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BEFORE THE STATE OF WASHINGTON  
ENERGY FACILITY SITE EVALUATION COUNCIL

IN THE MATTER OF APPLICATION NO. 96-1 )  
 ) NO. 96-1  
OLYMPIC PIPELINE COMPANY )  
 )  
CROSS CASCADE PIPELINE PROJECT. )  
\_\_\_\_\_)

PRE-FILED TESTIMONY OF  
DAMIEN C. HOOPER

ISSUE:

ADEQUACY OF DEIS, PROJECT MITIGATION AND  
IMPACTS TO GRANT COUNTY

SPONSOR:  
GRANT COUNTY

**What is your name and business address?**

Damien C. Hooper, 35 C. St. NW Ephrata, Washington 98823

**How are you employed?**

As a planner for Grant County in the Department of Community Development.

**In what capacity are you employed by Grant County?**

I am a planner in the Long Range Planning Division of the Department of Community Development.

**How would you choose to describe your present duties with Grant County?**

My primary duty is to work on the Comprehensive Land Use Plan for Grant County. When time permits I work with the Current Planning Department on projects which require additional staff.

**Are you authorized to make statements and commitments on behalf of Grant County?**

Yes.

**Is your relevant background, education and work experience summarized in your attached resume which is Exhibit DCH-1 p.1-3 to your testimony?**

Yes.

1  
2 **What are the subject matters of your testimony?**

3  
4 Purpose and need, constructability of the pipeline, geology, botanical resources and wetlands,  
5 wildlife, water resources, fish and fish habitat, air quality, noise, traffic and transportation,  
6 cultural and historic resources, land and shoreline use, agriculture, recreation, visual quality and  
7 aesthetics, socio-economics, leak and spill detection, access of emergency response crews,  
8 accident response time and capability, and capacity to address fire, explosion, and emergencies

9  
10 **Would you please summarize your work experience, education, and background which qualifies**  
11 **you to provide testimony on these subject?**

12  
13 I have a Bachelors Degree in planning acquired at Western Washington University's Huxley  
14 College. I worked for Skagit County in their Critical Areas Division of the Planning and Permit  
15 Center. Currently I work for Grant County in the Long Range Planning Division of the  
16 Department of Community Development.

17  
18 **Would you briefly summarize your testimony?**

19  
20 See EXHIBIT PJC-T (Peter J. Comenzo's Testimony)

21  
22 **What have you reviewed in relation to preparing you testimony?**

23  
24 The Draft Environmental Impact Statement as prepared by Jones & Stokes for the Olympic Pipe

Line Company's ("OPC") proposed Cross Cascade Pipe Line Project. I also reviewed a summary document prepared by Shapiro & Associates and selected DEIS comment letters.

**Have you discussed or coordinated your testimony with other Grant County employees or officials?**

Yes.

**What employees or officials?**

Mr. Tim Snead, Mr. LeRoy Allison, and Mrs. Deborah Moore (The Grant County Board of County Commissioners), Mr. Peter J. Comenzo (Senior Planner), Mr. Stephen J. Hallstrom (Deputy Prosecuting Attorney).

**Have you discussed or coordinated your testimony with other parties to this proceeding?**

Yes.

**What parties?**

Mr. Dennis D. Reynolds, Attorney at Law with Williams, Kastner & Gibbs.

**Do you have an opinion regarding the adequacy of the information contained in the project application?**

Yes.

1  
2 **What is your opinion?**

3  
4 The project application inadequately addresses the potential impacts of the project.

5  
6 **What is the basis for your opinion?**

7  
8 I do not now, nor have I ever claimed to be a pipeline expert. After a cursory review of the  
9 application, however, I concluded that there was an incredible amount of information in the  
10 application but it contained very little analysis. A fair portion of that information is very  
11 technical, and does not fully state the implications of the project.

12  
13 **Does the Draft Environmental Impact Statement cure these deficiencies in your opinion?**

14  
15 No.

16  
17 **Why not?**

18  
19 I feel the application and DEIS omit many of the impacts because they are considered minor, or  
20 negligible. No criteria was developed as to what a minor impact is versus what a major impact  
21 is. This type of classifying leaves too much open for interpretation.

22  
23 **Does Grant County have a preferred or recommended route?**

Yes.

1  
2 **Would you briefly summarize potential impacts of peculiar or local concern to Grant County?**

3  
4 The areas of most concern with Grant County are the Saddle Mountains Fault, the Columbia  
5 River Crossing, and the Hanford Reach. The Saddle Mountains Fault appears to be very active,  
6 with the pipeline running next to and crossing this active fault. The method in which the  
7 Columbia River is going to be crossed is of concern to the County because of potential  
8 catastrophic degradation. The Hanford Reach is of concern to the County due to the extremely  
9 sensitive natural state of that portion of the river. An Interim Action Plan has been developed  
10 through the efforts of a tri-county consortium to help manage the use of the land and river. The  
11 very real threat of a pipeline spill could jeopardize the work that has gone into that project. As  
12 far as I know this project was never even taken into consideration in regards to this pipeline.

13  
14 **Do you have an opinion whether the mitigation proposed to date by the applicant is sufficient to**  
15 **ameliorate these concerns?**

16  
17 Yes.

18  
19 **What is your opinion?**

20  
21 Most of the proposed mitigation is predicated on the preparation of additional studies and action  
22 plans. This makes any meaningful review of these mitigations highly dependent on these studies  
23 and action plans. Since the applicant to date has not produced any of the additional studies and  
24 action plans, it is impossible to make any type of decision as to the sufficiency of these  
25

mitigations.

1  
2 **What is the basis for your opinion?**

3  
4 It is my opinion that the following additional studies need to be addressed to be able to make an  
5 informed decision as to the sufficiency of the proposed mitigations.

6 A. Purpose and Need.

7  
8 Information should be provided to determine if there are any other pipelines in existence, or  
9 planned that could provide a supply of petroleum from the south (Oregon) or east (Idaho). Are  
10 there any other pipelines beyond the Chevron and Yellowstone Pipeline?

11  
12 There should be more information of the viability of the existing pipelines, including any plans  
13 for expansion, retrofit, or addition of pumps to the existing pipelines. Information should be  
14 provided to determine if the Yellowstone and Chevron pipelines can be extended or retrofitted to  
15 provide increases in capacity. Have the use of polymers and other techniques for increasing flow  
16 been introduced in these other pipelines?

17  
18 Information on the distribution pattern of the petroleum products in Eastern Washington should  
19 be provided.

20  
21 More information should be provided to clarify the capacity of pipelines from the east, rather  
22 than just how much product is shipped. The DEIS indicates the Yellowstone pipeline has a  
23 capacity of 56,000 bpd, but only 26,000 bpd are being shipped, the difference is 50% of the  
24 capacity of proposed OPL. If the Yellowstone pipeline has been closed around the Flathead  
25

1 Reservation for some reason. What is the cost of reopening or constructing a new 50 mile pipe  
2 around that reservation. The DEIS indicates increased production in Salt Lake City, but offers no  
3 explanation for why that product can't be brought to eastern Washington.

4 **Constructability of the Pipeline**

5  
6 The documents acknowledge the possibility that loss of drilling fluids associated with a  
7 directional drill to cross the Columbia River could occur. Therefore, the timing of the drilling  
8 should be such that it coincides with "fish windows" or other times when construction impact on  
9 the river ecosystem is less critical. The applicant might consider trenching to identify the  
10 extension of the Saddle Mountain Fault (AFSCA, pg 2.15-11) at some time prior to construction,  
11 in order to allow for a complete, unpressured examination of contingencies.

12  
13 Additional exploration/design at the Columbia River crossing should be completed.

14  
15 **What is the probability that seismic-induced ground motion would affect the pipeline? What**  
16 **return period is recommended for design?**

17  
18 Analysis of soil/pipe interaction under seismic loading should be completed.

19  
20 Trenching to identify possible extension of the Saddle Mountain Fault should be investigated.

21  
22 Additional mitigation of the Saddle Mountain Fault Rupture (DEIS p. 3-37) potential might  
23 include increasing the quantity of bedding surrounding the pipe and/or bedding the pipe in  
24 aggregates or other materials that would tend to reduce the influence of ground motion on the  
25

pipeline.

Investigation and design of remediations and mitigation's for portions of alignment affected by mass wasting is needed.

More complete scour investigation/discussion of Grant County stream and river crossings is needed.

An additional mitigation might consider installation of monitoring wells into the sediments at major river crossings (AFSCA, pg 3.3-76). These could be used to monitor the water quality of the associated aquifer and might allow early leak detection. If installed as an inclinometer, they could also validate scour assumptions.

Corrosion issues are not addressed in the geology section of the DEIS. Corrosion is a threat to pipelines due to potential electrochemical attack of the steel pipe by aggressive soil/water, either individually or in combination. The potential for stray current affecting the pipeline also exists where it crosses other utilities. Design of corrosion protection for pipeline based on site-specific soils investigations is needed.

**Mitigation for impacts related to:**

**Geology, Seismicity**

Additional description is needed concerning what environmental circumstances would have activated the large Columbia River Crossing Landslides (DEIS pg 3-12). What is the likely

1 cause of these slides and what is the probability of similar circumstances occurring and causing  
2 landslide movement in the future?

3 The scour discussion is primarily oriented towards the streams on the west slope of the Cascades.  
4 However, significant scour/erosion potential is associated with the Columbia River due to the  
5 size of the river. The Columbia Crossing geotechnical report documents significant erosion near  
6 that site in 1996 floods, which did not approach the design discharge for Wanapum Dam. A  
7 thorough investigation of scour potential at these major river crossings is mandatory as indicated  
8 in the AFSC. It might consider the potential for increased flows and possible dam removal  
9 associated with efforts to save the salmon.

## 10 **Botanical Resources and Wetlands**

11 The only apparent error identified in the descriptions was the characterization of wetland  
12 191401A as a Category II wetland despite the acknowledged presence of peat, which is generally  
13 considered sufficient to designate a wetland as Category I. Interestingly, this is also the wetland  
14 with the single greatest impact of 1.54 acres.  
15

16 The AFSC and DEIS acknowledge both temporary and long-term impacts to wetlands. AFSC  
17 Table 3.4-3 then indicates the area of permanent wetland impacts to be zero. Information should  
18 be provided in the discussion of impacts in the AFSC to substantiate the statement: "impacts to  
19 wetlands that are particularly susceptible or sensitive to disturbance of hydrology will be  
20 moderate. Impacts to wetland buffers and more resilient wetlands will be low."  
21

22 The greatest potential impacts to wetlands from a project such as this one are destruction of  
23  
24  
25

1 vegetation during construction and alteration of hydrologic conditions either during or following  
2 construction. These impacts are summarized in the DEIS and a few examples are given, but no  
3 systematic evaluation is provided. These impacts also are alluded to in the discussion of impacts  
4 in the AFSC, but little supporting evidence is provided.

5 Stock statements are presented in the technical report, which is not included as part of the DEIS  
6 or AFSC, and is only available by special request. These statements describe potential impacts to  
7 hydrologic conditions and possible mitigation measures, but there needs to be more explanation.  
8 Statements such as "This wetland is not at risk of being drained through the pipeline trench nor  
9 through the soils" gives no explanation for the conclusion.

10 Another regularly used stock statement: "This wetland is not at risk of being drained through the  
11 pipeline trench, but may be at risk of being drained through the subsoils. Inspection and  
12 assessment will occur during the trenching process, and an impervious layer will be recreated if it  
13 is necessary to prevent the draining of the wetland." These somewhat cavalier statements, which  
14 are then summarized into a single table for all the wetlands in the corridor, offer little comfort  
15 that issues of wetland impact have been adequately assessed.

16 Information on types of mitigation was presented in the DEIS, including revegetation of  
17 disturbed areas, enhancement of some wetlands that would receive construction impacts, and  
18 enhancement of some other off site wetlands. Information should provided as to which  
19 wetlands would be enhanced or where they were located, to make it possible to determine  
20 whether the mitigation is adequate or appropriate.

21  
22  
23  
24 Many of the wetlands that would be disturbed by the construction have previously been disturbed  
25

1 by human activity. According to the Technical Report, some of the wetlands in the corridor are  
2 also associated with fish-bearing streams. More detail regarding the location of the suggested  
3 mitigation is necessary.

4 It would seem appropriate for the mitigation to target areas of significant past impacts where  
5 positive improvements can be accomplished. Revegetation of an area of wet pasture would be  
6 appropriate, but would not do a great deal for wetland functions. It would be more valuable to  
7 plant woody vegetation along a riparian corridor to improve water quality and fish habitat. If  
8 such mitigation areas were protected in perpetuity through a conservation easement, they would  
9 provide a positive contribution to fish and wildlife habitat and water quality.

## 10 **Wildlife**

11  
12  
13 Even though blasting will coincide with general timing restrictions for construction, this activity  
14 will potentially impact local wildlife. Additional research on local wildlife impacts should be  
15 conducted and a description of mitigation offered. Migration, feeding, and territorial  
16 maintenance could be affected.

17  
18 Regarding marbled murrelet nest sites, the statement (DEIS p. 3-83, P-4): "The entire corridor  
19 has not been surveyed so, potentially, unknown nest sites may be present", is vague. Additional  
20 research surveys should be done, or an estimate of the likelihood that nests are present in  
21 unsurveyed areas should be made.

22  
23 The status of several of the species needs to be updated (DEIS pp. 3-87 and 3-88, Table 3.5-2).

24 The updated statuses should include the following: lynx is a USFWS Candidate Species,  
25

1 wolverine is a state Candidate Species, common loon is a state Candidate Species, Pacific fisher  
2 is a state Endangered Species, Larch Mountain salamander is a USFWS Species of Concern and  
3 a state Sensitive Species, Van Dyke's salamander is a USFWS Species of Concern and a state  
4 Candidate Species, and Vaux's swift is a state Candidate Species. Also, acronyms for state  
5 Endangered Species, state Sensitive Species, and USFWS Candidate Species need to be added to  
6 the key.

7 The status of several of the species needs to be updated (DEIS pp. 3-89 and 3-90, Table 3.5-3).  
8 The updated statuses should include the following: spotted frog is a state Candidate Species,  
9 ferruginous hawk is a USFWS Species of Concern, burrowing owl is a USFWS Species of  
10 Concern, loggerhead shrike is a USFWS Species of Concern, Washington ground squirrel is a  
11 USFWS Species of Concern, and harlequin duck is a USFWS Species of Concern.

12 Northern goshawk should be added to the list of raptors with special status (DEIS p. 3-93, P-1).

13 The statement: "Mitigation for impacts on Washington ground squirrels should be identified in  
14 cooperation with the WDFW (DEIS p. 3-106, Point 6), should be expanded to include examples  
15 of what mitigation measures would be necessary.  
16  
17

## 18 **Water Resources**

19  
20 As additional mitigation, potential leaks of hydraulic fluid used in pumps should be closely  
21 monitored. Pumps should not be left unattended overnight without protective measures should a  
22 leak of hydraulic fluids or fuel occur.  
23  
24  
25

1 It should be noted that if potable water is used for testing larger sections of the pipeline (DEIS p.  
2 3-130), it should not be released directly to adjacent streams due to its chlorine content. Water  
3 should not be released to the Snake River by only filtering it unless this infers dechlorination and  
4 treatment to remove any other residual contaminants resulting from the testing process.

5 Grab samples of test waters would be analyzed for total suspended solids, pH, and oil and grease.  
6 While it is practical to analyze TSS and pH on site, oil and grease is typically analyzed in a  
7 laboratory. Is it really practical to assume construction crews would wait around for a one or two  
8 day (at best) turn around from a local laboratory before releasing test waters to lands adjacent to  
9 streams or directly to the stream?

10 Potential impacts related to changes in the distribution and hydraulic gradient of shallow  
11 granddaughter could be significant. As additional mitigation, measures should be proposed to  
12 manage granddaughter to avoid adverse effects on granddaughter flow paths that influence  
13 adjacent streams and wetland systems.  
14

15 Mitigation monitoring also should include assessment of restored instream habitat conditions.  
16

## 17 **Fish and Fish Habitat**

18 Mitigation for damages to fish and aquatic resources caused by petroleum pollution, and  
19 pollution or habitat modifications from petroleum spill clean up activities should to be described.  
20 Examples of potential impacts and mitigation should be offered at a minimum.  
21  
22

23 If sediment and retention ponds are used, the surfaces should be shaded to minimize solar heating  
24  
25

of water that could return to the streams. Replanting riparian vegetation should maximize the use of shade trees.

As additional mitigation for stream crossing construction, resident fish (DEIS p. C-35, Stream Crossings, point 10) should also be removed from upstream reaches before fluming. Removal should be by seining or appropriate protocols for electro-shocking to avoid fish mortalities.

In the DEIS Table D-2: The area of Potential Impact is calculated based on the distance across a full stream channel times the 30-foot-wide trench cut. This may seriously underestimate the impact because it does not take into account the full riparian zone, which may extend for at least 100 feet on either side of the Ordinary High Water Mark.

## **Air Quality**

There needs to be an explanation of pipeline and terminal operations, especially with regard to product changes in the pipeline. Product changes will affect volatile organic compound (VOC) generation.

The modeled results for the impacts of construction dust emissions nearly equal the standard of 150 ug/m<sup>3</sup>. When added to background and other sources, such as diesel engines, the levels may exceed the standard within 20 to 30 meters of the trenching operations. The model assumptions of 50% PM-10 is conservative; however, since the predicted high dust concentrations (but not exceedances) occur with light wind speeds, actual fugitive dust levels could be higher. Since settling rates for PM-10-sized particles are lower than for total suspended particulate (TSP), impacts may range farther downwind than predicted. Adequate dust control is essential,

especially given the generally dry and windy conditions on the east side of the Cascades.

1  
2 **Noise**

3  
4 Mitigation measures should be listed (DEIS p. 3-192) to minimize even the negligible impacts.

5  
6 Regarding the statement: "The noise impacts due to construction would be negligible" (DEIS p.  
7 3-190), this is inaccurate. Although the construction activities are temporary, there can, and will  
8 be, noise impacts that can adversely affect the surrounding communities (e.g. heavy trucks-90  
9 dBA). The short-term mitigation measures should be described.

10  
11 None of the reviewed material addresses the potential for transmission of noise from fluid  
12 hammer or mechanical vibration through the pipeline and into the surrounding environment.  
13 Given that this pipeline is to be almost entirely buried underground in populated areas, we  
14 believe there is little likelihood of noise impacts from this source. This is a substantial issue with  
15 the public, however. This issue could be easily laid to rest in the DEIS with a discussion of the  
16 predicted maximum noise levels from fluid hammer, mechanical vibration, and other sources,  
17 with a corresponding explanation of the noise attenuation gained by burying the pipeline.

18  
19 **Traffic and Transportation**

20  
21 What is the probability of construction workers car pooling? Proof should be provided from  
22 surveys with potential construction companies, that a significant number of employees car pool  
23 especially since many of the prospective employees will be from out of state (DEIS p. 3-196).  
24  
25

1 The discussion of the impacts on the 120 roadways that the proposed pipeline crosses or lies  
2 adjacent to, have not been adequately discussed. A discussion of the impacts by mile or segment  
3 (e.g., the figures that show the various roadway segments) should be reviewed to determine the  
4 real magnitude of the impacts.

5 The practical capacity per lane used in AFSC Table 5.2-1 is too high. These levels are for  
6 optimal conditions. Practical conditions should be used. The source of this table should be  
7 stated.

8 The peak hour factor referred to on AFSC p. 5.2-7 is actually known as the k-factor. Peak hour  
9 factor has an entirely different definition. Also, total roadway capacity must take into  
10 consideration the directional split of traffic volumes, also known as the D factor. Roadway  
11 capacity is not determined by multiplying the optimal lane capacity by the number of lanes.  
12

13 Staging areas need to be identified (AFSC p. 5.2-8). These locations are the places most likely to  
14 result in traffic operation impacts, even though they may be short term. The truck trips estimate  
15 is low.  
16

17 Additional data should be provided regarding the park-and-ride lots (AFSC p. 5.2-9) to answer  
18 the following: Who operates them? Are they at capacity? If construction workers do not park  
19 at park-and-ride lots, where will they park? Will all workers drive to the construction yards?  
20 Where are these located?  
21

22 There is no discussion on traffic safety, although pipeline construction traffic will use a variety of  
23 roadways from Interstates such as I-90 to local county roads. There are safety problem locations,  
24  
25

high accident locations, etc. These need to be researched and addressed.

1  
2 As stated in the DEIS, some roads will need to be closed as the pipeline route is dug across the  
3 right-of-way. These locations may be covered with steel sheets in the evening. As additional  
4 mitigation, all such construction locations require signing, flaggers, and flashing lights at night  
5 for safety.

6  
7 Where will the pipe staging areas be located (AFSC p. 5.2-21)? Show these areas on a map or  
8 list them.

9  
10 Access roads may have capacity, but research needs to be done to characterize what the current  
11 physical conditions of these roads are.

## 12 **Cultural and Historic Resources**

13  
14  
15 There is a statement "The significance of 12 prehistoric sites, 19 historic, and 2 dual component  
16 sites; and 6 prehistoric and 4 historic isolates could not be determined from survey-level data"  
17 (AFSC p. 5.1-128). While the text states that all but three of these sites would be avoided during  
18 project construction, additional study of at least these three sites needs to be conducted to  
19 determine their eligibility, potential project effects, and appropriate mitigation measures.

20  
21 Note that only general recommendations for mitigation measures have been included (AFSC p.  
22 5.1-130). There are no site-specific mitigation measures listed. These will presumably be  
23 developed at a later point in time when additional survey research has been completed,  
24 consultation with Tribes, agencies, and jurisdictions is complete, and NRHP (National Register  
25

1 of Historic Places) eligibility and project effects have more precisely been determined and  
2 disclosed as required under NEPA and Section 106 of the National Historic Preservation Act of  
3 1966.

4 On DEIS p. 3-206, P-1 and P-2 and AFSC p.5.1-130, it is noted that additional survey work is  
5 required on about 2% of the pipeline route. As a result, additional impacts may be identified and  
6 "site-specific mitigation measures for unsurveyed areas cannot be recommended at this time"  
7 (AFSC p. 5.1-130). Thus, Phase I work is not completed and presumably must be completed  
8 before the Final EIS and a ROD (Record of Decision) is issued.

9  
10 Review and approval under Section 106 by the SHPO and the Advisory Council on Historic  
11 Preservation will also be required if there are adverse effects, which is likely. An MOA  
12 (Memorandum of Agreement) between the lead agency (USFS), SHPO, the Advisory Council,  
13 and potentially other affected agencies, Tribes, and jurisdictions may also be required (if not  
14 considered adequately covered in the PA).

15  
16 In general, the EIS and EFSEC application seems to be deferring key work and identification of  
17 the effects and mitigation for cultural resources further into the NEPA and Section 106 process  
18 than is often the case. This may be of great concern to some affected entities including the 10  
19 Indian Tribes with lands or treaty rights along the proposed alignment with whom OPL or the  
20 USFS has had only preliminary consultation (see additional notes below).

21  
22 Considering the magnitude of the resources in the corridor, the impacts should range from  
23 negligible to significant depending on the location. The discussion of the impacts from the  
24 proposed pipeline has not been adequately discussed. A discussion of the impacts by mile or  
25

segment (e.g. the figures that show the various roadway segments) should be reviewed to determine the real magnitude of the impacts.

### **Land and Shoreline Use**

The documents do not provide enough detail to evaluate the impacts of the project (for example, the five mobile home parks along the corridor have not been analyzed to determine the impacts and level of risk do to fuel spill, fire/explosion, or other accidents).

It is noted (DEIS pp. 3-224, P-5 and 3-235) that there would be adverse construction and operational impacts on Army training activities at the Yakima Training Center (YTC). It is stated that training activities as a whole would be compromised by placing additional artificial restrictions in the northern expansion area. Although it would not jeopardize national security, it would conflict with the intent of acquiring the northern expansion area, and it is not feasible to use other areas on the YTC or acquire land outside the YTC for similar training activities. There is no discussion of applicable plans or regulations of the YTC, or the U.S. Army, and how the pipeline itself and the alignment may be consistent or inconsistent with applicable plans and policies. Are there inconsistencies that exist between applicable military plans and policies? If so, they need to be disclosed. Also, if there is a compelling need to use the YTC for the pipeline route because there are no prudent and feasible alternatives, that should be stated. Mitigation measures for these adverse substantial impacts to YTC training operations have not been clearly specified.

The DEIS states (pp. 3-225-227) that the operational effects on existing land use would be minor. However, this section goes on to say that some land would be cleared and converted to

1 utility ROW, future land uses on and adjacent to the pump stations may be restricted due to noise  
2 and truck activities, agricultural use of the site would be eliminated by the terminal. There are  
3 many qualitative statements like these in this section, these need to be analyzed quantitatively  
4 (e.g. the number of acres effected, the types of land uses, etc.). What about the potential effects  
5 of spills on land use?

## 6 **Agriculture**

7  
8 Range land is also not thoroughly discussed (DEIS p. 3-241, P-3) as a crop that is grown for  
9 consumption of cattle, sheep, etc. In addition, the guarantee of a 3 hour livestock disruption  
10 regarding access to water and feed is impossible to guarantee especially in inclement weather  
11 periods and excluding livestock for two season after planting.

12  
13 Although the pipeline is underground, the cumulative impacts and the induced effects of a  
14 continuous cross state pipeline (DEIS p. 3-236) would indicate that the pipeline would have more  
15 than a minor effect. These need to be reexamined and incrementally by mile evaluated.

16  
17 About 330 acres of prime farmland could be affected by construction (AFSC p. 5.1-135). Thus,  
18 these 330 acres may also be subjected to a long-term increase in risk from pipeline accidents such  
19 as spills and explosions and resulting temporary or long-term loss of farmland from such  
20 accidents. The risk to these farmlands should be disclosed and evaluated.

21  
22 Also, it should be noted that the No Action Alternative (continued barging of fuel on the  
23 Columbia River) would have less impact on agricultural lands. Federal agencies are required to  
24 compare these impacts of different alternatives.  
25

1 **Recreation**

2  
3 It is noted (DEIS p. 3-257) that recreational impacts from a spill would be major if a river or  
4 established recreation area is impacted ... Clean up could close facilities until repairs are  
5 completed. Aesthetic effects of a spill may remain after biological effects have recovered. Thus,  
6 there is potential for significant and long-term damage to all of the above recreational facilities  
7 and adverse impacts to recreational users, from spills, explosions, and other accidents. This risk  
8 to recreational facilities and users, if not already adequately covered in other sections of the  
9 DEIS, needs to be quantified and more closely evaluated in Section 3. 14 and project mitigation  
10 included in Appendix C, as appropriate.

11 **Visual Quality and Aesthetics**

12  
13 DEIS p. 3-273: Light and Glare. What about lighting during construction (e.g. up to 10 P.M.)?  
14 Would the have an adverse effect on wildlife?  
15

16 **Socio-economics**

17  
18 The DEIS states (p. 3-216, P-3) that there are five mobile home park along the pipeline corridor  
19 ... Two of the mobile home parks are within 30.5 meters of the centerline. No mitigation  
20 measures for socioeconomic impacts are proposed in the EIS because the primary effects are  
21 considered to be generally beneficial.  
22

23  
24 The mobile home park proximity issue also was noted under Land and Shoreline Use. The  
25

1 number of people that reside in these mobile home parks, as well as their minority and income  
2 status, should be disclosed. What are the risks to these people of either a fuel spill or  
3 fire/explosion since they are located so close to the pipeline? Federal law (Executive Order  
4 12898- Environmental Justice) states there should not be a disproportionately high adverse  
5 impact to minority or low income populations. If either low income or minority populations  
6 (including Native Americans) were exposed to a significantly higher risk of a pipeline spill or  
7 explosion than other populations along the pipeline route, this could be considered a  
8 disproportionately high adverse impact under E.O. 12898. Are there other portions of the  
9 pipeline route where there would be a risk of disproportionately high adverse effects to minority  
10 and low income populations? The minority and income status of those living or working in close  
11 proximity to the pipeline has not been disclosed with enough specificity to determine if there are  
12 concerns under Environmental Justice guidelines.

13 The proponent should explain why NW petroleum products are considered more desirable to the  
14 residents in Eastern Washington than those from the Yellowstone or the Chevron pipelines. Can  
15 this be quantified? What is the chemical make up of the OPL petroleum product that make it so  
16 desirable? If a difference exists, can this unique component be added to the other two pipelines  
17 products and the products to change to be similar to the OPL product? Is this cost effective?

18  
19 The proponent should explain why is 70% of the construction workers coming from out of state  
20 (DEIS p. 3-287, P-3)? If this is the case, only 273 jobs for local residents would be generated  
21 from the pipeline and requiring a temporary housing and service impact. In addition, car pooling  
22 and bussing to minimize the parking and transportation impacts will become more acute and the  
23 use of the campgrounds by these workers may adversely effect the availability of sites for  
24 summer peak user. These impacts should be discussed.

1 The proponent should explain what is the estimated loss from the negative economic effect due  
2 to a decrease in tourism and recreation (DEIS p. 3-294, P-2).

3  
4 The negative impact on the tanker trucking and barge companies and support services (e.g. gas  
5 stations, restaurants) along the route should be discussed (DEIS p. 3-295, P-5). How will the  
6 reduction in barge traffic effect the availability of barges to transport wheat and other agricultural  
7 products cost effectively? Describe the impact on the employment generated directly and  
8 indirectly from the elimination of both the barge and truck transport of the petroleum products.

9  
10 **Public Health and Utilities**

11  
12 If there was a significant incident would there be enough water, medical assistance, and  
13 hazardous waste specialists to prevent a significant loss to the construction companies/crew and  
14 the residents and their property (e.g. lack of water) in the community?

15  
16 **Environmental Health related to:**

17  
18 **Leak and Spill Detection**

19  
20  
21 A detailed task analysis is likely to indicate that additional trained fire personnel are required to  
22 mitigate an ensuing fire.

23  
24 The volume of product which may be released under pressure or as free flow may be significantly  
25

1 higher than predicted in the DEIS, especially if complete automatic block valve closure does not  
2 occur, or if a leak or rupture occurs at a location not covered by the EIS examples given on DEIS  
3 p. A-7.

4 Pipeline capacity is described in barrels containing 42 gallons each (DEIS p. 2-2). At ultimate  
5 peak capacity, a non-monitored (by detector system) leak of 1% produces a volume of 46,200  
6 gallons of released product per day. At an initial operating volume of 2,520,000 gallons of flow  
7 per day (p. 2-2), a 1% loss produces 1,050 gallons of released product per hour, or 17.5 gallons  
8 released per minute. These volumes can be significant and result in large scale incidents, which  
9 can challenge local resources. Mitigation should be described.

10 While the DEIS states that Block valves are placed at low points near environmentally sensitive  
11 areas where potential spill volumes can be reduced, no mention is made of emergency response  
12 difficulties to large spills in non-environmentally sensitive areas. The volume of product  
13 contained in 1 mile of 12-inch pipe is 121,800 gallons (42 gallons per barrel) and 168,000  
14 gallons in the 14-inch pipe planned for west of the Kittitas Terminal. Further study of the 29  
15 proposed block valve locations for the 231-mile pipeline appears needed to ensure potential  
16 spills/incidents are limited in size.

17 Further description of how spills occurring during pipeline testing is needed.  
18  
19

## 20 **Access of Emergency Response Crews**

21 The DEIS states (p. 2-19) that "No new access roads would be constructed or maintained ...  
22  
23 Access roads closed in winter would be via snowmobile. Use of an unsurfaced roadway directly  
24  
25

on the right-of-way may create safety and access problems for responding emergency vehicles".  
Additional research of roadways suitable for emergency vehicles appears necessary.

A significant number of pipeline incidents occur during construction of nearby pipelines, or other nearby work projects, as a result of existing pipelines being ruptured. The DEIS and AFSC need to address this aspect in more detail. The same very minimal DEIS coverage applies to access problems, response times, specialized vehicle, equipment, and extinguishing agent needs, crew size needs, length of time required per incident, training needs, and planning needs.

The local fire departments will need to build into their resource base and operating guidelines those items, training, and protocols advisable for loading rack areas (DEIS p. 3-180), tanker transportation, and tank farms. The cost of these mitigating steps needs to be calculated, and the degree of risk involved in the anticipated level of tanker-truck movement researched.

Handling a flammable/combustible liquid pipeline emergency is a major undertaking for any emergency organization, particularly the first responding fire department. The following are some of the considerations which will need to be addressed when developing viable emergency response plans and mitigation strategies:

#### Planning

- Pipeline route maps through the community.

- Possible incident locations.

- The type and magnitude of the incident.

  - product type

  - postulated release rate

-postulated release quantity

Potential high risk incident locations along the route.

Response routes to incident locations.

Obstructions which could occur at an incident.

Alternate routes and the need for equipment to respond from other directions.

Resource manual for notification information on pipeline shutdown and outside agency assistance.

Evaluation of products to be transported in the pipeline.

Evacuation plan for affected areas.

EMS plan for mass casualties.

#### Water Supply

Availability of pressure, including static pressure.

Amount of water available.

Tanker operations or relays necessary.

#### Incident Approach

Weather conditions.

Wind direction.

Accessibility to site.

Ground slope.

Physical state of product - gas or liquid.

Hazard of product - flammable, poisonous, corrosive.

#### Apparatus Positioning

Water availability.

Hazard exposure.

Vapor cloud.

Potential ignition sources if flammable and not yet ignited.

Personnel Rescue

Residential.

Institutional.

Commercial.

Industrial.

Vehicles: Cars, buses, trains, trucks.

Personnel Evacuation

Affected Area

Immediacy of Evacuation

Mean of Evacuation Notification

Evacuation Routes

Mode of Evacuation

Responsible Agency

Exposure Protection

High-life hazard facilities.

Target hazards.

Other exposures.

Considerations for protection: distance, height of building, type of construction,

electrical supply problems, drainage, sewer system.

1  
2 **Logistical and Resource Requirements**

3 Special extinguishing agents for exposure fires

4 -type

5 -quantity available,

6 -distance from incident location.

7 Heavy equipment

8 -type

9 -quantity available,

10 -distance from incident location.

11  
12 **Accident Response Time and Capability**

13  
14 An inventory of the local emergency response plans should be made. This would show where the  
15 County is deficient in its ability to handle a disaster. This inventory should include local police,  
16 fire, and emergency medical agency plans.

17  
18 **Capacity to Address Fire, Explosion, and Emergencies**

19  
20 The County needs to have a training agenda and implementation plan established. Along with  
21 this plan, local fire district/ departments need to have a complete inventory of the equipment they  
22 have that would be useful in the event of a pipeline fire. Then a list needs to be compiled  
23 showing what these local fire districts/ departments need to handle a pipeline fire.

**Mr. Hooper, are you clear as to the exact pipeline route through Grant County?**

1  
2 No, OPL has not clearly enunciated a route for the pipeline.

3  
4 **As to the possible route options within Grant County, do some options have more expected**  
5 **impacts than others?**

6  
7 Yes.

8  
9 **Please explain your answer.**

10  
11 I think the pipeline should cross the Columbia River above ground, is a better option than drilling  
12 below the Columbia River bottom. Drilling under the River introduces even more unnecessary  
13 risks to the environment than crossing above ground. When a problem does arise with the  
14 pipeline an above ground pipeline would be much easier to fix than one that is buried below the  
15 River. Unfortunately, all of the proposed options still have the potential geologically hazardous  
16 problems with running along the Saddle Mountains.

17  
18  
19 **Please identify Grant County's recommended route.**

20  
21 Grant County would like to see the pipeline routed in the most direct route possible. We feel this  
22 route is through Yakima and Benton Counties. With regards to the proposed routes, Grant  
23 County feels the Beverly-Burke railroad crossing is the most likely option.

**What is the County's justification for the preferred route?**

This would avoid the possible adverse impacts of crossing the Columbia River above the Hanford Reach. Also the issue of routing the pipeline near the Saddle Mountains (seismically active area) could be avoided all together. Grant County feels the Yakima/ Benton County option would be a more direct route to Pasco.

**Do you endorse the testimony of other parties to the proceedings?**

Yes.

**What parties?**

Kittitas County, Adams County.

**What testimony?**

The complete testimony of David Taylor (Director of Kittitas County Planning), Neil White (Associate Planner for Kittitas County), Dee Caputo (Director of Adams County Planning), Kevin A. Lindsey, and Rodney D. Smith and Mark G. Pedersen.

**Does this complete you testimony?**

No. I reserve the right to supplement my testimony after I have had the opportunity to review an adequate DEIS containing necessary information of which to base an informed analysis of

environmental impacts.

END OF DIRECT TESTIMONY OF WITNESS

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DECLARATION OF SERVICE

1 The undersigned certifies under penalty  
2 of perjury that on the below date, I  
3 mailed or caused delivery of a true copy  
4 of this document as authorized by WAC  
5 463-30-120(2)(a) to: the Energy Facility  
6 Site Evaluation Council and Counsel for  
7 All Parties at the regular office or  
8 residence thereof.

9 Dated this \_\_\_\_\_ day of \_\_\_\_\_ 1999 at  
10 Seattle, Washington.

11 \_\_\_\_\_  
12 Paula Polet

EXHIBIT DCH-1

**Damien C. Hooper  
117 E Street NW  
Ephrata, WA 98823**

**Objective:**

To obtain a position which will utilize and expand upon the skills I have developed in my college classes and allow me to contribute to the successful accomplishment of the goals and objectives of my employer.

**Education:**

Cascade High School, Everett, Washington Graduated with Honors: 1992.

Edmonds Community College Graduated: Associate of  
Arts/Sciences Degree, 1994.

Western Washington University (Huxley College Bachelors Degree in  
Urban Planning  
Geography Department) completed March 1998  
Graduated with Honors

**Experience:**

July, 1998 to present

Grant County Department of Community Development: Long Range  
Planning Division  
Ephrata, Washington

My duties include preparing the Comprehensive Land Use Plan, and working with the Current Planning Department on large projects, the Cross Cascade Pipeline Project for example, that required additional staff.

December, 1997 to April, 1998

Skagit County Planning and Permit Department  
Mt. Vernon, Washington

My duties included verifying and assessing applications for building permits as they affect critical areas. The work includes verification of property locations on GIS maps or site visits, completing critical area ordinance checklists.

August, 1995 to December, 1997

Old Town Cycles  
Bellingham, Washington

I served as the service shop manager for two years. I have made many good connections in the bicycle industry, and have an excellent reputation with the business and people I have met.

September 1994 to August, 1995

Recreational Equipment, Inc. (REI)  
Lynnwood, Washington

REI Bicycle Technician: Trained by Master Technician Denise Mannino, a graduate of the Barnet Bicycle Mechanic Program. Using the Barnet's Manual, I learned complete bicycle frame and fork milling and machining, Barnet's technique for overhauling a bicycle, and wheel building (including lateral, radial truing, dishing, spoke tensioning, etc.).

As a Bicycle Technician at REI, I am also trained as a ski technician during the winter season. I was trained in ski tuning on the Fontaine Ski tuner which is a belt grinder and stone grinder combination. For ski mounting, I was sent to the Ski Mechanics Workshop (Snoqualmie Pass) for training on mounting Marker, Soloman, Geze, Look, and Tyrolia bindings. In the shop I was trained in cross-country ski mounting and tuning as well as snowboard mounting and tuning.

April, 1994 to September, 1994

Recreational Equipment, Inc. (REI)  
Lynnwood, Washington

REI Bicycle Assembler. REI's process of assembly includes complete disassembly and reassembly of bicycles to meet REI's strict quality control and quality assurance.

September, 1992 to April, 1994

Mailboxes, Etc.  
Everett, Washington

Duties include boxing and packaging of items to be shipped for customers and businesses. Handling of large amounts of money in Western Union transactions. Shipping services included UPS, Federal Express, and US Mail. Sorting mail for 400 private mailbox owners. Completely responsible for independently opening and closing the shop and verifying cash register receipts and balances.

**References:**

1. Alison Mohns: Skagit County Planning and Permit Center, (360) 336-9410.
2. Dan Cox: Skagit County Planning and Permit Center, (360) 336-9410.
3. Debnath Mookherjee: Advisor Western Washington University, (360) 650-3284.
4. Andy Bach: Geography Professor Western Washington University, (360) 650-3284.
5. Tom Terich: Geography Professor Western Washington University, (360) 650-3284.
6. David Neevel: Personal Reference, (360) 676-1103

**List of Huxley College of Geography classes taken:**

Envr 202 Environmental Studies: A Social Approach  
Envr 301 Environmental Systems  
Envr 302 Environmental Disturbances  
Envr 303 Human Ecology  
Envr 304 Environmental Resource Policy  
Envr 305 Environmental History and Ethics  
Envr 464 U.S. Environmental Policy  
Envr 465 International Environmental Policy  
Envr 436 Environmental Impact Assessment  
Geog 201 Human Geography  
Geog 203 Physical Geography  
Geog 270 Introduction to Planning  
Geog 305 Analysis of Spatial Data (Statistics)  
Geog 314 Urban Geography  
Geog 330 Landform Geography (Geomorphology)  
Geog 351 Map reading and Analysis  
Geog 370 The Planning Process  
Geog 414 Urban Environment  
Geog 470 Planning Studio  
Econ 383 Environmental Economics  
PISc 353 Political Science: State and Local Politics