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BEFORE THE WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND  
TRANSPORTATION COMMISSION,

Complainant,

v.

ILIAD WATER SERVICES, INC.,

Respondent.

DOCKET UW-060343

DECLARATION OF JOHN C. MCDONNELL,  
P.E.

I, John C. McDonnell, P.E., hereby declare under penalty of perjury under the laws of the State of Washington that the following statements are true and correct.

1. My name is John C. McDonnell and I am a licensed professional engineer.
2. I provided engineering drawings for Y Bar S to submit to the state under the Drinking Water State Revolving Fund (DWSRF) and signed the application in 1997.
3. The application was submitted under the company's understanding that Y Bar S would not qualify for funding as a for-profit corporation and would have to convert to a non-profit corporation. In fact, that is what happened as evidenced by my letter of November 6, 1997 to Mr. Bob James at the Washington Department of Health. Please see Item 15 in that letter.

DECLARATION OF  
JOHN C. MCDONNELL, P.E. - 1

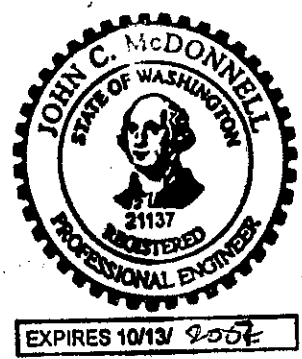
Law Office of  
Richard A. Finnigan  
2112 Black Lake Blvd. SW  
Olympia, WA 98512  
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4. It was my understanding as informed by the company that a for-profit corporation would not qualify for DWSRT funding. Therefore, Y Bar S was in the process of converting to a non-profit corporation or created a successor corporation as a non-profit corporation. The proposed name of the new entity was to be State Mutual Water Group. I do not know whether this entity was ever formed.

Dated this 20 day of December, 2006.

*John C. McDonnell*  
\_\_\_\_\_  
JOHN C. MCDONNELL, P.E.



DECLARATION OF  
JOHN C. MCDONNELL, P.E. - 2

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**J.C. McDonnell & Associates**  
**Consulting Civil Engineers**  
2812 Colby Avenue  
Everett, WA. 98201  
Tel.: (425) 258-2059

November 6, 1997

Mr. Bob James, PE  
Wash. Department of Health,  
Northwest Operations  
1511 Third Avenue #719  
Seattle, WA. 98101

RE.: Response to Comment Letter dated July 16, 1997 regarding Y-Bar-S  
Water System (ID# 988757).

Dear Mr. James,  
In response to your comments, the following information is provided in  
behalf of the Purveyor (originally Bliss Industries, Inc. now Mutual  
Water Group), The Contractor (Iliad, Inc.) and the Engineer,  
respectively:

1. The Purveyor has confirmed that the Water System now serves 100  
connections as stated in the Engineering Report;
2. The issue of treatment was discussed at length between the  
Engineer, the Contractor and the Purveyor. EPA alternatives were  
examined for ground waters with acid pH. The suggested path was  
chemical neutralization mixing caustic chemicals and/or aerating  
the water. A referral was discussed to a Sanitary Engineer for  
estimates on process costs. However, the caustic alternative was  
not selected for the following reasons: First, the primary supply  
wells are shallow (i.e. only 30 feet deep). Second, they are more  
sensitive to surface contamination than deeper wells with  
impervious layers. Nitrate contamination has been observed in some  
samples in the past with concentrations of 3 to 7 mg/l. The EPA MCL  
is 10 mg/l. The treatments proposed will have no effect on this  
potential contaminant.

Next, the cost of manning and operating the caustic treatment  
process was determined to be much higher than treating for Fe/Mn.  
And finally, both the Contractor and the Engineer on the project  
are much more familiar with cost effective treatment for Mn/Fe  
removal processes in the northwest.

Caustic neutralization is a process that is not used in private

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water systems to their knowledge. The shallow wells were known to have experienced increasing nitrate concentrations in the past, a direct health concern since the entire community relies upon septic drainfields. Since the GWI and SWI rules have been promulgated by DOH, the surveyor was concerned that additional treatment processes would be required in the future solely because of the shallow depth of the wells regardless of the water quality.

Therefore, the recommendation was made and seconded that a deeper source be drilled and that the existing standby well #3 (Highview) be returned to service. Ozonation with filtration was selected as a readily available low maintenance process that could provide the necessary water quality. The attached Pilot Plant studies performed by Sun Industries, Inc. have demonstrated in excess of 90% removal of Fe/Mn contaminants while the pH remains 7.3 after the treatment. All this was explained in detail in correspondence to you before the well was sited and drilled and again in the May Engineering report.

3. Copies of recorded well covenants were supplied in the May 5 Engineering Report as Exhibit A. While they are hard to decipher, we have added the site circles on the system map. The Company does not enclose a copy of the Protective Covenant at Well 4. The well is centrally located within the Well #1 covenant area so the Company's position is that the same well covenant applies to Well #4. An attached sketch shows the location of well #4 and measurements to the nearest field obstacles. Also, photos are attached indicating the surrounding conditions around wells #3 and #4 respectively. Clearly there are no obstacles or structures within 100 feet of the well.
4. The existing Water Rights include a 50 gpm permitted use authorized for withdrawal from the #3 "Highview well" (G1-20529) and 48 gpm for withdrawals from Wells #1, #2 and #4 (G1-20398). These Rights were explained in the Engineering Report. As explained in previous correspondence, DOE has recommended combination of these rights so that the 98 gpm can be withdrawn from any of the approved sources. The Company has requested and received a supporting letter from Mr. Ethan Moseng of the Department of Health see our correspondence dated 4/7/97. His letter was sent to DOE dated 10/7/97. Also included is a copy of this "Health Letter".
5. The pump test provided by the well driller suggests that there is ample source water exceeding the proposed 62 gpm maximum withdrawal. The drilled well was approximately 350' deep with a well casing perforation between 162' and 175'. The initial well pump test started at 11:35 AM 3/10/97 and continued for 30 hours. The well approached stabilization at a maximum depth of 88 feet at a pump rate of 62 gpm. However, the test was terminated without determining the well maximum yield or recovery because of the limited pump size. A second test was conducted on 3/10/97 for another 24 hours. The second pump rate started at 90 gpm and dropped to 75 gpm after 23 hours at a drawdown of 133 feet. The well dropped from 119' to 133' during the night over a period of 20 hours.

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Since no one was on-site monitoring during this period, it is not possible to determine how long the well was drawn to 133 feet. It seems probable that the drawdown was stable for more than 4 hours

but without on site observation's, we cannot certify this. Recovery was monitored for only 9 minutes after the well was shut down. As indicated on the enclosed curve, the recovery occurred very quickly from 133' to 63.5' but there are insufficient data points to accurately determine the recovery time to the original static point.

It was reported to us that the recovery occurred so quickly that the operator assumed that static would be restored within one hour. The purveyor has indicated that since only 62 gpm will be permitted from this well there is apparently sufficient water available to supply the maximum daily requirements for the 100 connections. We recommend that the well be properly tested prior to final approval. There will be ample time to conduct the test while the Contractor is on site. The Owner will be assuming any related risks.

6. The Susceptibility Assessment, as prepared by Iliad, Inc. the project Contractor, is attached.
7. Well heads on the property do not meet DOH requirements. A new well head configuration will be required as demonstrated in the detail supplied on the attached plans. Wellheads will be upgraded at the time of construction.
8. The operation of both Well pumps at #3 and #4 are controlled by a Healy Ruff telemetering system, as designed by the Engineer of Record, Hammond, Collier, Wade, Livingstone, Inc. A float in the Storage Tank is set 18" below the high water mark. The call for water is relayed to both well pumps simultaneously.
9. The new ozone system to be installed will delete the inlet and outlet ports described in you comment;
10. The revised ozone drawing provided by the supplier addresses all the points required on the DOH outline except items I, II and III. These items were individually addressed in the J.C. McDonnell Engineering report. Water Quality information was also presented therein.
11. Material specifications for ozonation system equipment were submitted in the attached Ozonation report.
12. A note was added to the plan specifications requiring that all materials to be in contact with the water supply shall be verified for compliance to ANSI/NSF Standard 61 by the Project Engineer prior to construction.
13. The revised ozonation system drawing will use treated water for backwashing in lieu of raw water.
14. A proposed swale is shown at the Highview well with a discharge to

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an existing ditch in the unopened road ROW for the backwash water. The Company anticipates no drainage problems due to the large pasture area surrounding the well head. At the #4 well, the backwash will be routed to the east and north if a drainage easement is obtained from the property owner. Responsibility for placement and design of these items will remain with the owner and his Contractor. If easement is not granted an underground tank will

be installed draining to conventional drywell trenches located in the lawn to the east of the pump house.

15. The Y-S Board has informed me that a change of ownership has taken place, creating a new ownership for the water system corporation. I have been told that the new company, Mutual Water Group, will be operated as a non-profit corporation. The new President will be James Halligan. I have been informed that this information has been sent to the DOH under separate cover with two mailings to the Customers. The customers are members and are to be represented by a committee.

16. The Company has been selected to make application for the SRF loan.

The documents described above are attached. Our responses reflect our understanding of the current facts. Please call if you have any questions on this application.

Sincerely,



John E. McDonnell, MS, PE

cc.: Iliad, Inc.  
Rock Caley, Attorney at Law  
James Halligan, President