Exhibit No. T-____ (DMP-1T) Docket No. UW-060343 Witness: Derek M. Pell

BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND TRANSPORTATION COMISSION,

Complainant,

v.

ILIAD WATER SERVICE, INC.,

Respondent.

DOCKET NO. UW-060343

RESPONSE TESTIMONY OF

DEREK M. PELL Assistant Manager, NW Office of Drinking Water Washington State Department of Health

ON BEHALF OF STAFF OF WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

October 4, 2006

1		I. INTRODUCTION
2		
3	Q.	Please State Your Name And Business Address.
4	A.	Derek Pell. 20435 72 nd Ave S, Suite 200. Kent, WA 98032.
5		
6	Q.	By whom are you employed and in what capacity?
7	A.	I am employed by the Washington State Department of Health (DOH, or
8		Department), Office of Drinking Water in the NW Regional Office. I am now the
9		Assistant Regional Manager (2002-present) and was the Regional Engineer assigned
10		to Pierce County water systems in December 2000.
11		
12	Q.	How long have you been employed with this Agency?
13	A.	January 2007 will be 15 years.
14		
15	Q.	Please describe your current job duties.
16	A.	As the Assistant Regional Manager, I supervise a staff of 7 engineers and 2 planners
17		and assist the Regional Manager on program implementation in Pierce, King,
18		Snohomish, Skagit, Whatcom, Island, and San Juan Counties. I mentor new staff,
19		assist senior staff on time-consuming compliance, water quality, and governance
20		issues, and work on policy and program development as it applies to regional
21		implementation of the drinking water program.
22		
23		

24 Q. What are your educational and professional qualifications?

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A. I am a licensed professional engineer in the State of Washington (#34440). I earned
 a Bachelor of Science and Engineering degree from the University of Toronto,
 Canada. [Exhibit No. ___ (DMP-2)].

4

5

Q. Are you familiar with Iliad Water Service, Inc.?

A. Yes. Iliad Water Service, Inc. (or "Iliad Water") owns public water systems in
Pierce, Snohomish, and Kitsap Counties. According to my research of the Secretary
of State and records in the Office of Drinking Water, Derek Dorland is the President
of Iliad Water. Dave Dorland, Sr. has been the Department of Health's primary
contact person for the Alder Lake water system. Derek Dorland and Dave Dorland,
Sr. are considered "purveyors" of water for the Alder Lake water system. The term
"purveyor" is defined in the Drinking Water Regulations, WAC 246-290-010.

Dave Dorland, Sr. is also the manager or owner of about a dozen other public water utilities in the state. The NW Regional Office of Drinking Water and I have worked with Dave Dorland, Sr. on several significant water system issues since 2000, specifically: customer complaints of low pressure, poor water quality, and poor response to complaints on the Kayak Estates water system, similar complaints at the Sunwood water system, and the Y Bar S water system.

I worked primarily with Dave Dorland, Sr. regarding issues with the Alder
 Lake water system and communicated with him on numerous occasions. I am
 familiar with the Alder Lake water system and the water chlorination treatment plant
 project proposed by the company.

Ingrid Salmon is my colleague and the NW Regional Office Compliance
 Manager. Based on her communications with Dave Dorland, Sr., I am generally
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1		familiar with Iliad Water Service's efforts to seek WUTC approval to fund
2		construction of this treatment facility.
3		
4	Q.	Have you reviewed the tariff filing in Docket No. UW-060343, and testimony
5		and exhibits filed by Derek Dorland before the Washington Utilities and
6		Transportation Commission (WUTC) in Docket No. UW-060343 on September
7		20, 2006?
8	A.	Yes, I have.
9		
10	Q.	What is the purpose of your testimony in this case?
11	A.	The Department of Health, Office of Drinking Water's mission is to protect the
12		health of the people of Washington State by assuring safe and reliable drinking
13		water. The purpose of my testimony in this case is to provide background
14		information on Iliad Water Service, Inc.'s Alder Lake water system, the potential
15		health risks to customers, and describe the Department of Health's efforts to have
16		Iliad Water Service, Inc. as owner of the water system, install disinfection treatment.
17		
18	Q.	Do you sponsor any exhibits in this proceeding?
19	A.	Yes, I am submitting the following documents:
20		Exhibit No (DMP-2), Derek Pell resume.
21		Exhibit No (DMP-3), DOH Letter to David Dorland dated 01/19/2001, attached
22		invoice and survey notes.
23		Exhibit No (DMP-4), DOH Letter to David Dorland dated 12/19/2000.
24		Exhibit No (DMP-5), David Dorland Letter to DOH dated 01/12/2001.
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1	Exhibit No (DMP-6), David Dorland Letter to DOH dated 03/12/2001.
2	Exhibit No (DMP-7), DOH Letter to David Dorland dated 01/18/2001.
3	Exhibit No (DMP-8), DOH Letter to David Dorland dated 07/9/2001.
4	Exhibit No (DMP-9), DOH Letter to David Dorland dated 11/5/2001.
5	Exhibit No. (DMP-10), McDonnell Letter to DOH dated 05/23/2001.
6	Exhibit No (DMP-11), DOH Letter to Derek Dorland dated 06/27/2001.
7	Exhibit No (DMP-12), McDonnell Letter to DOH dated 12/14/2001.
8	Exhibit No (DMP-13), DOH Letter to Derek Dorland dated 01/31/2002.
9	Exhibit No (DMP-14), DOH Strategic Directions, Compliance Matrix, GWI
10	Program Compliance Strategy 7/6/06.
11	Exhibit No (DMP-15), David Dorland Letter to DOH dated 12/12/2001.
12	Exhibit No (DMP-16), DOH Phone Memo of Conversation 08/22/2003.
13	Exhibit No (DMP-17), DOH Letter to David Dorland dated 9/5/03 with
14	attached Bilateral Compliance Agreement.
15	Exhibit No (DMP-18), David Dorland Letter to DOH dated 9/11/03.
16	Exhibit No (DMP-19), DOH Phone Memo of Conversation 09/29/2003.
17	Exhibit No (DMP-20), DOH Phone Memo of Conversation 10/20/2003.
18	Exhibit No (DMP-21), DOH Letter to David Dorland dated 03/19/ 2004.
19	Exhibit No (DMP-22), DOH Phone Memo of Conversation 04/29/2004.
20	Exhibit No (DMP-23), David Dorland Letter to DOH dated 05/14/2004.
21	Exhibit No (DMP-24), DOH Letter to David Dorland dated 05/21/2004.
22	Exhibit No (DMP-25), David Dorland Letter to DOH dated 07/9/2004.
23	Exhibit No (DMP-26), David Dorland Letter to DOH dated 09/27/2004.
24	Exhibit No. (DMP-27), DOH Letter to David Dorland dated 01/19/2005.

1		Exhibit No. (DMP-28), David Dorland Letter to DOH dated 05/19/2005.
2		Exhibit No (DMP-29), DOH Letter to David Dorland 04/3/2006.
3		Exhibit No (DMP-30), DOH Letter dated 09/22/2006 to Iliad Water Service,
4		Inc. and Order.
5		Exhibit No (DMP-31), DOH Coliform Summary dated 10/2/2006.
6		Exhibit No. (DMP-32), TPCHD Letter to Iliad dated 01/11/2005 (2006).
7		
8		II. DISINFECTION TREATMENT PROJECT
9		
10	Q.	For how long has the Department of Health monitored Iliad Water's Alder
11		Lake water system?
12	А.	The system has been monitored since 1986. The Department of Health approved the
13		engineering design for the Alder Lake water system on January 9, 1986.
14		
15	Q.	Can you please describe the first time DOH became aware of the need for the
16		Alder Lake project at issue in this docket?
17	А.	On December 12, 2000, the Tacoma-Pierce County Health Department reported that
18		they had received calls from customers at the Alder Lake water system saying that
19		they were "out of water." Apparently, historic low water level in Tacoma City
20		Light's Alder Lake Reservoir caused the water level in the two wells serving the
21		Alder Lake water system to drop below the well pump intakes. This was termed a
22		"water outage." I first contacted Dave Dorland, Sr. on December 14th, to discuss
23		options to restore water service to customers as soon as possible. Mr. Dorland
24		indicated that he had arranged for delivery of trucked water to fill the Alder Lake
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1		water system storage tank and that he wanted to drill deeper in one of the existing
2		wells.
3		
4	Q.	Did you personally visit the Alder Lake water system and document your
5		findings?
6	A.	Yes. On January 10, 2001, I visited the Alder Lake water system to gain a
7		perspective on the declining water level in Alder Lake and to conduct a routine
8		sanitary survey. My observations, findings, and recommendations were documented
9		in a letter dated January 19, 2001. [Exhibit No (DMP-3)].
10		
11	Q.	What does DOH identify as the health risks associated with the "water outage"
12		on the Alder Lake water system in December, 2000?
13	A.	There are two potential health risks associated with this water outage. First, when a
14		water system suffers a significant loss of pressure (water outage) there is an
15		immediate concern that back suction can draw bacteriological contamination into the
16		water distribution system through leaks in the pipe. Bacteriological contaminants
17		such as fecal coliform and E. coli can make people sick. This potential risk can be
18		mitigated by restoring water system pressure, drawing chlorinated water through the
19		distribution system to kill any bacteria that may have entered the system, and
20		collecting samples to confirm the absence of coliform bacteria.
21		The second potential health risk is associated with the hydraulic relationship
22		between the lake and the wells (the source of drinking water). Disease causing
23		organisms such as Giardia and Cryptosporidium can live in surface water (in this
24		case, Alder Lake). If the well water were to be under direct influence of surface
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water, these disease causing organisms could get into the wells, be distributed to customers, and make them sick. This potential risk would require further evaluation before determining the appropriate course of action, that is, the addition of simple disinfection or more complex surface water filtration treatment.

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Q. What further evaluation would be required?

A. Since the wells went dry when the lake level dropped, the wells were determined to
be potentially groundwater under the direct influence of surface water ("potential
GWI") and determined to be in "hydraulic connection" to the lake (surface water).
It is important to note that the Drinking Water Regulations, WAC 246-290250(4), stipulate that the minimum level of treatment required for wells is

13 Department has considered water systems with good bacteriological water quality

continuous disinfection unless modified by the Department. Historically, the

histories as not needing disinfection treatment. The determination of "hydraulic
 connection" changed the Department of Health's perspective on the requirement for
 disinfection for the Alder Lake water system.

WAC 246-290-640 defines the actions a water purveyor must take when
 notified that a source of drinking water is classified as potential GWI and in
 hydraulic connection to surface water. Actions include providing disinfection and
 collecting samples for further investigation to determine whether filtration is also
 required.

22

23 Q. What key DOH determinations would be yielded from further investigation?

1	A.	Further investigation of the Alder Lake wells would determine whether the
2		"hydraulically connected" wells were also "groundwater under the direct influence
3		of surface water" (GWI). To determine whether the wells are GWI, samples are
4		collected to look for the presence of surface water indicators. This is done through a
5		microscopic particulate analysis (MPA). If MPA results show a significant number
6		of surface water indicators, then the Department confirms the well to be GWI and
7		filtration treatment is required.
8		
9	Q.	Did DOH notify Iliad Water of the potential health risks and instruct Iliad
10		Water to take specific actions regarding the Alder Lake water system in
11		December, 2000?
12	A.	Yes, in a letter dated December 19, 2000. [Exhibit No (DMP-4)].
13		
13 14	Q.	Please describe the notification and the instructions issued on December 19,
	Q.	Please describe the notification and the instructions issued on December 19, 2000.
14	Q. A.	
14 15		2000.
14 15 16		2000. On December 19, 2000, on behalf of DOH, I wrote to Dave Dorland, Sr.
14 15 16 17		2000.On December 19, 2000, on behalf of DOH, I wrote to Dave Dorland, Sr.summarizing the water outage at the Alder Lake water system and our conversations
14 15 16 17 18		2000. On December 19, 2000, on behalf of DOH, I wrote to Dave Dorland, Sr. summarizing the water outage at the Alder Lake water system and our conversations about the Department's expectations. [Exhibit No (DMP-4)]. The expectations
14 15 16 17 18 19		2000. On December 19, 2000, on behalf of DOH, I wrote to Dave Dorland, Sr. summarizing the water outage at the Alder Lake water system and our conversations about the Department's expectations. [Exhibit No(DMP-4)]. The expectations outlined were: (1) monitor water quality and inform customers of potential health
14 15 16 17 18 19 20		2000. On December 19, 2000, on behalf of DOH, I wrote to Dave Dorland, Sr. summarizing the water outage at the Alder Lake water system and our conversations about the Department's expectations. [Exhibit No (DMP-4)]. The expectations outlined were: (1) monitor water quality and inform customers of potential health risks, (2) deepen one of the existing wells based on a provisional approval – one
14 15 16 17 18 19 20 21		2000. On December 19, 2000, on behalf of DOH, I wrote to Dave Dorland, Sr. summarizing the water outage at the Alder Lake water system and our conversations about the Department's expectations. [Exhibit No (DMP-4)]. The expectations outlined were: (1) monitor water quality and inform customers of potential health risks, (2) deepen one of the existing wells based on a provisional approval – one provision being submit a design for disinfection treatment and install treatment
 14 15 16 17 18 19 20 21 22 		2000. On December 19, 2000, on behalf of DOH, I wrote to Dave Dorland, Sr. summarizing the water outage at the Alder Lake water system and our conversations about the Department's expectations. [Exhibit No(DMP-4)]. The expectations outlined were: (1) monitor water quality and inform customers of potential health risks, (2) deepen one of the existing wells based on a provisional approval – one provision being submit a design for disinfection treatment and install treatment within 30 days of DOH approval, and (3) take action to further evaluate the

1		
2	Q.	How did Iliad Water respond to your letter dated December 19, 2000?
3	А.	On January 17, 2001, I received a letter and detailed information from Dave
4		Dorland, Sr. in response to my December 19 th letter. [Exhibit No (DMP-5)].
5		I also received a letter from Dorland, Sr. on March 12, 2001. [Exhibit No
6		(DMP-6)].
7		
8	Q.	Was this response satisfactory to the Department?
9	А.	I considered the response as initially satisfactory, but incomplete. With the
10		deepened well in service along with satisfactory bacteriological sample results from
11		the distribution system, I believed the high priority potential health risks associated
12		with back suction of contaminants had been successfully mitigated. Additional steps
13		to be completed include evaluation of the well's relationship to surface water
14		contaminants (MPA testing) and the installation of disinfection treatment. On
15		January 18, 2001, I wrote to Dave Dorland, Sr. authorizing him to place the
16		deepened well into service. [Exhibit No (DMP-7)]. My letter also reaffirmed
17		the requirement to install disinfection treatment, requested a schedule for the design
18		of the treatment facilities, acknowledged Dorland's plan to collect the first MPA
19		sample in February 2001, and reduced the coliform monitoring requirement back to
20		the normal one sample per month.
21		Dorland, Sr.'s March 12, 2001 letter delayed the MPA sample collection
22		until April 2001 and indicated that an engineering design would be submitted next
23		week. [Exhibit No (DMP-6)]
24		

1	Q.	Did Iliad Water follow through in collecting MPA samples, and, if so, what did
2		the results tell you with regard to the type of treatment that would be required?
3	A.	Yes, samples for MPA analysis were collected in the spring and summer of 2001.
4		On July 9, 2001 and November 5, 2001, I wrote to Dave Dorland, Sr. summarizing
5		my review of MPA sample results. [Exhibit No (DMP-8)] [Exhibit No
6		(DMP-9)]. The data showed that the wells were not considered directly influenced
7		by surface water (GWI); therefore, filtration treatment facilities are not required.
8		However, I reiterated the determination made in my December 19, 2000, letter that
9		because the wells went dry when the lake level dropped, they were "hydraulically
10		connected" to surface water and disinfection was required. [Exhibit No (DMP-
11		4)]. I requested a schedule for completion of the design review process and
12		installation of disinfection treatment.
13		In looking back on this letter, I would say that while disinfection treatment is
14		important as an additional barrier against potential biological contamination, it is not
15		urgent. Disinfection treatment is still required and the Department of Health will
16		use our Strategic Directions, Compliance Matrix, and implementation strategies to
17		allocate resources to enforce this requirement.
18		
19	Q.	Did Iliad Water follow through in submitting an engineering design for
20		disinfection treatment?
21	A.	Yes. I received an engineering design on May 30, 2001. [Exhibit No (DMP-10)].
22		
23	Q.	Please describe the typical approval process needed by the DOH for a water
24		utility that seeks to install a disinfection treatment facility.
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1	A.	Prior to construction of a disinfection treatment facility, the water purveyor hires a
2		licensed professional engineer to prepare design documents for submittal to DOH.
3		Design documents typically include a Project Report describing why a project is
4		being proposed and how the project will meet design objectives and Construction
5		Documents that identify how the specific project will be constructed. DOH has
6		licensed professional engineers on staff who review and approve the designs. This is
7		termed an "engineering design for treatment." Following completion of project
8		construction, the water purveyor submits to DOH their engineer's certification that
9		the project was constructed in accordance with the approved design.
10		
11		
12	Q.	Did the DOH approve an engineering design for the Alder Lake disinfection
13		treatment system? If so, when?
14	A.	Yes. I reviewed McDonnell's May 30, 2001 engineering design and issued a
15		comment letter on June 27, 2001 noting specific items that needed to be addressed
16		before approval could be granted. [Exhibit No (DMP-11)]. On December 19,
17		2001, I received a response to my comment letter and approved the disinfection
18		treatment design on January 31, 2002. [Exhibit No (DMP-12) -response].
19		[Exhibit No (DMP-13) disinfection approval].
20		
21	Q.	Once the engineering design is approved, what is the normal time frame that
22		DOH expects a water purveyor to complete the project?
23	A.	Approval is good for two years unless withdrawn by DOH or an extension is
24		obtained from DOH by the purveyor. Normally, project completion time is related
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1		to the purveyor's ability to pay design and construction costs. Financially viable
2		utilities would have timely access to its capital, seek new investors, or would apply
3		for other financing such as a Drinking Water State Revolving Fund (DWSRF) loan
4		to pay for system improvements. DWSRF loan applications are evaluated yearly.
5		In my December 19, 2000, letter, I set an expectation that disinfection treatment at
6		Alder Lake should be installed within 30 days of Department approval. [Exhibit No.
7		(DMP-4)]. This was intended as a starting point to establish a realistic schedule
8		for completing the project. In letters dated January 19, 2001, and November 5,
9		2001, I requested a schedule for completing the disinfection project. [Exhibit No.
10		(DMP-3)] [Exhibit No(DMP-9)]
11	Q.	Did Iliad Water complete the project or establish a realistic schedule with DOH
12		for the completion of the project?
13	A.	No. The project has not yet been completed and DOH does not have an agreement
14		with Iliad Water for schedule to complete the project.
15		
16	Q.	Did Iliad Water seek or obtain extension of the January 31, 2002 approval from
17		DOH after January 31, 2004?
18	A.	No. Iliad Water did not seek an approval extension after January 31, 2004.
19		The two year approval limit is established so that if regulations or design
20		standards change after an approval is issued, DOH can request an updated design
21		without debate after the expiration date. Often, even after the approval expiration
22		date, DOH has re-evaluated designs and considered them still valid without need for
22 23		date, DOH has re-evaluated designs and considered them still valid without need for revision.

24

Q. Once the engineering design for a project has been approved by DOH, what 1 efforts does DOH undertake to monitor the project's completion status? 2 A. When DOH establishes an expectation for a purveyor to construct a facility to 3 mitigate a potential public health risk, our first effort is to work with the utility to 4 5 define a reasonable schedule to arrange financing and complete the project. When delays become apparent, DOH seeks a signed compliance agreement with the utility 6 that formally sets milestones for completing the improvements. If we are unable to 7 obtain agreement with the utility, we refer to our Office of Drinking Water workload 8 9 priorities (Strategic Directions, 2001), our compliance priorities (Compliance 10 Matrix, 2002), and our compliance policies to determine the next level of enforcement. [Exhibit No. ___ (DMP-14)]. 11 The DOH Compliance Matrix identifies "Failure to provide disinfection 12 when source determined to be hydraulically connected to surface water" as a 13 "Medium Health Risk Violation." The prescribed compliance process for medium 14 15 health risk violations includes: notifying the utility of the violation, offering the utility a compliance agreement to establish milestones to complete the project, 16 17 designating the utility as a "significant non-complier", issuing a red operating permit, and targeted active enforcement in the form of a Departmental order. WAC 18 246-290-010 provides a general definition of "significant non-complier". 19 20 In a document entitled, "GWI Program Compliance Strategy July 6, 2006", the Department established a specific definition for significant non-compliance for 21 failing to provide disinfection when the source is determined to be hydraulically 22 connected to surface water. It says that if step-specific timelines are not met or 23 revised, a Bilateral Compliance Agreement (BCA) is negotiated (or an existing BCA 24

1		is revised). If a BCA is not negotiated in a timely fashion or a BCA milestone is not
2		met, then the system is designated a State Significant Non-Complier (SSNC).
3		
4	Q.	Since the engineering plan was approved on January 31, 2002, please explain
5		the steps that the Department of Health has taken to seek compliance with the
6		directive.
7	A.	In a December 12, 2001 letter to DOH, Dave Dorland, Sr. indicated that the water
8		company had made a loan application for the water system improvements and that
9		WUTC would have to approve the loan prior to construction. This suggested to me
10		that the water utility was moving forward in good faith. [Exhibit No (DMP-
11		15)].
12		On August 22, 2003, DOH (Compliance Manager, Ms. Ingrid Salmon)
13		contacted Dave Dorland, Sr. by telephone to inquire as to progress on meeting the
14		disinfection treatment requirement. Her telephone notes indicate that Dorland, Sr.'s
15		company had submitted paperwork to WUTC and that WUTC had requested more
16		documentation of the costs. The notes further indicate that Dorland, Sr. had not yet
17		responded to WUTC. [Exhibit No (DMP-16)].
18		
19	Q.	Did DOH seek a signed compliance agreement with Iliad Water that would
20		formally set milestones for completing disinfection treatment system?
21	A.	Yes. On September 5, 2003, DOH (Ms. Salmon) wrote to Dave Dorland, Sr.
22		requesting his signature on a bilateral compliance agreement (BCA) for the
23		installation of disinfection treatment within 14 days. [Exhibit No (DMP-17)].
24		On September 11, 2003 Dorland, Sr. replied by letter explaining that he expected to
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1		receive financing by January 2004 and construction by April 2004. He did not sign
2		and return the BCA. [Exhibit No. (DMP-18)].
3		
4	Q.	What further contacts did DOH have with Iliad Water concerning the
5		completion of the water treatment system?
б	A.	DOH, by and through Ms. Salmon, had on-going contacts with Dave Dorland, Sr.
7		regarding progress towards completing the disinfection project, specifically:
8		September 29, 2003, October 20, 2003, March 19, 2004, April 29, 2004 – each
9		contact documented in memoranda of conversation or letter. [Exhibit No
10		(DMP-19)]. [Exhibit No (DMP-20)]. [Exhibit No (DMP-21)]. [Exhibit
11		No (DMP-22)]. On May 14, 2004, Dave Dorland, Sr. wrote to Ms. Salmon
12		indicating that WUTC approval would take 30/45 days. [Exhibit No (DMP-
13		23)].
14		In letter response to Dave Dorland, Sr., DOH (Ms. Salmon) asserted that
15		disinfection improvements were long overdue and again requested a formal
16		compliance schedule. [Exhibit No (DMP-24)]. This letter is undated, but was
17		later determined to be May 21, 2004 from an electronic copy found on Ms. Salmon's
18		computer.
19		On July 9, 2004, Dave Dorland, Sr. wrote to Ms. Salmon indicating that he
20		had met with the Alder Lake Homeowner's representative and expected to start
21		construction of the disinfection project in August with completion expected by the
22		end of September 2004. [Exhibit No (DMP-25)].
23		On September 27, 2004, Dave Dorland, Sr. wrote to Ms. Salmon saying that
24		improvements would not be completed as expected. [Exhibit No (DMP-26)].
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1		On January 19, 2005, Ms. Salmon wrote to Dave Dorland, Sr. requesting the
2		current status of the project. [Exhibit No (DMP-27)].
3		On May 19, 2005, Dave Dorland, Sr. wrote to me explaining that he was still
4		seeking financing approval from WUTC and requesting my opinion on whether the
5		costs for MPA testing would be reimbursable. I replied to Dave Dorland, Sr. by
6		telephone; in my opinion MPA costs are reasonable to include in engineering costs.
7		[Exhibit No (DMP-28)].
8		
9	Q.	What compliance actions has DOH taken against Iliad Water with regard to the
10		Alder Lake water system?
11	A.	DOH issues an operating permit annually. In a letter dated April 3, 2006, DOH
12		changed the Alder Lake water system operating permit from "green" to "blue" for
13		failure to meet the disinfection design approval requirement. [Exhibit No
14		(DMP-29)]. Utilities with blue operating permits are considered adequate for
15		existing uses but are not considered adequate for adding new service connections.
16		The term "blue" operating permit is defined in WAC 246-294-040.
17		As described previously, on July 6, 2006, DOH adopted a statewide
18		definition of "significant non-complier" for utilities failing to install disinfection on
19		sources that are hydraulically connected to surface water. This definition and Iliad's
20		reluctance to sign a BCA formally put Iliad Water, as purveyors of the Alder Lake
21		water system, in "significant non-compliance."
22		On September 22, 2006, DOH issued a Departmental order to Iliad Water
23		requiring them to install disinfection treatment by March 30, 2007. [Exhibit No.
24		(DMP-30)]. Failure to comply with the Departmental order may result in the
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1		issuance of penalties of up to \$5,000 per violation per day. The order also requires
2		Iliad Water to hire a certified operator and to notify customers that it is under a
3		Departmental order to install disinfection treatment.
4		It is my intention to pursue penalties if the purveyor does not comply with
5		the order.
6		
7	Q.	Has the DOH recently assessed Iliad's Alder Lake water system status and
8		potential health risks? When?
9	A.	Yes. DOH continuously tracks health risks by reviewing the purveyor's water
10		quality, monthly bacteriological quality, and through sanitary surveys of water
11		system facilities every 5 years.
12		
13	Q.	Please describe the DOH's assessment of the current condition of the purity and
13 14	Q.	Please describe the DOH's assessment of the current condition of the purity and water quality of this system.
	Q. A.	
14	-	water quality of this system.
14 15	-	water quality of this system. WAC 246-290-300(3) requires the purveyor of the Alder Lake water system to
14 15 16	-	water quality of this system.WAC 246-290-300(3) requires the purveyor of the Alder Lake water system to collect one colliform bacteria sample per month and submit it for analysis by a state
14 15 16 17	-	water quality of this system.WAC 246-290-300(3) requires the purveyor of the Alder Lake water system to collect one coliform bacteria sample per month and submit it for analysis by a state certified laboratory. In the 56 months since January 2002, there were 6 occasions
14 15 16 17 18	-	 water quality of this system. WAC 246-290-300(3) requires the purveyor of the Alder Lake water system to collect one coliform bacteria sample per month and submit it for analysis by a state certified laboratory. In the 56 months since January 2002, there were 6 occasions when coliform bacteria were detected in the Alder Lake water system; only one of
14 15 16 17 18 19	-	water quality of this system. WAC 246-290-300(3) requires the purveyor of the Alder Lake water system to collect one colliform bacteria sample per month and submit it for analysis by a state certified laboratory. In the 56 months since January 2002, there were 6 occasions when colliform bacteria were detected in the Alder Lake water system; only one of which constituted a water quality violation (in general, a violation occurs when two
14 15 16 17 18 19 20	-	water quality of this system. WAC 246-290-300(3) requires the purveyor of the Alder Lake water system to collect one coliform bacteria sample per month and submit it for analysis by a state certified laboratory. In the 56 months since January 2002, there were 6 occasions when coliform bacteria were detected in the Alder Lake water system; only one of which constituted a water quality violation (in general, a violation occurs when two or more samples in a month show the presence of coliform bacteria). Fecal and <i>E</i> .
14 15 16 17 18 19 20 21	-	water quality of this system. WAC 246-290-300(3) requires the purveyor of the Alder Lake water system to collect one coliform bacteria sample per month and submit it for analysis by a state certified laboratory. In the 56 months since January 2002, there were 6 occasions when coliform bacteria were detected in the Alder Lake water system; only one of which constituted a water quality violation (in general, a violation occurs when two or more samples in a month show the presence of coliform bacteria). Fecal and <i>E.</i> <i>coli</i> bacteria have not been detected in the water system. While water quality sample

1		Some background information about how the bacteriological quality is
2		determined: coliform bacteria are used as an indicator of the biological health of a
3		water system. Coliform bacteria are present in the environment, but not typically in
4		groundwater supplies. Coliform bacteria do not typically cause illness; however,
5		their presence in drinking water indicates that disease causing organisms may also
6		be present. Whenever coliform bacteria are detected in a sample, standard
7		laboratory protocol looks for fecal or E. coli bacteria.
8		
9	Q.	Please describe the DOH's current assessment of the volume and water
10		pressure of the system?
11	A.	Assessment of the volume and pressure of a water system is done at the time of
12		engineering design. This is where a licensed professional engineer defines customer
13		water demand assumptions and the size of pumps and storage facilities are
14		determined so that supply meets demand. The engineering design of the Alder Lake
15		water system was approved on January 9, 1986. The water outage of December,
16		2000 was caused by the unexpected lowering of the level of Alder Lake. With the
17		rise of Alder Lake to its normal operating level, I expect that the supply continues to
18		meet demand as originally designed. I am not aware of any change in customer
19		demand or pump performance to suggest that volume and pressure are inadequate.
20		The last sanitary survey was done on December 28, 2005, [Exhibit No
21		(DMP-32)] and reaffirmed the findings of the sanitary survey conducted on January
22		10, 2001.
23		

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1

2

Q.

What is DOH's evaluation of the urgency of the disinfection treatment project?

A. Installation of disinfection treatment at the Alder Lake water system is considered 3 important, but not urgent. With the wells in hydraulic connection to Alder Lake, 4 5 there is the potential for biological contaminants to enter the water system. While the hydraulic connection has been established, DOH is not aware of specific water 6 quality test results suggesting that a contaminant is present in the drinking water 7 8 system. DOH recognizes that customers have been consuming this water, in some 9 cases, for many years. However, the potential risk remains and installation of an 10 additional protective barrier, disinfection treatment, is warranted.

In the six years since the original instruction to Dave Dorland, Sr. to install 11 disinfection treatment, DOH attempted on multiple occasions to seek a reasonable 12 13 schedule to complete the task. Unfortunately, Iliad Water Service, Inc. was either unwilling or unable to secure financing in a timely manner to complete the project. 14 15 As an investor-owned utility, I would expect Iliad Water to make the necessary investment in the water system to address the potential public health risks to its 16 17 customers. As a utility regulated by the Washington Utilities and Transportation Commission (WUTC), I would expect Iliad Water to seek a tariff to recover the 18 19 investment from the rate payers. However, I do not find it in the best interest of the 20 Alder Lake water system customers for an investor owned utility to defer taking an action to protect public health because it is unwilling or unable to get a tariff 21 approved by WUTC. 22

23

1	Q.	In Richard Sarver's testimony on behalf of DOH, he states that a Drinking
2		Water State Revolving fund loan ''is not approved for projects unless the
3		projects are contained in a DOH approved water system plan, plan amendment,
4		or small water system management program," and he further states that "the
5		jurisdictional Office of Drinking Water regional office decides which type of
6		planning document is required for each project." Do you agree? Please explain.
7	A.	Yes, I agree. In order to receive a Drinking Water State Revolving Fund loan, Iliad
8		Water would have to complete a planning document and identify the disinfection
9		project in the capital improvement program. Regional office staff determines which
10		type of planning document is required.
11		
12	Q.	In your opinion, what type of planning document would be required for the
12 13	Q.	In your opinion, what type of planning document would be required for the Alder Lake project?
	Q. A.	
13		Alder Lake project?
13 14		Alder Lake project? Since the Alder Lake water system has an approved engineering design and, to my
13 14 15		Alder Lake project? Since the Alder Lake water system has an approved engineering design and, to my knowledge, is not planning to expand its water system service area or serve more
13 14 15 16		Alder Lake project? Since the Alder Lake water system has an approved engineering design and, to my knowledge, is not planning to expand its water system service area or serve more than its current approved number of connections, the appropriate level of planning
13 14 15 16 17		Alder Lake project? Since the Alder Lake water system has an approved engineering design and, to my knowledge, is not planning to expand its water system service area or serve more than its current approved number of connections, the appropriate level of planning detail would be a small water system management program. Since the Alder Lake
 13 14 15 16 17 18 		Alder Lake project? Since the Alder Lake water system has an approved engineering design and, to my knowledge, is not planning to expand its water system service area or serve more than its current approved number of connections, the appropriate level of planning detail would be a small water system management program. Since the Alder Lake water system is also regulated by the WUTC, commission staff may request
 13 14 15 16 17 18 19 		Alder Lake project? Since the Alder Lake water system has an approved engineering design and, to my knowledge, is not planning to expand its water system service area or serve more than its current approved number of connections, the appropriate level of planning detail would be a small water system management program. Since the Alder Lake water system is also regulated by the WUTC, commission staff may request

1	А.	No. However, often small waters systems submit an application for a State
2		Revolving Fund loan with the understanding that a planning document would be
3		required prior to approval of the loan.
4		
5		III. CONCLUSION
6		
7	Q.	Do you have any closing comments regarding DOH efforts when a utility
8		company is noncompliant with DOH regulations?
9	А.	As customers become increasingly aware of the utility's failure to make adequate
10		investment into the water system and voice opposition to rising utility rates to
11		compensate for poor management decisions by the utility owners, they begin to
12		demand change.
13		In situations similar to this, I have attempted to inform customers of options
14		available to them to affect change. I encourage customers to organize as
15		homeowners and communicate their expectations directly to the utility owners. I
16		also offer that a homeowner association may choose to negotiate with the utility
17		owner to purchase the water system, thereby gaining control of utility decision
18		making. Further options include formation of a water district and eminent domain
19		action taken to gain control of utility management.
20		When DOH perceives an immediate health risk to customers constituting an
21		emergency, DOH may petition the court to place the utility in receivership and
22		request a hearing within three days.
23		I want to make this information available as part of this public hearing record.
24		

- 1 **Q.** Does this conclude your testimony in this case?
- 2 A. Yes.