duplicate samples of any samples collected by Chevron pursuant to implementation of this Order. Chevron shall notify Ecology seven (7) days in advance of any sample collection or work activity at the Site. Ecology shall, upon request, allow Chevron and/or its authorized representative to take split or duplicate samples of any samples collected by Ecology pursuant to the implementation of this Order, provided that doing so does not interfere with Ecology's sampling. Without limitation on Ecology's rights under Section VIII.E (Access), Ecology shall notify Chevron prior to any sample collection activity unless an emergency prevents such notice.

In accordance with WAC 173-340-830(2)(a), all hazardous substance analyses shall be conducted by a laboratory accredited under Chapter 173-50 WAC for the specific analyses to be conducted, unless otherwise approved by Ecology.

**G. Public Participation**

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 this 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 this Order is inadequate or improper in any respect.

A Public Participation Plan is required for this Site. Ecology shall review any existing Public Participation Plan to determine its continued appropriateness and whether it requires amendment, or if no plan exists, Ecology shall develop a Public Participation Plan alone or in conjunction with Chevron.

Ecology shall maintain the responsibility for public participation at the Site. However, Chevron shall cooperate with Ecology, and shall:

1. If agreed to by Ecology, develop appropriate mailing lists, prepare drafts of public notices and fact sheets at important stages of the remedial action, such as the submission of work plans, remedial investigation/feasibility study reports, cleanup action plans, and engineering design reports. As appropriate, Ecology will edit, finalize, and distribute such fact sheets and prepare and distribute public notices of Ecology's presentations and meetings.

2. Notify Ecology's project coordinator prior to the preparation of all press releases and fact sheets, and before major meetings with the interested public and local governments. Likewise, Ecology shall notify Chevron prior to the issuance of all press releases and fact sheets, and before major meetings with the interested public and local governments. For all press releases, fact sheets, meetings, and other outreach efforts by Chevron that do not receive prior Ecology approval, Chevron shall clearly indicate to its audience that the press release, fact sheet, meeting, or other outreach effort was not sponsored or endorsed by Ecology.

3. When requested by Ecology, participate in public presentations on the progress of the remedial action at the Site. Participation may be through attendance at public meetings to assist in answering questions or as a presenter. Chevron shall have the right to participate in public meetings even if not requested to do so by Ecology.

4. When requested by Ecology, arrange and/or continue information repositories to be located at the following locations:

- a. Chelan Public Library  
417 S Bradley Street  
Chelan, WA 98816
- b. Ecology's Central Regional Office  
15 West Yakima Avenue, Suite 200  
Yakima, Washington 98902

At a minimum, copies of all public notices, fact sheets, and documents relating to public comment periods shall be promptly placed in these repositories. A copy of all documents related to this site shall be maintained in the repository at Ecology's Central Regional Office in Yakima, Washington.

#### **H. Retention of Records**

During the pendency of this Order, and for ten (10) years from the date of completion of work performed pursuant to this Order, Chevron shall preserve all records, reports, documents, and underlying data in its possession relevant to the implementation of this Order. Upon request of Ecology, Chevron shall make all records available to Ecology and allow access for review within a reasonable time.

Nothing in this Order is intended by Chevron to waive any right it may have under applicable law to limit disclosure of documents protected by the attorney work-product privilege and/or the attorney-client privilege. If Chevron withholds any requested records based on an assertion of privilege, Chevron shall provide Ecology with a privilege log specifying the records withheld and the applicable privilege. No Site-related data collected pursuant to this Order shall be considered privileged.

**I. Resolution of Disputes**

1. In the event a dispute arises as to an approval, disapproval, proposed change, or other decision or action by Ecology's project coordinator, or an itemized billing statement under Section VIII.A (Remedial Action Costs), the Parties shall utilize the dispute resolution procedure set forth below.

a. Upon receipt of Ecology's project coordinator's written decision or the itemized billing statement, Chevron has thirty (30) days within which to notify Ecology's project coordinator in writing of its objection to the decision or itemized statement.

b. The Parties' project coordinators shall then confer in an effort to resolve the dispute. If the project coordinators cannot resolve the dispute within fourteen (14) days, Ecology's project coordinator shall issue a written decision.

c. Chevron may then request regional management review of the decision. This request shall be submitted in writing to the Central Region Toxics Cleanup Section Manager within seven (7) days of receipt of Ecology's project coordinator's written decision.

d. The Section Manager shall conduct a review of the dispute and shall endeavor to issue a written decision regarding the dispute within thirty (30) days of Chevron's request for review. The Section Manager's decision shall be Ecology's final decision on the disputed matter.

2. The Parties agree to only utilize the dispute resolution process in good faith and agree to expedite, to the extent possible, the dispute resolution process whenever it is used.

3. Implementation of these dispute resolution procedures shall not provide a basis for delay of any activities required in this Order, unless Ecology agrees in writing to a schedule extension.

**J. Extension of Schedule**

1. An extension of schedule shall be granted only when a request for an extension is submitted in a timely fashion, generally at least thirty (30) days prior to expiration of the



deadline for which the extension is requested, and good cause exists for granting the extension.

All extensions shall be requested in writing. The request shall specify:

- a. The deadline that is sought to be extended;
- b. The length of the extension sought;
- c. The reason(s) for the extension; and
- d. Any related deadline or schedule that would be affected if the extension were granted.

2. The burden shall be on Chevron to demonstrate to the satisfaction of Ecology that the request for such extension has been submitted in a timely fashion and that good cause exists for granting the extension. Good cause may include, but may not be limited to:

- a. Circumstances beyond the reasonable control and despite the due diligence of Chevron including delays caused by unrelated third parties or Ecology, such as (but not limited to) delays by Ecology in reviewing, approving, or modifying documents submitted by Chevron;
- b. Acts of God, including fire, flood, blizzard, extreme temperatures, storm, or other unavoidable casualty; or
- c. Endangerment as described in Section VIII.L (Endangerment).

However, neither increased costs of performance of the terms of this Order nor changed economic circumstances shall be considered circumstances beyond the reasonable control of Chevron.

3. Ecology shall act upon any written request for extension in a timely fashion. Ecology shall give Chevron written notification of any extensions granted pursuant to this Order. A requested extension shall not be effective until approved by Ecology. Unless the extension is a substantial change, it shall not be necessary to amend this Order pursuant to Section VIII.K (Amendment of Order) when a schedule extension is granted.

4. An extension shall only be granted for such period of time as Ecology determines is reasonable under the circumstances. Ecology may grant schedule extensions exceeding ninety (90) days only as a result of:

- a. Delays in the issuance of a necessary permit which was applied for in a timely manner;
- b. Other circumstances deemed exceptional or extraordinary by Ecology; or
- c. Endangerment as described in Section VIII.L (Endangerment).

**K. Amendment of Order**

The project coordinators may verbally agree to minor changes to the work to be performed without formally amending this Order. Minor changes will be documented in writing by Ecology within seven (7) days of verbal agreement.

Except as provided in Section VIII.M (Reservation of Rights), substantial changes to the work to be performed shall require formal amendment of this Order. This Order may only be formally amended by the written consent of both Ecology and Chevron. Chevron shall submit a written request for amendment to Ecology for approval. Ecology shall indicate its approval or disapproval in writing and in a timely manner after the written request for amendment is received. If the amendment to this Order represents a substantial change, Ecology will provide public notice and opportunity to comment. Reasons for the disapproval of a proposed amendment to this Order shall be stated in writing. If Ecology does not agree to a proposed amendment, the disagreement may be addressed through the dispute resolution procedures described in Section VIII.I (Resolution of Disputes).

**L. Endangerment**

In the event Ecology determines that any activity being performed at the Site under this Order is creating or has the potential to create a danger to human health or the environment on or surrounding the Site, Ecology may direct Chevron to cease such activities for such period of time as it deems necessary to abate the danger. Chevron shall immediately comply with such direction.

In the event Chevron determines that any activity being performed at the Site under this Order is creating or has the potential to create a danger to human health or the environment, Chevron may cease such activities. Chevron shall notify Ecology's project coordinator as soon as possible, but no later than twenty-four (24) hours after making such determination or ceasing such activities. Upon Ecology's direction Chevron shall provide Ecology with documentation of the basis for the determination or cessation of such activities. If Ecology disagrees with Chevron's cessation of activities, it may direct Chevron to resume such activities.

If Ecology concurs with or orders a work stoppage pursuant to Section VIII.L (Endangerment), Chevron's obligations with respect to the ceased activities shall be suspended until Ecology determines the danger is abated, and the time for performance of such activities, as well as the time for any other work dependent upon such activities, shall be extended in accordance with Section VIII.J (Extension of Schedule) for such period of time as Ecology determines is reasonable under the circumstances.

Nothing in this Order shall limit the authority of Ecology, its employees, agents, or contractors to take or require appropriate action in the event of an emergency.

**M. Reservation of Rights**

This 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 of Ecology's rights or authority. Ecology will not, however, bring an action against Chevron to recover remedial action costs paid to and received by Ecology under this Order. In addition, Ecology will not take additional enforcement actions against Chevron regarding remedial actions required by this Order, provided Chevron complies with this Order.

Ecology nevertheless reserves its rights under Chapter 70.105D RCW, including the right to require additional or different remedial actions at the Site should it deem such actions necessary to protect human health and the environment, and to issue orders requiring such remedial actions. Ecology also reserves all rights regarding the injury to, destruction of, or loss

of natural resources resulting from the release or threatened release of hazardous substances at the Site.

By entering into this Order, Chevron does not admit to any liability for the Site. Although Chevron is committing to conducting the work required by this Order under the terms of this Order, Chevron expressly reserves all rights available under law, including but not limited to the right to seek cost recovery or contribution against third parties, and the right to assert any defenses to liability in the event of enforcement.

**N. Transfer of Interest in Property**

No voluntary conveyance or relinquishment of title, easement, leasehold, or other interest in any portion of the Site shall be consummated by Chevron 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 Chevron's transfer of any interest in all or any portion of the Site, and during the effective period of this Order, Chevron shall provide a copy of this Order to any prospective purchaser, lessee, transferee, assignee, or other successor in said interest; and, at least thirty (30) days prior to any transfer, Chevron shall notify Ecology of said transfer. Upon transfer of any interest, Chevron shall notify all transferees of the restrictions on the activities and uses of the property under this Order and through the appropriate transfer mechanism, assure that any activities and uses inconsistent with this Order are prohibited.

**O. Compliance with Applicable Laws**

1. All actions carried out by Chevron 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 RCW 70.105D.090. At this time, no federal, state or local requirements have been identified as being applicable to the actions required by this Order.

2. Pursuant to RCW 70.105D.090(1), Chevron is exempt from the procedural requirements of Chapters 70.94, 70.95, 70.105, 77.55, 90.48, and 90.58 RCW and of any laws

requiring or authorizing local government permits or approvals. However, Chevron shall comply with the substantive requirements of such permits or approvals. At this time, no state or local permits or approvals have been identified as being applicable but procedurally exempt under this Section.

Chevron 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 either Ecology or Chevron 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 the other party of its determination. Ecology shall determine whether Ecology or Chevron shall be responsible to contact the appropriate state and/or local agencies. If Ecology so requires, Chevron 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 Chevron and on how Chevron must meet those requirements. Ecology shall inform Chevron in writing of these requirements. Once established by Ecology, the additional requirements shall be enforceable requirements of this Order. Chevron shall not begin or continue the remedial action potentially subject to the additional requirements until Ecology makes its final determination.

3. 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 that is necessary for the State to administer any federal law, the exemption shall not apply and Chevron 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.

**P. Indemnification**

Chevron agrees to indemnify and save and hold the State of Washington, its employees, and agents harmless from any and all claims or causes of action (1) for death or injuries to persons or (2) for loss or damage to property, to the extent arising from or on account of acts or omissions of Chevron, its officers, employees, agents, or contractors in entering into and implementing this Order. However, Chevron shall not indemnify the State of Washington nor save nor hold its employees and agents harmless from any claims or causes of action to the extent arising out of the negligent acts or omissions of the State of Washington, or the employees or agents of the State, in entering into or implementing this Order.

**IX. SATISFACTION OF ORDER**

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

**X. ENFORCEMENT**

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. A liable party, who refuses without sufficient cause to comply with any term of this Order will be liable for:

a. Up to three (3) times the amount of any costs incurred by the State of Washington as a result of its refusal to comply; and


b. Civil penalties of up to twenty-five thousand dollars (\$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 RCW 70.105D.060.

Effective date of this Order: June 25, 2014

**CHEVRON ENVIRONMENTAL  
MANAGEMENT COMPANY**  
for itself and as Attorney-in-Fact for  
Chevron U.S.A. Inc.



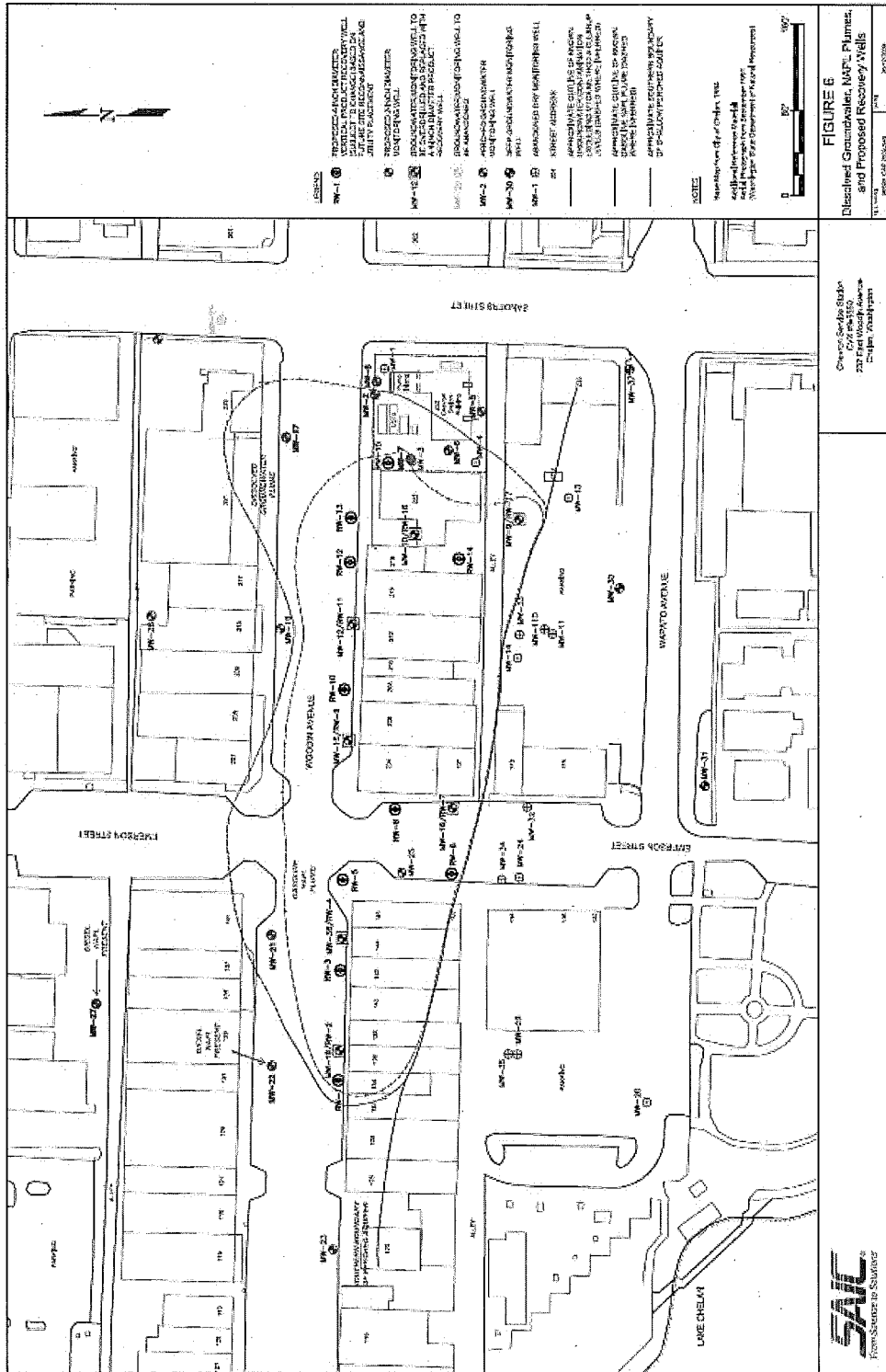
Richard G. Horn  
Environmental Compliance Officer -  
Marketing Business Unit  
Chevron Environmental Management Company  
San Ramon, California  
Telephone: (925) 790-6234

**STATE OF WASHINGTON,  
DEPARTMENT OF ECOLOGY**



Valerie Bound  
Section Manager  
Toxics Cleanup Program  
Central Regional Office  
Telephone: (509)454-7886

# EXHIBIT A. Site Diagram



Charles S. Smith  
222 West Washington  
Chicago, Illinois 60604

DATE: 10/15/2008  
PROJECT: 08-001-001-001 (Pilot Recovery)



EXHIBIT B. Ecology letter dated November 1, 2012, evaluation of the 2006 RI/FS deficiencies



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

15 W Yakima Ave, Ste 200 • Yakima, WA 98902-3452 • (509) 575-2490

November 1, 2012

Eric Hetrick  
Chevron Environmental Management Company  
6101 Bollinger Canyon Rd  
San Ramon, CA 94583  
BR1X – Room 5315

Re: Chevron Station #9-6530, 232 East Woodin Avenue, Chelan, WA  
FS/ID# 77751227, Cleanup Site ID# 6660  
Requiring Supplemental Feasibility Study and new Draft Cleanup Action Plan

Dear Mr. Hetrick:

The Department of Ecology (Ecology) appreciated the opportunity to meet with both Chevron and SAIC representatives on August 8, 2012 to discuss the above-referenced Site. The primary objective of the meeting was to ensure Chevron's understanding that Ecology could not work towards a Consent Decree with the current Draft Cleanup Action Plan (2009 DCAP). We realize time, effort, and resources have been spent since the approval of 2006 Feasibility Study (2006 FS) and remedy selection, 2007 satisfaction of the Agreed Order, and 2009 DCAP.

However, before a Cleanup Action Plan (CAP) can be approved, a Supplemental Feasibility Study (SFS) MUST be conducted to include updated site information and evaluate additional, more aggressive remediation alternatives with more reasonable restoration timeframes. Subsequent to the approval of the SFS, a new CAP will be drafted by Ecology. We understand the frustration you have expressed about this change in course. Unfortunately, the 2009 DCAP, as written, does not satisfy the requirements of the Model Toxics Control Act (MTCA) that regulate contaminant releases for the protection of human health and the environment. At your request, we are providing this letter to explain Ecology's rationale for rescinding our approval of the 2006 FS and requirement of a SFS. We've also outlined a path forward for how Chevron and Ecology could come to agreement on reaching cleanup goals.

The preferred alternative (2C) carried through to the 2009 DCAP includes monitored natural attenuation of shallow groundwater and soil with periodic hand bailing and absorbent socks. Ecology's concerns with the 2006 FS and 2009 DCAP are summarized below and should be addressed in future work.



- 1) More aggressive remediation alternatives must be included in the SFS. The preferred alternative is inappropriate for the above-referenced site because it relies on an approach that is too passive and results in an unreasonably long restoration timeframe.
  - a) Additional, more aggressive cleanup technologies must be evaluated in the SFS. The free product plume is estimated to be as large as 300,000 gallons and spreads over 2 acres (covering portions of 2 city blocks in downtown Chelan and affecting 17 or more neighboring properties) based on information presented in Appendix G and Figure 4-6 of the 2006 FS. For a plume this size, hand bailing over several decades is not considered a sufficient remedial action. For guidance on commonly used petroleum treatment strategies, please see Ecology Publication # 10-09-057 *Guidance for Remediation of Petroleum Contaminated Sites* (ex. Table 11.2). See also ITRC guidance, *Evaluating LNAPL Remedial Technologies for Achieving Project Goals*, Dec 2009 (ex. Table 5-1 and 5-2). In addition to these options, the SFS must include evaluation of directional drilling, interception trench, containment placement, enhanced chemical oxidation and/or bioremediation, and reactive wall and/or funnel and gate treatment technologies or a combination of treatments (e.g. those mentioned in the 2006 FS, guidance, or found elsewhere) within the right-of-ways that bisect the free product plume (ex. alley, Emerson Street, and Woodin Avenue). The goal of such an approach is to optimize use of areas of accessibility in order to treat, remove, contain or break up the free product plume to a greater extent and more quickly. It is likely that a combination of approaches for different areas of the free product and dissolved plumes would be a more effective approach. Ecology understands that soil characteristics and residual saturation have been expressed by Chevron as hindrances to more aggressive cleanup options. However, based on the information discussed in the 2006 FS and 2009 DCAP, Ecology fails to understand both *how* these properties make any more aggressive measures infeasible or *why* a broader variety of remediation strategies or combinations were not evaluated. Discussion of these parameters and other relevant considerations should be included in the SFS, and the basis for their impact on the selection of remediation alternatives should be evaluated *and* supported by data.
  - b) Inappropriate selection of Monitored Natural Attenuation (MNA). Furthermore, reliance on MNA is not appropriate for use at sites with significant free product because petroleum is not readily degraded by microorganisms in this form and the dispersion, dilution by recharge, and sorption of free product is very slow. Provided adequate source removal occurs and protection of receptors is provided, MNA may be considered a component of a remedial action for this site (for example, as a final polishing step). However, adequate evaluation of MNA parameters and trends must be provided, beyond the limited analysis found in App J of the 2006 FS in order for this to be considered. For further information on Ecology's MNA guidelines, please refer to Ecology Publication #s 05-09-091 and 05-09-091a, *Guidance on Remediation of Petroleum-Contaminated Ground Water By Natural Attenuation and User's Manual: Natural Attenuation Analysis Tool Package for Petroleum-Contaminated Ground Water*. A more complete MNA evaluation of both soil and groundwater must be presented if MNA is selected.
  - c) Restoration Timeframe. A more reasonable (shorter) timeframe for cleanup with supporting rationale for estimation of that timeframe is required in the SFS. In the 2006 FS, a restoration timeframe of 30 years is estimated for the preferred alternative (2C).

However, this timeframe does not appear to be reasonable, the basis for its calculation has not been explained adequately, and justification for such a long timeframe has not been provided. In addition, the 2009 DCAP discussion is inconsistent about restoration timeframe estimates, stating that free product recovery would take 20 to 30 years and subsequent attenuation an additional 20 to 30 years. This totals 40-60 yrs for the restoration timeframe, not 30 years (2009 DCAP, Appendix A). As a starting point, Ecology requires Chevron to explore cleanup options that would achieve cleanup in approximately 10 years or less. The basis for restoration timeframe estimates must be explained and justification for recommendations of any timeframe over 10 years must be provided.

- 2) **The SFS should ensure protectiveness.** Greater measures for protection of receptors should be provided.
  - a) Environmental covenants soil and a soil management plan will be needed for shallow soil (0-15 feet below ground surface) remaining above the cleanup levels for protection of human health. In addition, groundwater use restrictions will be required for the area (ex. sensitive areas ordinance). Because the Site impacts multiple downtown properties and right-of-ways, the City of Chelan will need to be consulted on how to achieve cooperative, memorialized, interim and long-term protectiveness for the downtown area.
  - b) Contingency plans are required and should describe the decision criteria, approach, and potential actions needed if cleanup goals are not met within the restoration timeframe or if protection of receptors is compromised.
  - c) For the indoor air pathway, additional evaluation and periodic soil vapor monitoring is required and should include measurements of petroleum constituents and lower explosive limits (LELs). A single soil vapor sampling event was conducted June 30 to July 1, 2003 and appears to be the sole basis for recommendations on the human health exposure pathway for indoor air. These results indicate benzene as a chemical of concern with soil vapor concentrations exceeding Tier I screening levels published in Ecology guidance. Also, because there are two earthen basements AND free product (2006 FS, Table 4-5), use of the Johnson Ettinger Model, as presented in the 2006 FS Appendix F, is not appropriate (per both Ecology and EPA guidance). Please refer to Ecology publication # 09-09-047, *Draft Guidance for Evaluating Soil Vapor Intrusion in Washington State: Investigation and Remedial Action*.
  - d) Lastly, the Site is within 300 feet of the nearest surface water body, Lake Chelan. Although data indicate that the plume has not advanced beyond the silt unit to the southwest, the NAPL plume is *alarmingly close* to Lake Chelan. This, in addition to the other concerns discussed, provides heightened impetus to reach a quick and complete cleanup as well as provide robust monitoring in the interim.
- 3) Ecology appreciates that Chevron has continued to conduct monthly product bailing, quarterly groundwater monitoring and water level and free product measurements, and annual reporting. Because the previous Agreed Order has been satisfied (please refer to September 6, 2007 letter from Ecology), we also understand that this work is currently being conducted as an Independent Remedial Action.

Eric Hetrick  
Chevron Environmental Management Company  
November 1, 2012  
Page 4 of 4

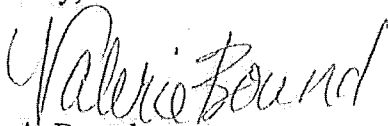
- 4) Additional site information has been collected since the 2006 FS was written and should be included in the SFS evaluations.
- 5) Data should continue to be entered into Ecology's Environmental Information Management (EIM) System database regularly. The most recent entry in EIM is from May 2011. Thank you for entering these past data sets. EIM protocols have recently been updated and there are now entry fields for reporting free product and water levels. Please refer to the following website for more information:  
[www.ecy.wa.gov/eim/helpDocs/EIMHelp\\_WaterLevelsInWellsWithLNAPL.pdf](http://www.ecy.wa.gov/eim/helpDocs/EIMHelp_WaterLevelsInWellsWithLNAPL.pdf).

For all the foregoing reasons, please consider this letter your written notification that, after additional review, **Ecology is rescinding our acceptance of the 2006 FS**. Therefore, a SFS and new CAP will be required. Ecology will be forwarding a new Agreed Order to Chevron to govern the production of the SFS. We would like to have the new Agreed Order signed and finalized by the end of this year.

You should be aware that during a recent meeting with the City of Chelan, Ecology obtained assurances that they are supportive of a variety of remediation approaches, and further meetings to outline specifics should be planned. There are a number of issues where we need their support (e.g., environmental covenants and soil management plans (discussed above) as well as plans for remedial activities), and Ecology is willing to facilitate those meetings to achieve desired outcomes.

In recognition of the additional new work required, Ecology is willing to have staff draft the CAP at no charge once the SFS is approved. We hope that this letter clarifies Ecology's position and rationale, and provides direction for a path forward. We understand that Chevron would like to schedule a follow-up meeting to discuss next steps. Please provide a couple dates that work for your group to either myself or Laura Klasner, your new project manager. In the interim, feel free to contact me directly at (509) 454-7886.

Sincerely,



Valerie Bound  
Section Manager  
Toxics Cleanup Program  
Central Regional Office

cc: Russell Shropshire, P.E., SAIC  
Phyllis Barney, Assistant Attorney General

EXHIBIT C. Schedule

SCOPE OF WORK/SCHEDULE OF DELIVERABLES

<u>Deliverable</u>	<u>Schedule</u>
<ul style="list-style-type: none"> <li>Draft Supplemental Remedial Investigation Work Plan, including a Sampling and Analysis Plan (SAP), Quality Assurance Project Plan (QAPP), and Health And Safety Plan (HASP)</li> </ul>	<ul style="list-style-type: none"> <li>60 days following the effective date of the Agreed Order</li> </ul>
<ul style="list-style-type: none"> <li>Final Supplemental Remedial Investigation Work Plan</li> </ul>	<ul style="list-style-type: none"> <li>30 days after receiving Ecology's written comments on the Draft Supplemental Remedial Investigation Work Plan</li> </ul>
<ul style="list-style-type: none"> <li>Draft Supplemental Remedial Investigation Report</li> </ul>	<ul style="list-style-type: none"> <li>One year after receipt of Ecology's approval of the Final Supplemental Remedial Investigation Work Plan</li> </ul>
<ul style="list-style-type: none"> <li>Final Supplemental Remedial Investigation Report</li> </ul>	<ul style="list-style-type: none"> <li>30 days after receipt of Ecology's written comments on the Draft Supplemental Remedial Investigation Report</li> </ul>
<ul style="list-style-type: none"> <li>Supplemental Feasibility Study (SFS) outline and planning meeting with Ecology</li> </ul>	<ul style="list-style-type: none"> <li>30 days after receipt of Ecology's approval of the Final Supplemental Remedial Investigation Report</li> </ul>
<ul style="list-style-type: none"> <li>Draft SFS Report</li> </ul>	<ul style="list-style-type: none"> <li>90 days after receipt of Ecology's input on remedial options to be included in SFS</li> </ul>
<ul style="list-style-type: none"> <li>Final SFS Report</li> </ul>	<ul style="list-style-type: none"> <li>30 days after receiving Ecology's written comments on the Draft SFS Report</li> </ul>
<ul style="list-style-type: none"> <li>Draft Cleanup Action Plan (Draft CAP)</li> </ul>	<ul style="list-style-type: none"> <li>90 days after receipt of Ecology's approval of the SFS and agreement upon a remedial action alternative</li> </ul>
<ul style="list-style-type: none"> <li>Draft Final CAP</li> </ul>	<ul style="list-style-type: none"> <li>30 days after receipt of Ecology's input on the Draft CAP</li> </ul>
<ul style="list-style-type: none"> <li>Progress Reports</li> </ul>	<ul style="list-style-type: none"> <li>Quarterly by the 15<sup>th</sup> day of the month following the quarter being reported</li> </ul>

This schedule of work to be performed and deliverables summarizes requirements of the Agreed Order. It does not include all details of each element of work or deliverables. In the event of any conflict between this summary and the full text of the Agreed Order provisions, the full text content and meaning shall prevail.