

Exhibit No. _____ (DMP-3)

Docket No. UW-060343

Witness: Derek M. Pell

**BEFORE THE WASHINGTON UTILITIES AND TRANSPORTATION
COMMISSION**

**WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,**

Complainant,

v.

ILIAD WATER SERVICE, INC.,

Respondent.

DOCKET NO. UW-060343

**EXHIBIT TO
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**

*Letter dated January 19, 2001 from DOH to David Dorland,
attached Invoice No. 18308 and Survey Notes*

October 4, 2006



STATE OF WASHINGTON

DEPARTMENT OF HEALTH

20435 72nd Ave. S., Suite 200, K17-12 • Kent, Washington 98032-2358

January 19, 2001

DAVE DORLAND
ALDER LAKE WATER SYSTEM
PO BOX 20429
SEATTLE WA 98102

Subject: Alder Lake Water System (ID#26995H) Pierce County
Water System Sanitary Survey
Follow Up to Well Failure

Dear Mr. Dorland:

This letter is written in follow up to my sanitary survey of the Alder Lake water system on January 10th. I appreciate your facilitation for my "drop by" visit of the water system while I was in the area. The purpose of my visit was to gain first hand perspective of the dramatic lowering of Alder Lake and the impact on the wells serving the Alder Lake water system. I also took the opportunity to conduct a routine sanitary survey – a requirement for all Group A public water systems every 5 years.

My inspection revealed no acute health concerns. Enclosed is a copy of my survey notes. Please consider the identified issues and work with me in their implementation. I would appreciate a progress report indicating your thoughts and intentions within the next month or so.

The Drinking Water Regulations require that all Group A public water systems have a sanitary survey every 5 years. In order to receive credit for the survey, a sanitary survey fee must be paid. Enclosed is an invoice for \$261.00. Please remit your complete payment in the form of a check or money order within thirty days of the date of this letter to: DOH, Revenue Section, P.O. Box 1099, Olympia, WA 98507-1099.

I can be reached in Seattle at 253/395-6763 if you have any questions or concerns.

Sincerely,

Derek M. Pell, PE
Regional Engineer
NW Drinking Water Operations

Enclosures

cc: Tacoma Pierce County Health Department



**Division of Drinking Water
INVOICE
Water Plan Review**

TO: DAVE DORLAND
ALDER LAKE COMMUNITY WATER SYSTEM
PO BOX 20429
SEATTLE WA 98102

INVOICE NUMBER	18308
INVOICE DATE	1/22/01
BILLING PERIOD	30 DAYS NW

DATE	DESCRIPTION	QUANTITY	COST	AMOUNT
1/22/01	SURVEY FEE ALDER LAKE COMMUNITY WATER SYSTEM PIERCE COUNTY PWS ID 26995H DATE OF SURVEY: 01/10/2001	1	\$261.00	\$261.00
Payment due within 30 days. Interest shall accrue at 1% per month after 30 days.				

Make Checks Payable to Department of Health

Return Lower Tear-off Portion to:

Department of Health
P.O. Box 1099
Olympia, WA 98507-1099

Division of Drinking Water
Water Plan Review

NAME	ALDER LAKE COMMUNITY WATER SYSTEM
INVOICE NO.	18308
INVOICE DATE	January 22, 2001
AMOUNT	\$261.00 NW

Revenue Section
P.O. Box 1099
Olympia, WA 98507-1099

DOH 713-006P (2/91)

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SYSTEM INSPECTION / MEETING SUMMARY

Date: 01/10/2001

ALDER LAKE WATER SYSTEM Pierce County (ID#26995H)

Persons Attending: Derek Pell - DOH ^P

Purpose: Routine Sanitary Survey. Wells failed due to Alder Lake level drop.

SYSTEM SUMMARY / FINDINGS

Last surveyed: none.

Approval status:	Existing Connects	=	22
	Eng Capacity	=	35
	Total Lots	=	35

WATER QUALITY HISTORY:

Bacteriological	:	Oct 2000, Aug 1999 unsatisfactory samples, repeats ok.
Nitrate	:	Well field- 1.9ppm
Exceed MCL?	:	Well field- Fe=0.67ppm (MCL=0.30) secondary contaminant

SOURCES:

S1- Well#1 (South Well) Q= dry due to low lake level.

Well is located ~50' from and ~10' in elev above the high water mark of Alder Lake (current lake level is ~60' below the high water mark). Well is located in a grassy area adjacent to the gravel driveway of a residence. Wellhead extends 12" above the ground surface, is fitted with a pitless adapter, screened vent, and sample tap. No meter. Well was deepened on 01/15/2001 (per well log). Well is plumbed to pump directly to distribution. Well is currently out of service.

S2- Well#2 (North Well) Q= dry due to low lake level.

Well is ~20' from well#1 and the gravel driveway described above. Wellhead extends 12" above the ground surface, is fitted with a pitless adapter and screened vent. No meter, no sample tap.

System is supplied weekly by trucked water from the Town of Eatonville (treated surface water with some unfiltered groundwater that has been determined to be under the direct influence of surface water) during this emergency situation. Customers have been provided notice of the trucked water and its quality. A free chlorine residual was measured in the field of 0.3ppm at the Stephen Huggler residence.

Alder Lake lake level elevations - Per Dave Dorland (owner)

1138' -- now (existing well depths 1132', pumps set at ~1128')

1152' -- historical low

1156' -- normal

1200' -- high water mark

TREATMENT: none.

STORAGE:

23,000 gal Tank (concrete) (tank base ~40' above highest house)
Common inlet/outlet. Access hatch locked (**unable to inspect inside tank**). Overflow screened, discharges to daylight. Screened vent (**screen lies flat within vent structure, organic debris has been wind blown into vent and rests on top of screen**). No sample tap. No bypass.

DISTRIBUTION:

"Single Pressure Zone"

Gravity. Design calcs show that 30psi can be maintained at each lot line (per DOH requirements). However, homes are constructed at higher elevation than lot lines - customers at the highest elevation may notice pressures as low as ~17psi in upstairs water taps.

MANAGEMENT & OPERATIONS:

Small Water System Plan	No
WFI Update	05/2/2000
Water Quality Monitoring Report	DOH mailed out in Jan 2001
Coliform Monitoring Plan	No
Consumer Confidence Report	Yes
Last Sanitary Survey	None
Operating Permit	Green
Overall Design Approval	35 connects
Certified Operator	No
O&M Manual	No
Flushing Program	No
Conservation Program	No -- although customers advised of water emergency and encouraged to conserve.
Individual Customer Meters	Unknown
Unaccounted for Water	Unknown
Cross Connect Program	No
Wellhead Protection Program	Susceptibility Assessment only
Emergency Response Plan	Trucking water.
Financial Viability Program	Unknown
Complaints	None on record

FINDINGS / RECOMMENDATIONS

1. I appreciate the fast action taken to address the failure of the two wells – first by trucking water, second by deepening the south well, and third by keeping your customers well informed.

My letter dated January 19, 2001 gives the go ahead to use the deepened well along with the department's expectations for installation of disinfection facilities and further monitoring to see if the source is under the "direct influence" of surface water. I look forward to working with you in continuing progress on these issues.

2. As I walked through the system, I made some notes on minor deficiencies. In general, please confirm that that the sanitary integrity of the system is intact and verify that all "openings" are properly sealed and screened and are in good repair. Some specific improvements are noted above in bold type.
3. I reviewed our records and find that nitrate results have shown some fluctuation since 1991 (from 0.2 to 2.1ppm). Nitrate contamination of a well may generally be attributed to up-gradient drain fields, pasture animals or fertilizer application. While the current nitrate level is less than the maximum contaminant level of 10ppm, it is useful to be aware of the fluctuation and be on the look out for potential increasing trends.
4. Enclosed is a copy of the Department's "Small Water System Management Program" (SWSMP) guidance. The document is a useful tool to organize water system information and serves as a good guide for what the Drinking Water Regulations expect of a small water system purveyor. Completion of the SWSMP is required, but submittal of the completed document is not required at this time.