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RECEIVED  
2008 FEB 25 PM 4:00  
IDAHO PUBLIC  
UTILITIES COMMISSION

Attorneys for Applicant

**BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION**

IN THE MATTER OF THE  
APPLICATION OF SPIRIT LAKE EAST  
WATER COMPANY, INC., FOR  
AUTHORITY TO INCREASE ITS  
RATES AND CHARGES FOR WATER  
SERVICE IN THE STATE OF IDAHO

**Case No. SPL-W-06-01**

**STATUS REPORT TO COMMISSION  
IN RESPONSE TO COMMISSION  
FINAL ORDER NOS. 30279 & 30315**

COMES NOW Spirit Lake East Water Company (“Spirit Lake” or “Company”) and hereby files this pleading in response to the Idaho Public Utilities Commission’s (“Commission”) requirement that the Company “file a detailed written plan and schedule showing start and completion dates within seven days of the service date of May 14, 2007, demonstrating a commitment to install a new generator and address system leaks as directed by the Commission in Order No. 30279.” Order No. 30315 at p. 5.

The documents attached to this pleading as **Exhibit “A”** are in chronological order (with the oldest first) and contain information concerning the progress Spirit Lake has made in eliminating the leakage of water from the Company’s water system (the “System”) and the installation of a backup generator to power the System’s pumps and other associated equipment in the event of a power outage. As discussed in the attached documents, System leakage has decreased significantly due to the location and repair of

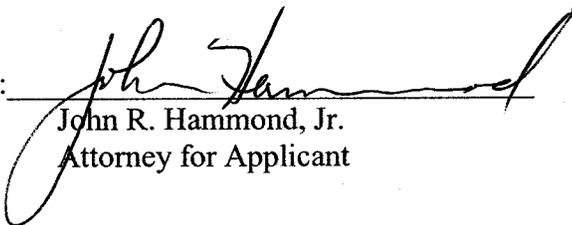
leaks which were made through the Company's leak detection program. The Commission in its Order noted that the System was possibly losing over 50% of the water pumped into the Company's reservoir due to leakage. *See generally* Final Order No. 30279 at p. 3. Through the success of the leak detection program the System meter readings from the fall showed that water loss was cut in half at least. Since that time additional leaks have been located and repaired and others soon to be.

Spirit Lake also anticipates that it will shortly complete the installation of a back-up generator as long as weather permits.

The attached documents also contain information on completing the necessary repairs to the System that were required by the Consent Order entered into between the Company and the Idaho Department of Environmental Quality. A copy of this Consent Order is attached to the Company's Second Response to Commission Final Order No. 30315 and has been attached to this pleading for the Commission's convenience and reference as **Exhibit "B."**

DATED THIS 25<sup>th</sup> day of February, 2008.

SPIRIT LAKE EAST WATER COMPANY

By:   
John R. Hammond, Jr.  
Attorney for Applicant

**CERTIFICATE OF SERVICE**

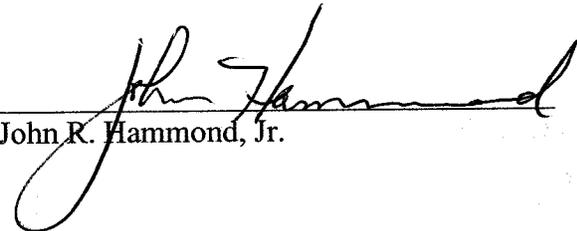
I HEREBY CERTIFY that on this 25<sup>th</sup> day of February, 2008, a true and correct copy of the foregoing document was served on the following individuals by the method indicated below:

Jean Jewell  
IDAHO PUBLIC UTILITIES COMMISSION  
472 W. Washington St.  
PO Box 83720  
Boise ID 83720-5983

- U.S. Mail
- Facsimile
- Overnight Delivery
- Messenger Delivery
- Email

Weldon Stutzman  
Deputy Attorney General  
Idaho Public Utilities Commission  
472 W. Washington St.  
PO Box 83720  
Boise ID 83720-5983

- U.S. Mail
- Facsimile
- Overnight Delivery
- Messenger Delivery
- Email

  
\_\_\_\_\_  
John R. Hammond, Jr.

John R. Hammond Jr.

e-mail: jrh@battfisher.com

July 2, 2007

Stephanie Ebright  
Deputy Attorney General  
Natural Resources Division,  
Environmental Quality Section  
1410 N. Hilton, 2<sup>nd</sup> Floor  
Boise, Idaho 83706-1225

Re: *Consent Order Submittals*

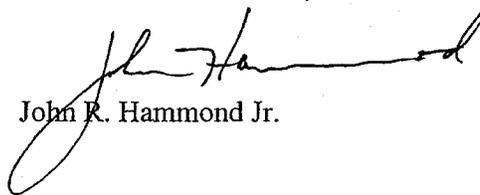
Dear Stephanie:

Please find enclosed the following documents required to be submitted by Spirit Lake East Water Company pursuant to the Consent Order: 1) Corrective Action Plan from Inland Northwest Consultants, Inc.; 2) Corrective Action Plan from, AEI, Inc.; and 3) Report from B & B Sani Services regarding leak detection work.

If you have any questions regarding the enclosures, please contact me at your convenience.

Sincerely,

FISHER LAW GROUP, LLP



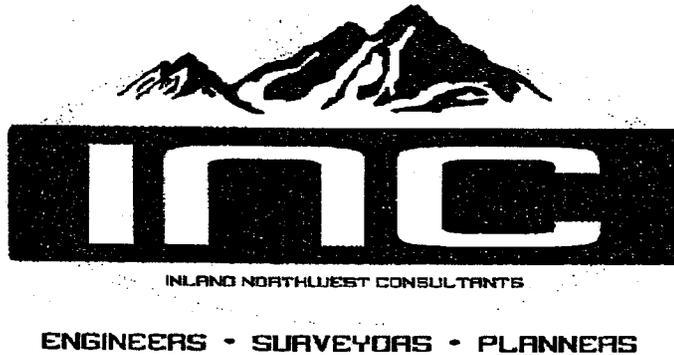
John R. Hammond Jr.

JRH/hva

cc: Robert Boyle  
Steve Tanner  
Weldon Stutzman  
Dean Renninger

Encls.





June 28, 2007

Spirit Lake East Water Company  
C/O Hanson Industries, Inc  
15807 E. Indiana Ave.  
Spokane Valley, Washington. 99216

ATTN: Ms. Roxann Middleton  
Mr. Dean Renninger

RE: Spirit Lake East Water Company, Inc PWS#: ID1280176  
Public Water System Correction Action Plan (CAP Plan)

Dear Roxann:

As requested, Inland Northwest Consultants, Inc (INC) has reviewed the June 5, 2007 Consent Order assigned to Spirit Lake East Water Company (SLEW) and as required by the State of Idaho Department of Environmental Quality (DEQ), have prepared this Public Water System Corrective Action Plan (CAP) to submit for DEQ approval.

On June 4, 2007, INC met with Dean Renninger, the system operator(s), and Ray Watkins with AEI Engineering to review the existing water system for addressing the non-compliant items contained within the Consent Order. It is our understanding that Inland Northwest Consultants is under contract with SLEW to provide the Civil and Structural Engineering set forth in paragraphs 7d and 7e of the Consent Order and will coordinate and/or assist AEI Engineering on the electrical issues set forth in paragraphs 7a, 7b, and 7c. AEI is under a separate contract with SLEW and will draft up their responses to paragraphs 7a, 7b, and 7c of the Consent Order. Our comments are as follows:

#### **Consent Order 7d**

Paragraph 7d states: *"A detailed plan and schedule for conducting a leak detection survey of the entire Spirit Lake drinking water system performed by a professional leak detection company providing written survey results to the Department which, at a minimum,*

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*identify the location and estimated intensity of all leaks detected to ensure compliance to IDAPA 58.01.08.542.10".*

IDAPA 58.01.08.542.10 states: *"Leaking water mains shall be repaired or replaced upon discovery and disinfected in accordance with American Water Works Association (AWWA) Standards, incorporated by reference into these rules at Subsection 002.01."*(3/30/07)

### **Corrective Action Plan (CAP Plan) 7d**

This CAP Plan is broken into three (3) phases;

. Phase 1 is exposing all the SLEW water distribution system's valves. Phase 2 is implementation of the leak detection program and Phase 3 is the repair and/or replacement of all discovered leaks within the system.

SLEW has authorized the system operator(s) to pursue the first phase of leak detection program in May 2007. Phase 1 required excavation of valve boxes currently buried within the gravel and dirt streets. While it is common practice to bury valve boxes, it is the recommendation of this report that all valve boxes are brought to street grade and include the installation of a concrete apron or collar. This will improve valve access in a timely and safe manner. Each apron shall be reinforced with steel rebar encompassing the valve box and anchored into the ground. Each apron should be ramped with 24 to 36 inches of concrete facing towards oncoming traffic. This should minimize snow plow damage and road grading conflicts, a concern of the Highway district who maintains the roads in Spirit Lake East.

Phase 1 of this CAP Plan has been completed by the system operator(s). The following valves were not located and have been prioritized to be located using a more extensive locating method at the beginning of Phase 2:

1. Liberty Drive at Kelso North valve
2. CD'A Drive at Blanchard Circle
3. CD'A Drive at Pend Oreille North and South valve
4. Liberty Drive at Newman Drive

The extensive locating method previously mentioned requires the use of a more sensitive metal locating device. The system operator(s) have recently acquired this locator.

Accompanying this CAP Plan are the report documents from the system operator(s) and B&B Sani Services on work completed to date. B&B Sani Services used listening devices to obtain audio readings of isolated pipe segments. Audio readings greater than the normal range are suspected to contain leaks. B&B detected audio readings above the typical readings in the following locations:

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1. Liberty Drive to the well house.
2. Spokane Circle to St Joe Drive
3. St Joe Drive to St Maries Drive.

These areas shall be prioritized in the Phase 2 leak detection program.

Phase 2 of the CAP Plan is implementation of the leak detection program. This program utilizes portable flow monitoring devices and hydrostatic pressure testing to measure flow and pressure within a given isolated pipe segment. Portable flow monitoring devices shall be calibrated against the existing flow meter to establish consistency in monitored flow readings. It is also a good method to determine the accuracy of the existing flow meter. A hydrostatic pressure test will provide data to on pressure drops associated with a leak in the system. It also provides data to support deficiencies within the water system.

Isolated pipe segments shall be controlled by fully closing the valves on all designated pipeline segments and branch lines where applicable. Prior to shutting down any pipeline segment, system operator(s) shall notify affected residents. Once the pipeline segment is closed, the leak detection program can proceed. System operator(s) shall be responsible for monitoring and documenting the results. If the leak detection program has determined that no leaks are occurring within an isolated pipe segment, the segment can be excluded from further leak detection procedures. If a leak is detected, then the system operator(s) shall refine their search within the isolated pipe segment by using the audio listening devices used in Phase 1 of the CAP Plan. Once the leak has been discovered, the system operator(s) shall estimate the size of the leak. Any leaks greater than 7 gallon per minute (gpm) (10,000 gallon per day) shall be identified as a major leak and be immediately repaired and/or replaced. Any leaks less than 7 gpm (minor leak) shall be scheduled for a repair and/or replacement as time allows. The process shall only be completed by the system operator(s) and/or a professional leak detection company.

#### **7d. Action Plan and Schedule**

1. The aforementioned missing valves shall be located and exposed to complete the leak detection program.
2. Notify residents affected by the leak detection program of a water line shut down.
3. The system operator(s) shall install the flow meter at their discretion.
4. The system operator(s) shall verify all air release valves within the isolated pipe segment are closed and not leaking.
5. The system operator(s) shall isolate the pipe segment by closing the valves defined in Table #1.
6. The system operator(s) shall further isolate the pipe segment by closing the valves at each water service meter set. At this time, the check system shall be inspected to ensure proper water stop operation.

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7. The system operator(s) shall install a pressure gauge on a selected water service and begin monitoring and document the water pressure.
8. Should the water pressure begin to fall below the 30 pounds per square inch (psi), the system operator(s) shall begin charging the isolated pipe segment with a potable water source through a selected meter set.
9. At no time during the pressure test shall the isolated pipe segment water pressure drop below 20 psi.
10. Should the pressure continue to drop after recharging the line, an extensive search using the audio devices in Phase 1 shall be implemented until the entire isolated pipe segment has been examined.
11. All leaks shall be accessed by the system operator(s) to determine the severity of the leak. This may require excavation.
12. Leaks greater than 7 gpm shall be immediately documented and repaired and/or replaced. Leaks less than 7 gpm shall be documented, quantified, and scheduled for replacement at a later date.
13. After completion of the leak test on an isolated pipe segment, system operator(s) shall reopen the water system. And all water services.
14. Repeat for the next scheduled pipe segment.
15. Inland Northwest Consultants shall be available to assist the system operator(s).

Table #1 provides the CAP Plan and schedule for Phase 2 of the leak detection program

**Table #1**  
**Spirit Lake East Water Distribution System Leak Survey for Isolated Pipeline Segments**

Isolated Pipeline Segment	Tested Pipeline Size (Inch)	Valve Closure Program	CAP Plan Schedule (week of:)
Well House	10"	Spokane Circle and Liberty Drive	July 16
Sandpoint Circle	6"	Close all valves at Sandpoint circle	July 23
St. Joe Drive	6"	Spokane Circle, St Joe Nrth of Newman	July 23
St Joe Drive	4"	St. Maries Circle	July 23
Easement	6"	Well house	July 23
Liberty Drive	6"	Spokane Circle between CD'A and Liberty.	July 23
CD'A Drive	6"	Spokane Circle between CD'A and Liberty and Spokane Circle.	July 23
Liberty Drive	8"	Spokane Circle, North and South Priest River, North and South Hayden, Liberty east of Hayden.	July 30

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### Applicable Standards

Inland Northwest Consultants shall perform the above design work in accordance with the following Standards:

- International Fire Code (IFC)
- International Building Code (IBC)
- Uniform Plumbing Code (UPC)
- American Water Works Association (AWWA)
- Nation Sanitation Foundation (NSF)
- American National Standards Institute (ANSI)
- American Society for Testing and Materials (ASTM)
- Idaho Standards for Public Works Construction (ISPWC)
- 10 State Standards for Water Works
- Refer to AEI Engineering for all electrical codes.

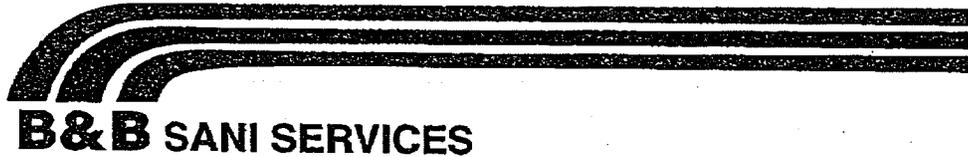
Should you have any questions regarding the above, please call.

Best Regards,

Michael L. Becker, E.I.T.  
Project Engineer

Drew C. Dittman, P.E.  
Director of Engineering

CC  
Encl.



June 12, 2007

Valve Survey - Spirit Lake East Water System

As requested by Dean Renninger, B & B Sani Services performed a valve survey on the Spirit Lake East Water Distribution System.

We performed a series of tests on the valves to determine the following:

- 1) The condition of the valves—whether they open and close properly.
- 2) To ascertain whether or not the valves are cutting water and isolating a portion of the system when in the closed position.
- 3) To see if a high volume of water is going through the lines at the time of testing.

We were able to evaluate the majority of the system; however we could not do a thorough inspection because we were unable to locate the following areas:

- Between Liberty Drive and Kelso Drive
- Between Liberty Drive and Newman Drive
- Between Coeur d'Alene Drive and Blanchard Circle
- Two valves around Coeur d'Alene Drive and Pend Orielle

In the locations where we were able to test, the following areas showed possible leaks:

- Well House to Liberty Road, which has an 8 inch valve with 8 inch piping;
- Sandpoint Circle and St. Joe Drive, which has a 6 inch valve and 6 inch piping;
- St. Joe Drive and St. Maries Circle, which has a 4 inch valve and 4 inch piping.

In all three of these locations, sound readings of .3 and .4 were high, indicating a possible leak.

All other valves located in the system appear to have normal readings, which are approximately .1 to .2. Anything higher points to a possible leak, and should be considered an area of concern. We would recommend further evaluation in these areas.

In conclusion, our inspection of the system showed that overall most of the valves were within the normal range of .1 to .2. However, we recommend a more intensive inspection be performed in those areas that showed an elevated range of .3 to .4, which should

include finding lost valves, as well as an inspection of the lines between valves and other areas which could hold possible leaks in the system. In addition, it should be a priority to find the areas where we could not locate valves for testing—it is part of understanding the system.

If you would like our help in further researching this system to determine the size of the leaks, and help prioritize how and what issues need to be addressed, we would be happy to assist you in any way we can.

Sincerely,

Brian Wells  
Manager

## A. Valves unable to be located

- 1.Liberty at Kelso (north valve)
- 2.Coeurd'Alene Dr. at Blanchard Circle.
- 3.Coeurd'Alene Dr. at PendOrielle(North valve)
- 4.Coeurd'Alene Dr. at PendOreille(South valve)
- 5.Liberty at Newman

## B. Valves with normal sound readings of a .1 to .2

- 1.Liberty at Spokane Circle
- 2.Liberty at Spokane Circle ( north side)
- 3.Liberty at Priest River (north valve)
- 4.Liberty at Priest River (south valve)
- 5.Liberty at Hayden Dr. (north valve)
- 6.Liberty at Hayden Dr. (south valve)
- 7.Liberty at Hayden Dr. (east valve)
- 8.Liberty at Kelso ( south valve)
- 9.Coeurd'Alene at Fernan
- 10.CoeurdAlene at Spokane Circle
- 11.CoeurdAlene at Priest River Dr.(north valve)
- 12.CoeurdAlene at Priest River Dr.(south valve)
- 13.Blanchard Circle ( west side of circle)
- 14.CoeurdAlene at Kelso Dr.
- 15.CoeurdAlene at Newman
- 16.CoeurdAlene at Tahoe
- 17.Newman at St. Joe Dr. (north valve)
- 18.Newman at St. Joe Dr. ( south valve)
- 19.Newman at Tahoe
- 20.Sandpoint circle and CoeurdAlene Dr.( west valve)
- 21.Sandpoint Circle and CoeurdAlene Dr.( east valve)
- 22.PendOrielle Dr. and Skyhawk (south valve)
- 23.PendOrielle Dr. and Skyhawk ( west valve)
- 24.St Joe and Skyhawk (north valve)
- 25.St Joe and Skyhawk ( east valve)
- 26.St Joe and Kelso
- 27.Kelso and Spirit Dr.( south valve)
- 28.Kelso and Spirit Dr. ( north valve)
- 29.Kelso Dr. at Dead End
- 30.St. Joe Dr. at Dead End.
- 31.Hayden Dr. (lots 43 and 46 )
- 32.East Hayden Dr. (lot 52 and 54 )
- 33.Hayden Dr. between lot 44 and 45

### C. Valves with higher sound readings

- |   |       |
|---|-------|
| 1.Liberty Dr. at Well House                     | .3-.4 |
| 2.Sandpoint circle and St. Joe Dr.(North valve) | .4    |
| 3.St Joe and St Maries Circle                   | .3    |

**CONSTRUCTION BACKHOE SERVICE, INC.****CBSI**

P.O. Box 920  
Rathdrum, Idaho 83858  
208-687-0802  
208-687-1583 fax

Valve Survey Spirit Lake East

## Liberty and Well site drive

8" gate valve open .2-.4 reading  
Leak possible 40 yards west of valve

## Liberty and Spokane Circle

8" valve open position looped .2 reading

## Liberty and North side of Spokane Circle

8" valve open looped .2 reading

## Liberty and Priest River Drive

South valve 6" gate dead end in open position .2 reading  
North valve 6" gate looped – unable to operate .2 reading

## Liberty and Hayden

South valve 6" gate valve looped in open position .2 reading  
North valve 8" gate closed looped no reading  
East valve 8" open looped .2 reading

## Blanchard Circle Coeur d Alene and Hayden

6" gate valve looped large rock in valve box .1 reading and percolating

## Blanchard Circle and Coeur d Alene Dr.

Unable to locate valve

## North Priest River Drive and Coeur D Alene

North valve 3" gate open dead end  
South valve 4" gate open looped .2 reading

## Coeur d Alene and Fernan

8" gate valve looped open .1 reading

## Spokane Circle N of Coeur d Alene Drive

4" gate valve dead end not operable .1 reading

**Coeur d Alene and Priest River Dr.**

3" valve north facing open looped .2

4" valve south facing open looped .2 reading

**Skyhawk and Pend Orielle Drive**

West valve 4" gate open looped .2 reading

South valve 6" gate open looped .2 reading

**St. Joe and Skyhawk**

East valve 4" open looped .1 reading

North valve 6" open looped .1 reading

**Sandpoint Circle**

North valve 6" open looped .2 reading

West valve 6" open looped .4 reading (pressure reducing valve near in vault bypassed)

East valve 6" open looped .2 reading

**Pend Orielle and Coeur D Alene**

North valve 6" unable to locate

South valve 4" unable to locate

**Newman and Coeur D alene**

6" gate valve open looped .2 reading

**Kelso and Coeur d Alene**

4" gate valve open looped reading.2

**South St. Joe**

Blow off – closed /dry dead end .1 reading

**St.Joe/ St. Maries Circle**

4" gate valve open looped .3 reading

**Spirit and Kelso**

6" gate valve facing west open looped .1 reading

6" gate valve facing north closed looped .2 reading

**Kelso Drive**

Blow off 2" closed dead end .1 reading

**Kelso and St. Joe**

4" gate valve open looped .2 reading

**St. Joe and Newman**

8" gate valve facing east open looped .1 reading

8" gate valve facing west closed looped .1 reading

**Newman and Tahoe**

4" gate valve open looped .1 reading

**Coeur d Alene and Newman**

6" gate valve open looped .1 reading

**Tahoe and Coeur d Alene**

6" gate valve open looped .2 reading

**Kelso and Liberty**

4" south facing gate valve open .2 reading

Unable to locate second valve

**Hayden Ave Lot 43&46 -**

Valve open looped .2 reading

Percolating - possible leak west uphill on line

**Hayden Ave. between lot 44 and 45**

2" blow off dead end .2 reading

**E. Hayden Dr. Lot 52 &54**

4" valve open looped .1 reading

5/30/2007

## Valve Isolation

### Including pressure gauge readings-

Eagle (Skyhawk E and W) – 110 psi gauge was over 110 psi with no noticeable change

Skyhawk (E and W) - 102 constant dropped to 45 psi when valve was closed

Possible leak noted from St. Joe and Skyhawk valve estimated between  
50' and 100' East of valve

St Joe (W Skyhawk and Sandpoint Circle) – 75 psi constant no change - one service  
between valves

Coeur d Alene 5655 frost free - (E Skyhawk and Sandpoint Circle) 90 psi no change  
as valves were opened and closed

Coeur d Alene 5655 frost free – to test if line fed between valve and pressure reducing valve 90psi no change

Coeur d Alene (Sandpoint Circle and Tahoe) – 63 psi holding as valves were operated and closed

Coeur d Alene (Sandpoint circle to Fernan) - 48 psi tested on Fernan drive. Valve, no noticeable leak however there is a known leak at Blanchard circle.

South Priest River Dr and Liberty to N. Priest River and CDA- tested at 48 psi dropped to 46.5 psi when valve on liberty was turned down. When valve was reopened on liberty rose to 53.5 psi.

Tahoe from Newman to CDA - 60 PSI held constant while both valves were open and closed

Hayden Drive from south liberty to CDA – 45 psi dropped to 42 but held as valves were operated to closed position then back up to 45

Kelso Rd from Liberty to CDA - unable to locate valve on liberty and Kelso

Newman from CDA to Liberty - unable to locate valve on Newman and Liberty.



1910 NW Boulevard, Suite 201, Coeur d'Alene, ID 83814  
(208) 686-4001 (208) 686-4021 FAX

June 28, 2007

Spirit Lake East Water Co.  
C/O Hanson Industries, Inc.  
15807 E Indiana Ave.  
Spokane Valley, WA 99216

Attention: Ms. Roxann Middleton  
Mr. Dean Renninger

Subject: Spirit Lake East Water Company  
Idaho Department of Environmental Quality  
Draft Consent Order – Electrical Compliance Plan

Dear Roxann:

AEI Engineering, Inc. has reviewed the Consent Order, met with Operating Staff, visited the site, reviewed the current installation, contracted with the Owner to design the required electrical system improvements, and performed initial coordination with the Civil Engineer (Inland Northwest Consultants). Based on the above, AEI Engineering, Inc. is addressing the requirements set forth in paragraph 7a, 7b, and 7c of the Consent Order. It is our understanding that paragraphs 7d and 7e are being addressed by Inland Northwest Consultants.

#### UNDERSTANDING OF PROJECT

The existing electrical and pump control system includes a 60KW stand-by generator set (not capable of operating the well pump), FVNR starters for the 100HP well pump, a 25HP booster pump, and two 10HP booster pumps. The well pump is controlled on reservoir level, and the booster pumps are controlled on discharge pressure in conjunction with a series of pressure tanks. The majority of the electrical system has reached the end of its serviceable life and requires replacement.

Spirit Lake East Water Company is planning on upgrading their current electrical and controls system to meet the Consent Order requirements.

#### SPECIFIC ACTION PLAN

Paragraph 7a: "A detailed plan and schedule for the installation of a replacement generator capable of running the submersible well pump and the three centrifugal water pumps used to pressurize the water distribution system to ensure compliance with IDAPA 58.01.08.552.01".

#### Action Plan:

1. The existing generator, fuel system, and automatic transfer switch will be removed and replaced. The minimum design requirement for the new system will be as follows:
  - a. 150KW minimum, diesel engine generator. The generator is sized to operate the 100HP submersible well pump, (1) 25HP booster pump, (2) 10HP booster pumps, the control system, and building utilities. The generator will be installed on a concrete foundation pad.

June 28, 2007

- b. The generator will be provided with a fuel tank capable of at least 8 hour operation at full load.
- c. A new 400 ampere, 480 volt, three phase automatic transfer switch. The transfer switch will be located inside the booster pump building.
2. The Final review design documents will be available for review on July 16, 2007.
3. The electrical system design documents will be completed incorporating DEQ comments within 10 days of DEQ Plan approval.
4. The electrical improvements will be bid and construction started following production of final documents. We anticipate this to commence in Mid August, 2007.
5. AEI has been contracted to provide electrical construction observation to ensure compliance with the design intent, and to provide record electrical drawings.

Paragraph 7b: "The development of a maintenance program to ensure that the replacement generator is inspected, test operated on a routine basis, and that all components, including back-up spare parts, stand-by items are in operating condition to ensure compliance with IDAPA 58.01.08.552.01.a".

Action Plan: The proposed stand-by generator system will be specified with the following requirements:

1. The automatic transfer switch programmed for automatic full load transfer testing on a one month minimum interval. Failure of the generator test cycle will initiate an alarm via the proposed automatic alarm dialer system.
2. The generator specification will include the requirements for periodic manufacturer suggested maintenance and recommended spare parts.
3. The generator specification will include a service agreement proposal for use by the Owner to contract on-call service with a local factory authorized service supplier.
4. AEI will prepare an electrical operations and maintenance manual for the entire electrical system detailing generator and all other required maintenance schedules and procedures. The manual will include a narrative by AEI and maintenance procedures and requirements provided by the equipment suppliers and installers.
5. The Final review design documents will be available for review on July 16, 2007.
6. The electrical system design documents will be completed incorporating DEQ comments within 10 days of DEQ Plan approval.
7. The electrical improvements will be bid and construction started following production of final documents. We anticipate this to commence in Mid August, 2007.
8. AEI has been contracted to provide electrical construction observation to ensure compliance with the design intent, and to provide record electrical drawings.

Paragraph 7c: "A detailed plan and schedule to evaluate and address any and all deficiencies associated with the electrical and pumping systems to ensure compliance with IDAPA 58.01.08.501.06, 58.01.08.552.01, and 58.01.08.541.03.e".

Action Plan:

1. The existing electrical and pump control system has been evaluated. In addition to the new stand-by power system identified above, the electrical system improvements will include:
  - a. Replacement of the electrical service entrance disconnect and feeder from the utility transformer with a new 300A service entrance rated enclosed circuit breaker and new 350kcmil service conductors.
  - b. Inspection of individual booster pump motors, coordinate replacement with Civil Engineer if required, establish base line motor test for inclusion in operations and maintenance manual.
  - c. Replacement of the booster pump starters with variable frequency drive controllers to maintain pressure control of the system.

- d. Revise/upgrade the electrical raceway and wiring as required throughout the facility to meet NEC and NETA standards.
  - e. Reworking and expansion of the existing lighting, heating and ventilation system.
  - f. Provide a new system Control Panel with automatic alarm dialer. This control panel will be PLC based and will monitor and control the well pump, the booster pumps, and the disinfection system. The alarm dialer will notify the Operator of well pump and booster pump failures, low system pressure, low reservoir level, building intrusion, generator failure, low generator fuel, loss of electrical power, and disinfection system motor failure. Alarms may be grouped a major and minor alarms.
2. The Final review design documents will be available for review on July 16, 2007.
  3. The electrical system design documents will be completed incorporating DEQ comment within 10 days of DEQ Plan approval.
  4. The electrical improvements will be bid and construction started following production of final documents. We anticipate this to commence in Mid August, 2007.
  5. AEI has been contracted to provide electrical construction observation to ensure compliance with the design intent, and to provide record electrical drawings.

## STANDARDS

AEI Engineering Inc. shall perform the above design work in accordance with the applicable sections of the following standards organizations:

IDAPA 58.01.08  
NFPA No. 70 - National Electrical Code (NEC)  
International Energy Code  
National Electrical Manufacturers Assoc. (NEMA)  
Underwriters Laboratories (UL)  
Institute of Electrical and Electronics Engineers (IEEE)  
International Fire and Building Codes  
Idaho State Energy Code

## BID DOCUMENT FORMAT

All drawings will be prepared in AutoCAD Release 2007. All specifications will be prepared in CSI format using Word for Windows.

The anticipated electrical construction drawings required include:

E1: Electrical Legend and Details  
E2: Electrical Site Plan  
E3: Electrical One-Line Diagram and Schedules  
E4: Well House Electrical and Control Plan  
E5: Well House Lighting, Receptacle, Heating, and Ventilation Plan  
E6: Control Panel Elevation and Details  
E7: Wiring Diagrams  
E8: Wiring Diagrams

The anticipated electrical construction specifications required include:

16010 - General Provisions  
16015 - Electrical Scope of Work  
16080 - Electrical Testing  
16100 - Basic Material and Methods  
16110 - Raceways  
16120 - Wire and Cable  
16134 - Panelboards

● Page 4

June 28, 2007

16400 - Service and Metering  
16460 - Dry Type Transformers  
16483 - Variable Frequency Drive Equipment  
16500 - Lighting  
16740 - Telephone Service  
16850 - Heating and Ventilation  
16917 - Solid State Starter Equipment  
16920 - Motor Control Equipment  
16921 - Control System

Please call with any questions, comments or concerns you may have.

Respectfully submitted,

AEI Engineering, Inc.

A handwritten signature in black ink that reads "Raymond J. Watkins". The signature is written in a cursive, flowing style.

Raymond J. Watkins, P.E., LEED AP

\*\*\*\*\*  
\*\*\* RX REPORT \*\*\*  
\*\*\*\*\*

RECEPTION OK

TX/RX NO	7296	
CONNECTION TEL		208 687 1583
SUBADDRESS		
CONNECTION ID		
ST. TIME	06/29 16:11	
USAGE T	04'21	
PGS.	18	
RESULT	OK	

RECEIVED  
JUN 21 2007

Spirit Lake East Water Company  
Spirit Lake, Idaho  
General Consultant and Professional Engineering Services Agreement  
June 17, 2007

BY: \_\_\_\_\_  
07-153

Inland Northwest Consultants is pleased to provide you with an agreement for general engineering and consulting services for the Spirit Lake East Water Company, an Idaho State Public Utilities serving the community of East Spirit Lake, Idaho. This agreement is meant to be inclusive of all scope of services as follows:

Scope of Services

Task #1 – General Consultant and Professional Engineering Services will perform the necessary consulting and professional engineering work required to resolve the Compliance Activities outlined in executed the Idaho Department of Environmental Quality Consent Order PWS# ID1280176 within the capacity of INC as follows:

Task #1A – Assist the Spirit Lake East Water Company in preparing a Public Water System Correction Action Plan and submit to the Idaho State Department of Environmental Quality by June 30, 2007 per Compliance Activity #7 of Consent Order #ID1280176. This task requires that the Spirit Lake East Water Company execute and pay all retainer deposits prior to midnight on June 20, 2007.

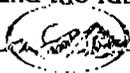
Task #1B – Assist the Spirit Lake East Water Company and the Electrical Engineer of Record under a separate Agreement in providing a detailed plan and schedule for installation of a replacement generator capable of running the existing submersible well pump and the existing three centrifugal water pumps used to pressurize the water distribution system to ensure compliance to IDAPA 58.01.08.552.01 per Compliance Activity #7a of Consent Order #ID1280176.

Task #1C – Assist the Spirit Lake East Water Company and the Electrical Engineer of Record under a separate Agreement in providing a detailed plan and schedule for evaluating and addressing any and all deficiencies associated with the existing electrical and pumping system to ensure compliance to IDAPA 58.01.08.501.06, 58.01.08.552.01, and 58.01.08.541.e per Compliance Activity #7c of Consent Order #ID1280176.

Task #1D – Assist the Spirit Lake East Water Company in providing a detailed plan and schedule for conducting a leak detection survey of the entire Spirit Lake East Water Company drinking water system per Compliance Activity #7d of Consent Order #ID1280176.

Task #1E – Assist the Spirit Lake East Water Company in preparing a plan and schedule to repair, replace, or modify the Spirit Lake East Water Company water reservoir roof to ensure that the roof is watertight and ponding of non-potable water on the reservoir roof is eliminated off the surface per Compliance Activity #7e of Consent Order #ID1280176.

Task #2 – Improvement Plans: INC will coordinate with the applicable agencies to prepare preliminary Improvement Plans of infrastructure improvements for submittal requirements of the State of Idaho Public Utilities Commission and the Idaho State Department of Environmental



BATT & FISHER, LLP

JUN 26 2007

RECEIVED

Quality. Upon receipt of plan approval, INC will finalize the design and prepare a set of final Improvement Plans of infrastructure improvements for submittal to all reviewing agencies. All revisions and meetings required by reviewing agencies to obtain Improvement Plan approval are included as a portion of this task.

**Task #3 – Construction Staking Services:** INC will perform Construction Staking per the approved Improvement Plans for the project. Staking shall be provided for INC and the Electrical Engineer of Record plans only. Staking is for one time only. Any requested re-staking or additional staking not noted above will be performed and billed at our standard hourly rate and is outside the scope of this agreement.

**Task #4 – Building Construction Staking:** INC will provide construction staking per the approved structural plan, consisting of the corners for the Spirit Lake East Water Company water reservoir.

**Task #5 – Structural Analysis and Computations:** INC will perform a structural analysis, associated computations and code analysis of the plans provided. INC will redline the provided plan and return to provider for changes. INC will assemble the appropriate structural computation packet for permit submittal and will coordinate and deliver important design information to your contractor.

**Task #6 – Record Drawings:** Upon completion of improvements, INC will perform the required survey work and internal required field inspections for the preparation and submittal of record drawings to the State of Idaho Public Utilities Commission, the Idaho State Department of Environmental Quality, and the Spirit Lake East Water Company.

**Task #7 – Construction Certification:** INC will perform field inspection and preparation of construction certification letters as required by State of Idaho Public Utilities Commission, the Idaho State Department of Environmental Quality

**Required Retainer Deposit: \$2,000.00**

\* This proposal is only for services as noted above and does not include any city, county, agency, testing, permits or other fees that may be associated with the project. INC may submit some application fees on your behalf with the understanding that you will reimburse Inland Northwest Consultants for these fees. The above services are for a time and materials Agreement executed with Spirit Lake East Water Company only and are based on the attached Hourly Fee Schedule. Due to the nature of our services and certain unknown factors, it is difficult to quote a fixed price. *JH* (initial)

Work will be initiated upon receipt of the required retainer deposit and signed agreement. The required deposit will be applied to your FINAL invoice. *JH* (initial)

Thank you for your consideration of our proposal. If this Agreement is acceptable to you, please, sign and date below and as indicated in the attached Terms and Conditions, Contract Acceptance block, as well as, fill in the billing and contact information below, and return to our office with required deposit.





1910 NW Haulvard, Suite 201, Coeur d'Alene, ID 83814  
(208) 866-4001 (208) 866-4021 FAX

June 18, 2007

Spirit Lake East Water Co.  
C/O Hanson Industries, Inc.  
15807 E Indiana Ave.  
Spokane Valley, WA 99216

Attention: Ms. Roxann Middleton  
Mr. Dean Renninger

Subject: Spirit Lake East Water Company  
Proposal for Electrical Engineering Services

Dear Roxann:

Thank you for the opportunity to submit this proposal for electrical engineering services for the subject project. The proposal and associated engineering fee estimate is based on our recent discussions, a site visit and the Idaho Department of Environmental Quality Draft Consent Order.

#### UNDERSTANDING OF PROJECT

Spirit Lake East Water Company is planning on upgrading their current electrical and controls system to meet the Consent Order requirements. This work includes the following:

- A new generator and automatic transfer switch capable of operating the well and booster pumps, as well as miscellaneous site utilities.
- Replace the booster pump starters with variable frequency drive controllers to maintain pressure control of the system.
- Replace the well pump starter with a soft starter.
- Replace the electrical service entrance disconnect.
- Replace the booster pump building electrical panelboard.
- Revise/upgrade the electrical raceway and wiring as required throughout the facility.
- Provide a new system Control Panel with automatic alarm dialer. This control panel will be PLC based and will monitor and control the well pump, the booster pumps, and the disinfection system. The alarm dialer will notify the Operator of pump failures, low system pressure, power system failure, generator system failure, and low/high tank levels.

AEI will coordinate our work and design with Inland Northwest Consultants.

#### APPROACH AND DELIVERABLES

During the initial (pre-design) phase of this project, we will meet to determine the specific design and operational requirements of the facility. AEI will prepare a written detailed electrical system improvement plan as required by the Consent Order with-in 5 working days of Contact Approval.

Following this effort, we will prepare detailed construction documents (plan and specifications) for competitive bidding of the project.

We will support Spirit Lake East Water Company during the bid process by answering questions from potential bidders and attending a pre-bid meeting.

Construction Administrative support is also being proposed. During this phase we will perform submittal review of electrical equipment and materials and answer construction questions. One site observation visit, with report, during the construction period is included.

A detailed list of design tasks and associated deliverables are identified below:

#### Preliminary Design Phase Tasks:

1. Participate in an initial project kick-off meeting with the Design Team.
2. Perform initial Electric Utility coordination.
3. Submit recommendations regarding basic electrical materials, systems and equipment, and development of conceptual design solutions for power service and distribution, lighting, alarms, and general requirements.

#### Construction Documents Phase Tasks

1. Preparation of final calculations, drawings, and specifications based upon approved Design Development Documents.
2. Submit 50% CD, 95% CD construction documents for review and coordination.
3. Finalize plans and specifications.
4. Submit Final construction documents.
5. Prepare Engineers Opinion of Probable Electrical Construction Cost

#### Assistance During Bid Phase Tasks

1. Answer questions from bidding contractors.
2. Prepare any necessary addenda to the bid documents to address issues that arise during the bid process. Design work associated with other discipline changes is not included in this estimate and will be charged on a time and materials basis.

#### Assistance During Construction Phase Tasks

1. Submittal review of electrical construction material and equipment.
2. Make two site visits including report, during construction.
3. Answer construction questions.
4. Additional fees for changes to the scope of the project during construction shall be negotiated.

#### ASSUMPTIONS

1. AEI will not be responsible for detailed site measurements and will produce drawings which are sufficient to accurately represent the electrical portion of the improvements only.

#### STANDARDS

AEI Engineering Inc. shall perform this work in accordance with the applicable sections of the following standards organizations during the design of this project:

NFPA No. 70 - National Electrical Code (NEC)

International Energy Code  
 National Electrical Manufacturers Assoc. (NEMA)  
 Underwriters Laboratories (UL)  
 Institute of Electrical and Electronics Engineers (IEEE)  
 International Fire and Building Codes  
 Idaho State Energy Code

**BID DOCUMENT FORMAT**

All drawings will be prepared in AutoCAD Release 2007. All specifications will be prepared in CSI format using Word for Windows.

**SCHEDULE**

AEI Engineering is prepared to begin work on this project upon notice to proceed and will work to support the project schedule.

**PRICE AND TERMS OF COMPENSATION**

Basic Service Fees

We propose that our compensation be fixed amounts as scheduled below. Reference attached fee estimate work sheet.

<b>Phase Description</b>	<b>Fee</b>
Preliminary Design Services	\$638.75
Construction Documents	\$7,617.50
Bid Administration Services	\$254
Construction Administration Services	\$2,521.50
<b>Total Basic Services</b>	<b>\$11,139.00</b>

Reimbursable Expenses

Spirit Lake East Water Company (Owner) shall pay the Engineer for Reimbursable Expenses at 1.10 times their direct costs. Such payments will be in addition to payments for Basic Services. Payment shall be made only if such expenses are incurred. Reimbursable expenses shall be as follows:

1. Plotting of CAD drawings other than for coordination of the work or as provided under basic service.
2. Reproduction of drawings and specifications other than for coordination of the work.
3. Local courier service.
4. Travel expenses outside the Greater Coeur d' Alene area.

Additional Services

If authorized in writing by the Owner, AEI Engineering shall furnish or obtain from others Additional Services of the following types that are not considered normal or customary Basic Services. The Owner agrees to pay for Additional Services on a time and expense or fixed fee

basis in accordance with AEI Engineering's standard billing rates at the time the Additional Services are negotiated.

- A. Services resulting from significant changes in extent of the Project or its design including, but not limited to, changes in size, complexity, Owner's schedule, or character of construction, or method of financing; and revising previously accepted studies, reports, design documents or contract documents when such revisions are due to causes beyond AEI Engineering's control.
- B. Services in connection with change orders to reflect changes requested by Owner if the resulting change in compensation for Basic Services is not commensurate with the additional services rendered, services after the award of each contract in evaluating substitutions proposed by Contractor(s), and in making revisions to Drawings and Specifications occasioned thereby.
- C. Preparing documents for alternate bids requested by Owner for Contractor(s)' work which is not executed or documents for out-of-sequence work.
- D. Services during out-of-town travel required of AEI Engineering other than visit to the site as required under the Basic Services.
- E. Preparing for the Owner, on request, a set of reproducible record prints of Drawings showing those changes made during the construction process, based on the marked-up prints, drawings and other data furnished by Contractor(s).
- F. Additional or extended services during construction made necessary by (1) work damaged by fire or other cause during construction, (2) significant amount of defective or negligent work of Contractor(s), (3) prolongation of the contract time of any prime contract by more than sixty days, (4) acceleration of the progress schedule involving services beyond normal working hours, and (5) default by Contractor(s).
- G. Services to make measured drawings of or to investigate existing conditions or facilities, or to verify the accuracy of existing drawings or other information related to underground utilities, system capacities and system loading (Except as agreed to under Basic Services).
- H. Investigations involving detailed consideration of operations, maintenance and overhaul expenses; providing Value Engineering during the course of design; the preparation of feasibility studies, cash flow and economic evaluations, rate schedules and appraisals; assistance in obtaining financing for the Project; evaluating processes available for licensing and assisting Owner in obtaining process licensing; detailed quantity surveys of materials, equipment and labor; and audits or inventories required in connection with construction performed by Owner.
- I. Services after the completion of the Construction Phase, such as inspections during any guarantee period and reporting observed discrepancies under guarantees called for in any contract for the Project.



1970 NW Boulevard, Suite 201, Coeur d'Alene, ID 83814  
 (208) 866-4001 (208) 608-4021 FAX

# ENGINEERING FEE ESTIMATE

Client Spirit Lake East Water Company, C/O Hanson Industries, Inc Date 6/18/2007  
 Address 15807 E Indiana Ave. Proposal No. M07111  
 City Spokane State WA ZIP 99216 File Name \_\_\_\_\_  
 Phone \_\_\_\_\_ Client Job No. \_\_\_\_\_

**Project** Well and Booster Pump Electrical System Upgrade

Description of Tasks	PM \$92.50	SE \$87.50	ENG \$83.00	DES \$70.00	DRAFT \$50.00	ADMIN \$35.00	Total
<b>Task 1 Project Management</b>							
1.1 Project correspondence and status reports							N/C
<b>Task 2 Preliminary Design Tasks</b>							
2.1 Coordination with Utility Company		0.5					\$43.75
2.2 Initial Site Visit		2					\$175.00
2.3 DEQ Electrical Improvement Plan Letter		4				2	\$420.00
<b>Task 3 Final Design Tasks</b>							
3.1 Prepare electrical drawings							
3.1.1 Sheet E1 - Electrical Legend and Notes					1		\$50.00
3.1.2 Sheet E2 - Electrical Site Plan		2	4		8		\$907.00
3.1.3 Sheet E3 - Electrical Ono-Line Diagram & Schedules		2	6		8		\$1,073.00
3.1.4 Sheet E4 - Electrical Power and Control Plan		1	12		12		\$1,683.50
3.1.5 Sheet E5 - Electrical Lighting & Receptacle Plan		1	3		6		\$636.50
3.1.6 Sheet E6, E7 & E8 - Control Panel Details & Wiring Diagrams		1	12		12		\$1,683.50
3.1.7 Prepare Electrical Specifications							
3.1.8 Electrical Division 16		1	8			4	\$891.50
3.2 Size Generator and ATS			1				\$83.00
3.3 Construction Cost Estimate			4				\$332.00
3.4 Quality Control / Assurance	3						\$277.50
<b>Task 4 Construction Management</b>							
4.1 Answer questions from bidders		1	1				\$170.50
4.2 Prepare Addenda as required			1				\$83.00
4.3 Contractor Questions and RFI's	1	1				4	\$320.00
4.4 Electrical Submittal Review		2	6			1	\$708.00
4.5 Site Inspection / Visits							
4.5.1 2 trips, 1 during Construction, and 1 final		6					\$626.00
4.6 Electrical O & M review			3				\$249.00
4.7 Record Drawings		1	4		6		\$719.50
<b>Total Hours</b>	<b>4</b>	<b>25.5</b>	<b>65</b>		<b>53</b>	<b>11</b>	

SubTotal \$11,031.25

Expenses \$107.75

**TOTAL \$11,139.00**

**Reimbursable Expense Details:**

Mileage	\$73
Reproducibles	\$25
Package Delivery	\$10
Misc.	
<b>Total Expenses</b>	<b>\$108</b>

**John R. Hammond**

---

**From:** rmiddleton [rmiddleton@hansonind.com]  
**Sent:** Tuesday, August 07, 2007 12:50 PM  
**To:** John R. Hammond  
**Subject:** RE:

Good morning,

The plans send to the DEQ were approved. Each of the engineers have talked to the DEQ and have proceeded with the detailed plans. These plans are to be finished middle of this week. Specs for GenSet should be done today so we can place on order. We'll have a cancellation clause in case DEQ has a problem but we need to get on order has they could be as much as a couple months out. They have assured me that all the electrical can be done first and the actual generator is one of the last things they need.

Good news about the leaks. Leslie just emailed the water loss from the last meter readings.  
October 06 thru March 07 – loss of 17,330,054 gallons 59.9% of total pumped  
April 07 thru July 07 – loss of 5,233,909 gallons 24.8% of total pumped

Several leaks were fixed at the end of May, so should have more improvement still.

We will read the meters next at Oct 1. If we still see a significant improvement, Bob and I were thinking we will have the meters read at Nov 1<sup>st</sup> and Dec 1<sup>st</sup> to confirm.  
Finally a bit of good news!!  
Roxann

---

**From:** John R. Hammond [mailto:jrh@battfisher.com]  
**Sent:** Tuesday, August 07, 2007 10:44 AM  
**To:** Bob Boyle; rmiddleton  
**Subject:**

Hello,

Have you heard anything from DEQ on the engineering plans?

John R. Hammond, Jr.  
Fisher Law Group, LLP  
U.S. Bank Building  
101 S. Capitol Blvd., Suite 500  
Boise, ID 83702  
208.331.1000  
208.331.2400 (facsimile)  
jrh@battfisher.com

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STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

2110 Ironwood Parkway • Coeur d'Alene, Idaho 83814 • (208) 769-1422

C.L. "Butch" Otter, Governor  
Toni Hardesty, Director

September 28, 2007

Raymond Hanson, President  
Spirit Lake East Water Company  
E 15807 Indiana Ave  
Spokane Valley, WA 99216

**RE: Reservoir Roof Structure and Electrical Improvements, Spirit Lake East Water Company**

Dear Mr. Hanson:

On September 11, 2007 Leslie Abrams with Water Works, Inc. submitted to this office for review and approval two items pertaining to proposed improvements to the Spirit Lake East public drinking water system. We have now completed our review of these submittals with the following results:

**Roof Structure Plans:** The drawing stamped by Joseph Hassell, P.E. of Inland Northwest Consultants, Inc. (INC) has been reviewed that contains plans and specifications for construction of a 60-foot by 60-foot free-standing wooden structure with metal roofing centered over the existing water reservoir. We understand that rather than reconstruct the existing roof over the stored water to be water-tight and sloping, you elected to construct this free-standing cover in order to prevent rainfall from ponding on the existing deteriorated roof.

The Roof Structure Plans are hereby **approved** for construction purposes in accordance with the Idaho Rules for Public Drinking Water Systems and Section 39-118 of Idaho Code. This approval initiates steps toward compliance with item 7.e. in the June 5, 2007 Consent Order by providing a watertight cover that eliminates ponding and is sloped to drain precipitation off the cover.

The engineer needs to consider the following comments on the proposal:

- The relationship of the gable and eave ends of the cover to the booster pump vault was not clear. We recommend placing the gable end over this vault to reduce the possibility of runoff from the roof affecting the vault. Installing gutters along the eave ends and diverting the runoff from the roof away from the tank foundation is also recommended.
- A building permit from Kootenai County for the structure might be required.
- We recommend completing the structure with some type of netting material installed inside the cover to prevent birds from entering and nesting inside the structure.

Inspection of construction activities approved herein must be done by an Idaho licensed Professional Engineer (P.E.) or by someone under the direct supervision of a P.E. The Corrective Action Plan (CAP) indicated INC would provide inspection services for construction of the reservoir cover.

Within thirty (30) days of completion of construction, Section 39-118(3) of Idaho Code requires that record plans and specifications based on information provided by the construction contractor and field

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OCT 04 2007

RE: **Reservoir Roof Structure and Electrical Improvements, Spirit Lake East Water Company**  
September 29, 2007  
Page 2

observations made by the engineer or the engineer's designee be submitted to DEQ. The record drawings must depict the actual construction of facilities.

**Spirit Lake East Water Co. – Electrical Improvements:** Plans and specifications for the improvements to the electrical systems at this location as prepared by Raymond Watkins, P.E. of AEI Engineering Inc. have been reviewed. This project consists of the following improvements:

- Installation of a new 150KW diesel powered generator located on a concrete pedestal and capable of operating at the same time the 100 Hp well pump, 25 Hp booster pump, two 10 Hp booster pumps, and other electrical items. The generator will involve a 300-gallon capacity double-walled fuel tank equipped with interstitial leak detection and alarms.
- Installation of variable frequency drives on the three booster pumps.
- Installation of entirely new control and monitoring systems and other electrical upgrades and replacements for the facility.

The plans and specifications for the Electrical Improvements are hereby **approved** for construction purposes in accordance with the Idaho Rules for Public Drinking Water Systems and Section 39-118 of Idaho Code. This approval appears to initiate compliance with Consent Order items 7.a (generator for all pumps) and item 7.c (other electrical deficiencies).

Inspection of construction activities approved herein must be done by an Idaho licensed Professional Engineer (P.E.) or by someone under the direct supervision of a P.E. The CAP indicated that inspection services for this project will be provided by AEI.

Within thirty (30) days of completion of construction, Section 39-118(3) of Idaho Code requires that record plans and specifications based on information provided by the construction contractor and field observations made by the engineer or the engineer's designee be submitted to DEQ.

**Corrective Action Plan:** It has come to our attention that the requirement in item 7 of the Consent Order for DEQ approval of the CAP was not formally issued. The CAP consists of an eight (8) page letter to you from INC dated June 28, 2007 for items 7.d. and 7.e. and consists of a four (4) page letter to you from AEI dated June 28, 2007 for items 7.a., 7.b., and 7.c.

DEQ review of the CAP indicated general agreement with the scope of the activities. However, some of the CAP implementation deadlines as indicated below have been exceeded or are missing.

- Item 7.a. New Generator – Construction starting mid-August.
- Item 7.b. Generator maintenance program – No schedule offered.
- Item 7.c. Other Electrical Improvements – Construction commencing mid-August.
- Item 7.d. Leak Detection Survey – Begun July 16 and ending November 12, 2007.
- Item 7.e. Tank Roof repair – Construction starting mid-August.

Only item 7.d. regarding the leak detection survey appears to possibly be on schedule. Item 8 of the Consent Order requires submittal by December 1, 2007 of an Implementation Plan reflecting a time schedule and budget for correction of the leaks identified in the survey per item 7.d.

RE: **Reservoir Roof Structure and Electrical Improvements, Spirit Lake East Water Company**

September 29, 2007

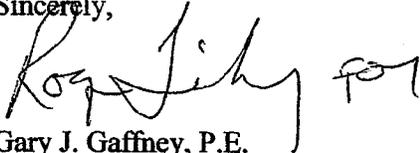
Page 3

The engineering plans and specifications for items 7.a., 7.c., and 7.e. were proposed in the CAP for submittal for DEQ approval in July of 2007 but were not received until September 11, 2007. Item 7.b. for implementation of an O&M plan for the new generator appears to have been misinterpreted in the CAP because this item can only be complied with once the new generator is operational.

Failure to comply with the terms of the Consent Order constitutes a violation that could result in civil penalties being imposed again. To postpone this type of enforcement action, you need to have a revised schedule for completion of items 7.a., 7.c., and 7.e. submitted to DEQ by INC and AEI. This information should also include a proposed date for compliance with item 7.b.

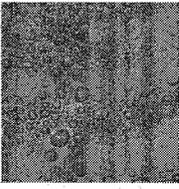
We will expect that you will be able to provide these revised completion dates to DEQ no later than October 15, 2007.

Sincerely,



Gary J. Gaffney, P.E.

- c: Leslie Abrams, Water Works Inc, PO Box 920, Rathdrum, ID 83858  
Raymond Watkins, AEI Engineering Inc, 1910 Northwest Blvd, Ste 201, CdA 843814  
Mike Becker/Drew Dittman/Joe Hassell, INC, 1296 E Polson Ave, Ste B, Post Falls  
Steve Tanner / Anthony Davis, DEQ, CdA  
John Hammond, Jr., Batt & Fisher LLP, PO Box 1308, Boise, ID 83701  
Harry Hall, IPUC, PO Box 83720, Boise, ID 83720-0074  
Jerri Henry, DEQ-Boise  
Stephanie Ebright, DEQ, Boise  
(#10110 plans at specs at Spirit Lake East pws file)



# Water Works, Inc.

Water and Wastewater Management

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October 15, 2007

To whom it may concern,

Water Works, Inc., water System operators for the Spirit Lake East Water Company would like to provide an update on the activities that have taken place on the Spirit Lake East water system over the summer of 2007 as well as to provide a loose schedule for the upgrades to the reservoir and the pump house.

To begin with I would like to give an update on the current leak detection program. The first step of this process occurred in the spring of 2007 with a valve survey that was performed by a professional leak detection company and was intended to help the water system operators to locate areas of concern for potential water loss. Fortunately there were no major issues found during the valve surveying process. The second step in the leak detection process, and the most time consuming, was a line isolation technique that required the system be broken down into a series of testable isolated sections. This technique was chosen due to its accuracy return rate. Closing down smaller sections of line and pumping them up to a pressure beyond normal operating pressure allows us to more easily determine where the water loss might be occurring. We are approximately 80% complete with the hydrostatic line testing, explained above, within both Spirit Lake East and Treeport. The remainder of the tests will be completed upon the installation of four new isolation valves, again needed to ensure that smaller sections of line can be tested. The isolation valve installation is currently underway and should be completed by the first week in November, providing ample time to complete the remainder of the leak detection program.

As a part of the hydrostatic testing, we are also in the process of ensuring that all valves are fully operable. This maintenance issue is often overlooked by system operators but in this case especially, it is our goal to ensure that the leak detection is as accurate as possible and therefore we find that it is necessary to ensure that each and every valve in the Spirit Lake East water system is functioning to full capacity.

Along with the leak detection testing there have been many leak repairs occurring in both Spirit Lake East and Treeport. We have been able to use the information gathered through the leak detection testing to locate some major areas of water loss. It has been found that the main source for system leaks has been isolated to the site of the individual service connections, and not on the main line themselves. These service connections, typically performed and installed by the home owner's contractor/excavator, have been the only site for system leaks thus far and have been easily identifiable through the hydrostatic testing. There have been approximately ten (10) service line connection replacements completed throughout the system, along with numerous meter leak repairs.

Spirit Lake East Water Company has also been working on pressure regulation throughout the system and has repaired an existing pressure reducing valve. There are also plans to install a new pressure reducing bypass valve once the isolation valves are in place.

The last thing that I would like to address is the timeline for the work being performed at the well site pump house and on the reservoir roof. Upon receiving formal approval from the IDEQ on the submissions by AEI electrical engineers, bid packets were disbursed to three different electricians and to three different generator companies. Unfortunately, at this time, we are unable to provide a concrete time frame for project completion as our contractors are trying to gather specifics from vendors concerning an

P.O. Box 920 ■ Rathdrum, ID 83858 ■ Phone: 208.687.0802 ■ Fax: 208.687.1583  
h2oworks.inc@gmail.com

estimated time of delivery for all components involved. There are five different delivery dates being discussed by the contractors for the generator itself. One of those delivery dates being up to 16 weeks from time of order, another, and the least dependable is 6 weeks from time of order. We have been working diligently to try to ensure that the upgrade project is completed by the required date, although we may be forced to request a time extension. It would seem that making hasty decisions while trying to get the project done within the currently allotted time line would only be cause for potential problems down the road and it is the intention to the Spirit Lake East Water Company to ensure that this project is completed in a manner that would allow for the system to function to its full potential. I do not feel as water system operator that it would behoove us to put a specific time frame to completion of this project without first getting specifics from our contractors and vendors. As soon as information regarding the generator set and electrical components are provided to us it will be made available to the IDEQ and all other parties involved. The reservoir roof will, however, be completed well within the currently allotted time line, barring any unforeseen incidents, and therefore does not seem to be a necessary component in requesting an extension. Materials for the roof have been ordered and construction will commence shortly, again we will keep all interested parties up to date on the progress.

Leslie Abrams

Water System Operator

Water Works, Inc.

(PAGE # 1 OF 3 PAGES)

# Quality Steel Buildings, Inc.

N. 7810 Market, Center Suite  
Spokane, WA, 99207  
Phone: (509) 468-1606

FAX# 922-5757

## SALES CONTRACT AND WORK ORDER

QUALISB081C7

I/we the owner(s) of the premises mentioned below hereby authorize you as contractor, to furnish all necessary materials, labor, and workmanship, to install, construct and place the improvements according to the following and/or attached specifications, terms and conditions, on premises below described:

Owner's Name HANSON INDUSTRIES, INC. CELL (509) 868-5929 Phone \_\_\_\_\_ Work Phone 922-5252  
 Job Address 9112 LIBERTY DRIVE City SPRIT LAKE State IDAHO Zip \_\_\_\_\_  
 Mailing Address 15807 E. INDIANA City SPokane Valley State WA Zip 99216  
 Legal Description (if necessary) \_\_\_\_\_

BUILT AS PER IDAHO ENGINEERED PLANS, DRAWN BY INLAND NORTHWEST CONSULTANTS DATED: 8/6/07 + SUPPLIED BY HANSON INDUSTRIES, INC.

COLORS:  
 ROOF COLOR BROWN  
 WALL COLOR BROWN  
 TRIM COLOR BROWN

THIS SALES CONTRACT AND WORK ORDER IS SUBJECT TO MATERIAL AND LABOR LIEN. CANCELLATIONS WILL BE SUBJECT TO 18% CHARGE TO BE MADE AGAINST CASH PRICE.

THE BALANCE IS DUE AND PAYABLE UPON COMPLETION OF BUILDING. PLEASE GIVE FINAL CHECK TO THE BUILDER MADE OUT TO QUALITY STEEL BUILDINGS, INC.

\*NOTE: ALL PROGRESS PAYMENTS MUST BE MADE WHEN DUE IN ORDER FOR WORK TO CONTINUE.

Cash price	\$	<u>36,925.00</u>
Tax	\$	<u>INCLUDED</u>
<u>N/A</u>	\$	<u>0</u>
Total	\$	<u>36,925.00</u>
Down payment or deposit	\$	<u>12,308.00</u>
Balance	\$	<u>24,617.00</u>
\$ <u>12,309.00</u>	Due	<u>WHEN FRAMED</u>
\$ <u>12,308.00</u>	Due	<u>WHEN BUILDING COMPLETED</u>
\$ <u>0</u>	Due	<u>0</u>
\$ <u>0</u>	Due	<u>0</u>

Make all checks payable to Quality Steel Buildings, Inc. Owner agrees to sign all necessary papers required by any financial institution. All surplus material is the property of contractor. In the event of breach of this contract, the Property Owner(s) also agree to pay reasonable attorney's fees for consultation and/or such litigation, including all expenses, as may be necessary. No completion date under 45 days will be specified without written approval from the office. All jobs will be completed as soon as possible, but the company is not responsible for delays caused by bad weather, strikes and reasonable material shortages from suppliers. Quality Steel Buildings, Inc., will under no condition subtract any amount of money from purchase price.

OCTOBER DAY 20 07

DO NOT SIGN THIS CONTRACT UNTIL COMPLETELY FILLED IN. NO VERBAL AGREEMENTS RECOGNIZED.

By \_\_\_\_\_ Representative of Quality Steel Buildings, Inc.  
 X R. A. Hanson Owner/buyer  
 X \_\_\_\_\_ Owner/buyer

COMPANY GUARANTEE: Quality Steel Building, Inc. guarantees its workmanship and will replace faulty material or faulty workmanship free of charge for 12 months from completion of building(s) provided all contracts and change orders are paid in full. Customers, by affixing their signatures hereon, acknowledge that they have received a copy of this contract and are aware of conditions on reverse side.



7810 N. Market  
Spokane, Washington 99217  
Office (509) 468-1606  
Fax (509) 468-3720  
www.qsbinc.com  
CONTRACTOR LICENSE # QJAI 158081C7

**Contract & Work Order Specifications**  
**Between: Quality Steel Buildings, Inc., &**  
**Hanson Industries, Inc.**

October 10, 2007

Page 2 of 3

Spirit Lake East Water Co. Roof Structure

Quality Steel Buildings, Inc., will supply materials, labor, delivery and clean-up to construct the project as per the engineering supplied by Hanson Industries, Inc., & drawn by Inc. & Issue Dated: 8/6/07, for the project listed below.

**SPECIFICATIONS:**

60'x 60'x 18' eave height clear-span pole building, with siding & wall framing that comes down from eave height on all sides of building 6'-8" Note: Building to be constructed over the top of existing concrete water storage tank.

4/12 Pitch @ 12' bays with manufactured, engineered 2 ply trusses, with 40-5-1# snow load.

8"x 8" Pressure treated structural posts at center truss crossings of building, and with 6"x 6" corner & endwall, posts. (1) row 2"x 10" pressure treated base girts, with 2"x 6" wall girts and 2"x 8" roof purlins @ approx. 24" O.C. for both. Note: All lumber is #2 & better grade Douglas Fir & Larch kiln dried hardwood framing.

**Post Footing Concrete:**

18.5 yards total at all posts combined, post footing concrete.

**Steel Roofing & Siding:**

29 Gauge colored steel roofing, siding, trim with color matched screws.  
**( 30 Year Paint Coat Finish Warranty From Manufacturer )**

**Insulation:**

2" Vinyl backed string reinforced fiberglass metal building insulation, at the roof only



Continious Ridge Vent:

60 lin. ft. of Continious Ridge Vent.

**Total Built \$ 36,925.00 Idaho Tax Included**

**(12 Month Warranty on Materiel & Workmanship)**

Exclusions: Building Permit, Site Prep. site restoration, removal of any post hole spoils, temporary power during construction.

Accepted: R. A. Hanson Date: 10-15-07  
Representative of Hanson Industries, Inc.

Accepted: \_\_\_\_\_ Date: \_\_\_\_\_  
Representative of Quality Steel Buildings, Inc.

**John R. Hammond**

---

**From:** rmiddleton [rmiddleton@hansonind.com]  
**Sent:** Tuesday, November 27, 2007 12:03 PM  
**To:** John R. Hammond  
**Subject:** Consent Order

Hi John,

Section 8 of the consent order has a Dec 1 date for the submittal of the CAP Implementation Plan. I believe this was submitted back in July. Can you confirm please?  
This would make us in compliance with order, correct?

Also, to complete our files, could you forward to me any correspondence you have had with DEQ with reference to the consent order after it was issued, I don't believe my files are complete.

The roof is under construction, should be done in couple of weeks. The electrical contractor has been chosen, generator is in stock, so work will begin soon.

We have chosen to read the meters this week in an effort to confirm that we are below the 15% leakage. We believe we are and wanted to confirm now, otherwise it would be late next spring before we could read them again.

Hope you had a great Thanksgiving!  
Best regards,

Roxann Middleton  
Hanson Industries, Inc.  
15807 E Indiana Ave  
Spokane Valley, WA 99216  
509-922-5252 Fax 509-922-5757  
rmiddleton@hansonind.com

**Water Works. Inc.**  
Water and Wastewater Management

# Fax

**To:** John Hammond  
**From:** Leslie Abrams  
**Fax:** 208-331-2400  
**Pages:** 10 including cover  
**Phone:**  
**Date:** December 5, 2007  
**Re:** Spirit Lake East Water  
**cc:**

**Urgent**    **For Review**    **Please Comment**    **Please Reply**    **Please Recycle**

**• Comments:**

John,

Following is the signed letter that you requested. Please let me know if there is anything further.

Leslie Abrams

RECEIVED  
DEC 06 2007  
FISHER PUSCH & ALDERMAN LLP

07-153



INLAND NORTHWEST CONSULTANTS

ENGINEERS • SURVEYORS • PLANNERS

December 3, 2007

Idaho Department of Environmental Quality  
2110 Ironwood Parkway  
Coeur d'Alene, Idaho 83814

Attn: Tony Davis

Re: Spirit Lake East Water Company

Dear Tony:

As requested by the Idaho Department of Environmental Quality (IDEQ), this letter is a follow-up to their September 28, 2007 letter regarding Corrective Action Plan (CAP) Item 7.d. for the above-referenced subject. As you may recall, Item 7.d. is for the leak detection and survey of the water distribution system. It was originally estimated to be completed by November 12<sup>th</sup> of this year. After discussions with the contractor, it appears several unforeseen items have presented themselves during their leak detection and survey program; thus resulting in delays. Pending further delays, unforeseen conditions, and weather, the contractor now estimates that Item 7.d. survey should be completed by December 31, 2007 with an estimated remaining budget of nearly \$15,000. The repair/replacement work is scheduled for completion by summer 2008. The budgeted amount for repair and replacement will depend on the number of leaks discovered.

It should be noted that the contractor has exceeded the CAP Item 7.d. implementation plan assigned to Spirit Lake East Water Company (SLEW) by IDEQ. They have replaced and repaired numerous leaks within the distribution system during their leak detection and survey program. They have also installed several new isolation valves in key locations, exercise existing valves to ensure water tightness, and repaired the pressure reducing valve serving the Treeport area. This should reduce water loss and increase the water quality in the SLEW area. Exercising valves improves the maintenance and useful life of valves.

The following information provides the progress of the Consent Order's CAP Implementation Plan:

1296 East Polston Avenue, Suite B  
Post Falls, Idaho 83854  
Phone: (208)773-8370  
Fax: (208)777-2128



- **Item 7.a. New Generator:** Submittal Date 9/11/07, Approval Date 9/28/07, Estimated Completion Date 2/28/08. The generator and automatic transfer switch (ATS) has been purchased and scheduled for installation the beginning of next week. The contractor is Electric 1.
- **Item 7.b. Generator Maintenance Program:** Pending completion and start-up of generator.
- **Item 7.c. Other Electrical Improvements:** Submittal Date 9/11/07, Approval Date 9/28/07, Estimated Completion Date 2/28/08. All electrical components have been purchased and scheduled for installation beginning the third week in December. They required a 6 week fabrication period. The same contractor as 7.a. was awarded the project.
- **Item 7.d. Leak Detection Survey:** Start Date mid July, Revised Estimated Completion Date 12/31/07. Skyhawk and Newman Streets appear to be the worst leak contributors. Repairs made: installed four (4) isolation valves, repaired one major leak in Hayden Drive, replaced /repaired 12 service connections, repaired one pressure reducing valve, tightened numerous meter sets, and capped one unauthorized connection which was leaking. Estimated reduction in water loss from 50% to 27%. See accompanying Leak Detection Report.
- **Item 7.e. Tank Roof Repair:** Submittal Date 9/11/07, Approval Date 9/28/07, Estimated Construction Completion Date 12/21/08. Poles and trusses have set and steel roof and siding should be completed within the next week.

Thank you and should you have any questions regarding the above, please call.

Best Regard,  
Inland Northwest Consultants, Inc.

Michael L. Becker, E.I.T.  
Project Engineer

CC: Dean Renninger, Leslie Abrams

encl

## Water Works, Inc.

Water and Wastewater Management

### Spirit Lake East Water Company Leak Detection Report

I have attached a spread sheet with the leak detection findings thus far. We still have 8 sections to do, we broke it down a little further than what was in the CAP plan. Following is also the list from the CAP plan with which parts we have completed in accordance with that so that it might be easier to reference in a letter.

We installed 3 main line valves, one at Sandpoint Circle, one at Blanchard Circle, and one at Newman and Liberty. One more is scheduled to be installed beginning of next week at Coeur d Alene and Fernan. We were unable to locate the valves that the plans claimed were originally installed and spent numerous hours trying to do so. Eventually it became apparent that we were going to have to shut down the main and install main line valves in order to complete leak detection. Because this involved turning the water off to so many customers we tried to be relatively conservative with the installs and attempted to schedule them far enough apart as not to inconvenience the customers too much. This may have set us back up to a full month.

We located four leaks on Skyhawk in Treport all on service connections, assuming the pipe composition was deteriorated, and repaired them. While each trench was open Hanson gave us permission to also replace the service connection on the opposite side of the road, to ensure that no future leaks would arise due to the faulty pipe, total of 8 fixed on Skyhawk. We located two leaks on Eagle and repaired those also, along with the opposite service connections, 4 total. Each repair that is made takes an additional amount of time and man power due to the fact that we are essentially digging blind. The as built drawings for the system have been so far off that we are never sure what is in the ground or where we are going to find it.

We found a major leak on Hayden, also on a service connection, and replaced the galvanized line that had become brittle and had broken with 200 psi poly.

There were numerous small leaks found at meter sets, each of these was tightened down and checked to ensure no future leakage.

We repaired an existing pressure reducing valve and installed a bypass valve to lower the pressure in Treport.

We spent weeks operating valves and flushing the system to provide a better seat on the existing valves, this also needed to be done before the leak detection could be completed.

### Leak Detection Survey Summary

P.O. Box 920 • Rathdrum, ID 83858 • Phone: 208.687.0802 • Fax: 208.687.1583  
h2oworks.inc@gmail.com

- Well house – incomplete (can't find blow off valve)
- Sandpoint Circle – missing valves
- St. Joe Drive – complete
- St Joe Drive – complete
- Liberty Drive – complete
- CD'A Drive – complete
- Liberty Drive – incomplete
- Liberty Drive – incomplete
- CD'A Drive and Fernan – missing valve
- CD'A Drive – missing valve
- CD'A Drive – missing valve
- CD'A Drive – missing valve
- Priest River Dr. – complete
- Priest River Dr – complete
- Priest River Dr – complete
- Hayden Dr- complete
- Hayen Dr and Easements – complete
- Kelso Dr – complete
- Kelso Dr – complete
- Kelso Dr – complete
- Newman Dr – complete
- Tahoe Dr – complete
- St. Joe – complete

- St. Joe - complete
- St. Joe - missing valves
- Eagle - complete
- Skyhawk - complete
- Pend Oreille Dr - complete
- Pend Oreille Dr - complete

Dec. 5. 2007 12:11PM

Inland Northwest Consultants

No. 9865 P. 6

Date	Location	Starting Pressure	Initial Pressure	Time	Line Pressure Raised To	Line Pressure Raise	Gallons Used	Pressure Drop / Time	Ending pressure	Line Pressure Raised To	Time to Raise	Gallons Used	Pressure
7/25/2007	Liberty Drive (Line C)	41 psi	59 psi	15 minutes	59 psi	1 minutes	1.5 gallons	9 lbs / 15 minutes	50 psi	60 psi	1 min	1 gallon	
7/25/2007	CDA Drive (Line B)	41 psi	59 psi	10 minutes	59 psi	5 minutes	3 gallons	18 lbs / 10 minutes	41 psi	59 psi	2 min	2.5 gallons	
7/25/2007	Feman	41 psi	60 psi	15 minutes	60 psi	1 minute	1 gallon	15 lbs / 10 minutes	45 psi	60 psi	30 seconds	.5 gallons	
7/28/2007	Priest River Drive	41 psi	60 psi	15 minutes	60 psi	3 minutes	.5 gallon	15 lbs / 10 minutes	45 psi	N/A	N/A	N/A	
8/1/2007	Priest River Drive between Liberty and CDA	40 psi	59 psi	15 minutes	59 psi	3 minutes	5 gallons	17 lbs / 10 minutes	42 psi	59 psi	3 minutes	3 gallons	17 lbs
8/2/2007	Hayden Drive between Blanchard and Liberty	35 psi											
8/8/2007	Kelso between Liberty and CDA	46 psi	60 psi	15 minutes	60 psi	2 minutes	2.5 gallons	2 lbs / 10 minutes	58 psi	60 psi	1 minute	.5 gallon	2 lbs
8/7/2007	Tarpe between CDA and Newman	55 psi	60 psi	15 minutes	60 psi	2 minutes	4 gallons	10 lbs / 8 minutes	50 psi	60 psi	1 minute	2 gallons	10 lbs
8/8/2007	Newman Drive	50 psi	51 psi	15 minutes	51 psi	7 minutes	8 gallons	0 lbs / 10 minutes	51 psi / would not pump over 51 psi it is assumed that there are				
8/9/2007	Kelso Dr. between Liberty and St. Joe	60 psi	70 psi	15 minutes	70 psi	1 minute	2.5 gallons	0 lbs / 10 minutes	70 psi	78 psi	3 minutes	1.75 gallons	0 lbs
8/13/2007	South end of Kelso, St. Joe to Newman	59 psi	72 psi	15 minutes	72 psi	13 minutes	3.5 gallons	4 lbs / 10 minutes	68 psi	72 psi	3 minutes	1.75 gallons	3 lbs
8/20/2007	Priest River Dr. from Liberty South to end of line	59 psi	75 psi	15 minutes	75 psi	4 minutes	1 gallon	10 lbs / 10 minutes	65 psi	75 psi	2 minutes	1 gallon	6 lbs



8/24/2007 Eagle Dr. 49 psi 15 minutes 65 psi 8 minutes 11 gallons 15 lbs / 10 minutes 50 psi 65 psi 3 minutes 3 gallons 16 lbs

Hayden Dr. between  
8/24/2007 Liberty and CDA Dr. 49 psi 15 minutes 65 psi 8 minutes 11 gallons 15 lbs / 10 minutes 50 psi 65 psi 3 minutes 3 gallons 16 lbs

St. Joe Dr. between CDA  
8/28/2007 Dr. and Newman Dr. 67 psi 15 minutes 80 psi 7 minutes 5 gallons 8 lbs / 10 minutes 74 psi 80 psi 3 minutes 2.5 gallons 8 lbs

Pend Orielle Dr. from  
9/27/2007 Skyhawk to CDA Dr. 95 psi 15 minutes 115 psi 6 minutes 3.5 gallons 5 lbs / 10 minutes 110 psi 115 psi 2 minutes 1 gallon 4 lbs

Pend Orielle Dr. from  
9/27/2007 CDA Dr. to end of line 75 psi 15 minutes 110 psi 1 minute 2.5 gallons 9 lbs / 10 minutes 99 psi 110 psi 2 minutes 2.25 gallons 90 lbs

3 minutes	49 psi	65 psi	2 minutes	8 gallons	16 lbs / 10 minutes	48 psi	85 psi	9 gallons
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The line pressure dropped again, down to 45 psi within 10 minutes of last pressure rise.

minutes	74 psi	80 psi	3 minutes	2 gallons	8 lbs / 10 minutes	74 psi	80 psi	2.5 gallons
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minutes	111 psi	116 psi	2 minutes	1 gallon	4 lbs / 10 minutes	111 psi	115 psi	3/4 gallon
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Starting line pressure 95 PSI shut main line valve and pressure dropped to 75 psi Dropped to 0 psi by 12:36 in original application of test.

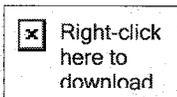
3 minutes	20 psi	110 psi	2 minutes	2.25 gallons	90 lbs / 10 minutes	20 psi	110 psi	2.25 gallons
-----------	--------	---------	-----------	--------------	---------------------	--------	---------	--------------

**John R. Hammond**

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**From:** Michael L. Becker [mikeb@incnorthwest.com]  
**Sent:** Thursday, December 06, 2007 10:38 AM  
**To:** John R. Hammond  
**Cc:** 'Leslie Abrams'; 'Renninger'; 'Drew C. Dittman, P.E.'  
**Subject:** FW: Sprit Lake East Water District  
**Attachments:** \_AVG certification\_.txt

For your information

 *MICHAEL L. BECKER, E.I.T.*  
*PROJECT MANAGER*  
*INLAND NORTHWEST CONSULTANTS, PA*

-----Original Message-----

**From:** Anthony.Davis@deq.idaho.gov [mailto:Anthony.Davis@deq.idaho.gov]  
**Sent:** Thursday, December 06, 2007 8:15 AM  
**To:** mikeb@incnorthwest.com  
**Cc:** Gary.Gaffney@deq.idaho.gov; Stephen.Tanner@deq.idaho.gov  
**Subject:** RE: Sprit Lake East Water District

Mike,

I am currently working on a chemical monitoring program that is quite time consuming. I reviewed the information that you sent in and it appears that SLE is on track to ultimately solving their problems. I will not be able to do anything more in depth as far as reviewing the progress with the CO requirements for about a week though. I just thought that I would let you know.

Thanks,

Tony Davis  
IDEQ CDARO

---

**From:** Michael L. Becker [mailto:mikeb@incnorthwest.com]  
**Sent:** Monday, December 03, 2007 4:40 PM  
**To:** Anthony Davis  
**Cc:** 'John R. Hammond'; 'Leslie Abrams'; Gary Gaffney  
**Subject:** Sprit Lake East Water District

Tony:

Attached is a copy of the letter with accompanying documents for your preliminary review. A hard copy is forthcoming via US Mail.

Please call with any questions.



STATE OF IDAHO  
DEPARTMENT OF  
ENVIRONMENTAL QUALITY

2110 Ironwood Parkway • Coeur d'Alene, Idaho 83814 • (208) 769-1422

C.L. "Butch" Otter, Governor  
Toni Hardesty, Director

December 11, 2007

Raymond Hanson  
Hanson Industries, Inc, President  
Spirit Lake East Water Company  
15807 E Indiana Ave  
Spokane, WA 99216-1864

**Re: Spirit Lake East Water System Implementation Plan**

Dear Mr. Hanson:

Thank you for the letter from the engineering firm, INC, of December 3, 2007 concerning the implementation of the Corrective Action Plan (CAP). We would like to address these items individually. In the order listed in the Consent Order and the CAP, we have the following comments:

- 7.a. New Generator:** The estimated completion date of 2/28/2008 is acceptable to DEQ. It is our understanding that at a certain point in time it will be necessary to disconnect the existing electrical service, remove and replace certain control components, and connect the new generator to the system. In the implementation plan we did not find a section addressing the time that the water system will be without power and how you intend to maintain pressure in the distribution system while the power is disconnected.
- 7.b. Generator Maintenance Program:** The generator maintenance program is important in that the operator will need guidance to maintain and operate it properly. What time frame do you envision in the development of this document?
- 7.c. Other Electrical Improvements:** The estimated completion date of 2/28/2007 is acceptable to DEQ.
- 7.d. Leak Detection Survey:** The leak detection survey appears to be nearing completion but the estimate of water loss is still near 27%. Do you anticipate finding additional major leaks that would substantially lower this loss?
- 7.e. Tank Roof Repair:** The estimated completion time for the reservoir roof was listed as 12/21/08. Did you mean 12/21/07? It is our understanding that construction is already underway.

If you have any further questions on this matter, please contact DEQ at 2110 Ironwood Parkway in Coeur d'Alene. Our phone number is (208) 769-1422.

Sincerely,

Stephen Tanner  
Drinking Water Program Supervisor

c: John Hammond Jr, Batt & Fisher, LLP, PO Box 1308, Boise, ID 83701  
Anthony Davis, IDEQ/CdA  
Courtney Bebee, IDEQ/SO  
Jeri Henry, IDEQ/SO  
Gary Gaffney, IDEQ/CdA

RECEIVED  
DEC 13 2007  
FISHER PUSCH & ALDERMAN LLP

**From:** Stephen.Tanner@deq.idaho.gov

**Sent:** Monday, February 04, 2008 4:36 PM

**To:** h2oworks.inc@gmail.com; Anthony.Davis@deq.idaho.gov;  
Gary.Gaffney@deq.idaho.gov; John R. Hammond; Courtney.Beebe@deq.idaho.gov;  
Jerri.Henry@deq.idaho.gov; weldon.stutzman@puc.idaho.gov;  
rmiddleton@hansonind.com; ray.watkins@aei-engineering.com;  
mikeb@incnorthwest.com

**Subject:** RE: Spirit Lake East Water System Implementation Plan

Leslie, thank you for emailing me this letter. I will look forward to receiving the signed copy for our files. Tony and I have both reviewed it and are satisfied that the project is moving toward completion in satisfying the consent order. Please continue to keep us informed of the progress with the generator installation. ST

*Steve Tanner*

*Drinking Water Program Supervisor*

*Idaho Department of Environmental Quality*

*2110 Ironwood Parkway*

*Coeur d'Alene, Idaho 83814*

*Phone - 208-666-4628*

*Fax 208-769-1404*

---

**From:** Leslie Abrams [mailto:h2oworks.inc@gmail.com]

**Sent:** Monday, February 04, 2008 12:43 PM

**To:** Anthony Davis; Gary Gaffney; john hammond; Courtney Beebe; Jerri Henry; Stephen Tanner; weldon.stutzman@puc.idaho.gov; rmiddleton; Ray J. Watkins; mikeb@incnorthwest.com

**Subject:** Spirit Lake East Water System Implementation Plan

To whom it may concern:

Attached you will find the Spirit Lake East Water System response to the December 11, 2007 letter regarding the implementation of the Consent Order.

--

Leslie Abrams

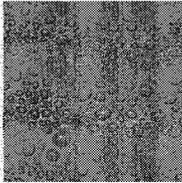
Water Works, Inc.

(208) 687-0802 office

(208) 687-1583 fax

P.O. Box 920

Rathdrum, ID 83858



# Water Works, Inc.

Water and Wastewater Management

---

January 22, 2008

Stephen Tanner  
Drinking Water Program Supervisor  
2110 Ironwood Parkway  
Coeur d' Alene, Idaho 83814

**Re: Consent order items addressed in December 11, 2007 letter.**

Dear Mr. Tanner:

We are writing in regards to the consent order items addressed in the December 11, 2007 letter from Stephen Tanner. We will attend to your concerns in the order presented in your letter:

**7.a. New Generator:** There was no section in the implementation plan addressing the time that the water system will be without power during the disconnection of the existing electrical service due to the fact that we should have the ability to run the booster pumps off of the existing generator while the power drop is relocated, providing the system with continued pressure. We will be installing all of the new electrical components, after being shop tested in a real time application, prior to removing any of the existing controls, allowing for a smooth and timely transition and providing us continued control over the water system at all times.

**7.b. Generator Maintenance Program:** The operations and maintenance plan for the new generator is being provided to Spirit Lake East Water Co. by the generator manufacturer, Caterpillar. We will receive these manuals from a Caterpillar representative whom will be on site for start up and initial testing and we will, at that time, have the ability to address any service related questions. Additionally, **ALL** service and support will be provided by Caterpillar for two years after installation.

**7.c. Other Electrical Improvements:** New completion date 2/28/2008.

**7.d. Leak Detection Survey:** The leak detection survey was completed on December 26, 2007. We are currently in the process of preparing a report on our findings and working with the engineer to prioritize repair procedures. We have pinpointed a few areas that by our estimates should be the major contributors to potentially all of the water loss. Another step that we will be taking to address the water loss percentage is to perform additional meter reading, as soon as weather

P.O. Box 920 ■ Rathdrum, ID 83858 ■ Phone: 208.687.0802 ■ Fax: 208.687.1583  
h2oworks.inc@gmail.com

permits. This procedure will give us a more accurate idea of the actual water loss percentage subsequent to all of the repairs on the system.

**7.e. Tank Roof Repair:** The estimated completion date for the roof was incorrect in our original submittal. It should have been referred to as 12/21/2007 not 12/21/2008. The new roof cover for the tank has been completed.

Please feel free to contact us with any additional questions or concerns.

Regards,

Leslie B Abrams  
Water Works, Inc.

CC:

Raymond Hanson, Spirit Lake East Water Co.

John Hammond Jr., Batt & Fisher, LLP.

Mike Becker, INC Engineering

Ray Watkins, AEI Engineering

Anthony Davis, IDEQ

Courtney Bebee, IDEQ

Jerri Henry, IDEQ

Gary Gaffney, IDEQ

**John R. Hammond**

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**From:** Leslie Abrams [h2oworks.inc@gmail.com]  
**Sent:** Thursday, February 21, 2008 6:58 PM  
**To:** John R. Hammond  
**Subject:** Re:

John,

The Gen set was set today and the wiring started, we should have it operational by the middle of next week. We are going to have to temp it in because all of the electrical components have not yet arrived which brings us to the fact that we will also have to ask for yet another extension. I have already spoken with S. Tanner (also sent e-mail to him and T. Davis) as an advanced warning that I will be submitting a letter from the electrical engineer with specific dates as to when everything will be delivered and completed. Tanner sounded perfectly fine with everything and said that it seemed like everything was under control. He also said that he understood that the weather really set us back, so all good there, hopefully..... Anyways to answer your original question, no, but I will touch base with you as soon as we get the gen set fired up.

On Thu, Feb 21, 2008 at 3:22 PM, John R. Hammond <jrh@fpa-law.com> wrote:

Has the gen-set been installed and inspected. I know it is a question out of the blue but would like to write a letter to DEQ requesting that the water system be approved back to a approved public water system.

John R. Hammond, Jr.

Fisher Pusch & Alderman, LLP  
U.S. Bank Building  
101 S. Capitol Blvd., Suite 500  
Boise, ID 83702  
208.331.1000  
208.331.2400 (facsimile)

[jrh@fpa-law.com](mailto:jrh@fpa-law.com)

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--  
Leslie Abrams

Water Works, Inc.

2/25/2008

(208) 687-0802 office  
(208) 687-1583 fax  
P.O. Box 920  
Rathdrum, ID 83858

**John R. Hammond**

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**From:** Leslie Abrams [h2oworks.inc@gmail.com]  
**Sent:** Friday, February 22, 2008 4:04 PM  
**To:** John R. Hammond  
**Subject:** Fwd: Spirit Lake East Water Co.

----- Forwarded message -----

**From:** Leslie Abrams <h2oworks.inc@gmail.com>  
**Date:** Thu, Feb 21, 2008 at 12:31 PM  
**Subject:** Spirit Lake East Water Co.  
**To:** anthony.davis@deq.idaho.gov, stephen.tanner@deq.idaho.gov

Tony,

I am writing concerning the completion date for the electrical upgrades at Spirit Lake East. Although we did get approval for a time extension from the original completion date we find ourselves again in the position to have to request yet another extension. The electrical contractor has been having difficulty receiving the components for the new control panel. Our electrical engineer is working on getting a concrete date for delivery of these components so that we may have a formal request submitted to you by the start of next week. Please know that we are working diligently on installing the parts that have come in the past few days and that the new generator is now set on site is being wired as I write this e-mail. Thank you for working with us on this and I will have the formal request to you by the start of next week. Please feel free to contact Ray Watkins, AEI Engineering or I, with any immediate questions or concerns.

--  
Leslie Abrams

Water Works, Inc.  
(208) 687-0802 office  
(208) 687-1583 fax  
P.O. Box 920  
Rathdrum, ID 83858

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Leslie Abrams

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P.O. Box 920  
Rathdrum, ID 83858

2/25/2008



5. The Department has also alleged that Spirit Lake's reservoir roof is not sloped adequately for drainage and that this condition is a violation of IDAPA 58.01.08.544.09, as amended on March 30, 2007.

6. In order to resolve this matter without litigation or further controversy, and without admission of fact or liability, Spirit Lake agrees to the provisions of this Consent Order and the following terms and actions:

7. By June 30, 2007, Spirit Lake shall submit to the Department for approval a written detailed Public Water System Corrective Action Plan ("CAP Plan"), prepared by an Idaho licensed professional engineer, with a specific time schedule that describes actions Spirit Lake will take to address the alleged violations identified in Paragraphs 2 through 5 of this Consent Order. The Department will review the CAP Plan to determine compliance with applicable facility standards and engineering standards of care, as well as the time schedule. In regards to determining compliance with applicable facility standards and engineering standards of care, as long as CAP Plan complies with applicable facility and design standards, the Department shall not substitute its judgment for that of Spirit Lake's design engineer concerning the manner of compliance with design standards. The Department expressly reserves the right to modify the time schedule as may be appropriate to protect the health of the Spirit Lake customers. Upon the Department's written approval of CAP Plan it shall be incorporated by reference into this Consent Order and be enforceable as provided by applicable law. Spirit Lake shall complete the items outlined in CAP Plan within the approved time schedule. CAP Plan shall include:

a. A detailed plan and schedule for the installation of a replacement generator capable of running the submersible well pump and the three centrifugal water pumps used to pressurize the water distribution system to ensure compliance with IDAPA 58.01.08.552.01;

b. The development and implementation of a maintenance program to ensure that the replacement generator is inspected, test operated on a routine basis, and that all components, including back-up, spare parts, and stand-by items are in operating condition to ensure compliance with IDAPA 58.01.08.501.07.a and 58.01.08.552.01;

c. A detailed plan and schedule to evaluate and address any and all deficiencies associated with the electrical and pumping systems to ensure compliance with IDAPA 58.01.08.501.06, 58.01.08.552.01, and 58.01.08.541.03.e;

d. A detailed plan and schedule for conducting a leak detection survey of the entire Spirit Lake drinking water system performed by a professional leak detection company providing written survey results to the Department which, at a minimum, identify the location and estimated intensity of all leaks detected to ensure compliance with IDAPA 58.01.08.542.10; and

e. A plan and schedule to repair the reservoir roof to ensure that the roof is watertight, that ponding of water on the roof is eliminated, and that the roof is sloped so that water drains off the surface to ensure compliance with IDAPA 58.01.08.544.09, as amended on March 30, 2007.

8. By December 1, 2007, Spirit Lake shall submit to the Department for approval a written CAP Implementation Plan ("Implementation Plan") prepared by an Idaho licensed professional engineer concerning a schedule and budget for correcting the leaks identified in the survey from Paragraph 7.d. of this Consent Order to ensure compliance with IDAPA 58.01.08.542.10. The Department will review the Implementation Plan to determine compliance with applicable facility standards and engineering standards of care, as well as the time schedule. In regards to determining compliance with applicable facility standards and engineering standards of care, as long as the Implementation Plan complies with applicable facility and design standards, the Department shall not substitute its judgment for that of Spirit Lake's design engineer concerning the manner of compliance with design standards. The Department expressly reserves the right to modify the time schedule as may be appropriate to protect the health of the Spirit Lake customers. Upon the Department's approval of the Implementation Plan, it shall be incorporated by reference into this Consent Order and be enforceable as provided by applicable law. Spirit Lake shall complete the items outlined in the Implementation Plan within the approved time schedule.

9. If CAP Plan is approved by the Department and satisfies the requirements of the Implementation Plan, the Company shall be excused from filing the Implementation Plan.

10. Civil penalties of TWO THOUSAND DOLLARS (\$2,000) assessed in the April 11, 2007 Notice of Violation issued to Spirit Lake will be resolved as follows:

- a. By June 1, 2007 Spirit Lake agrees to pay to the Department \$2,000.
- b. Payment(s) shall be made payable to the Idaho Department of Environmental Quality and shall be submitted to:

Idaho Department of Environmental Quality  
Financial Management  
Attn: Drinking Water Penalty Payment  
1410 N. Hilton  
Boise, Idaho 83706

11. Document Submittal and Review Process. Unless otherwise set forth specifically herein, the following document submittal and review process shall be followed regarding submittals requiring Department approval.

- a. Within thirty (30) calendar days of receipt of Spirit Lake's submittal, the Department shall notify Spirit Lake in writing that the document is either

approved or not approved. If the document is not approved, the Department will note the deficiencies with the document along with its recommended changes and submit these in writing to Spirit Lake.

b. If the Department does not approve Spirit Lake's submittal, Spirit Lake shall have thirty (30) calendar days from receipt of the Department's notification to submit a revised document to the Department that addresses the Department's noted deficiencies.

c. Failure to submit any required document within the applicable time deadlines herein is a violation of this Consent Order.

d. Once the Department approves any submittal by Spirit Lake it shall be incorporated by reference into this Consent Order and be enforceable as provided by applicable law.

12. Once the actions outlined in this Consent Order have been completed, including those outlined in the CAP Plan and the Implementation Plan, and the Department determines that Spirit Lake's public drinking water system is in compliance with all applicable Rule requirements, the Department shall withdraw its disapproval designation per IDAPA 58.01.08.007.

13. All communications required of Spirit Lake by this Consent Order shall be addressed to:

Stephen Tanner, Drinking Water Supervisor  
Department of Environmental Quality  
2110 Ironwood Parkway  
Coeur d'Alene, Idaho 83814

14. All notices, reports and submittals required of the Department by this Consent Order shall be addressed to:

Raymond Hanson  
President  
Spirit Lake East Water Company  
E 15807 Indiana Avenue  
Spokane Valley, WA 99216

and

John R. Hammond, Jr.  
Batt & Fisher, LLP  
P.O. Box 1308  
101 South Capitol Blvd, Suite 500  
Boise, Idaho 83701

15. This Consent Order shall not in any way relieve Spirit Lake from any obligation to comply with any provision of the Idaho Rules for Public Drinking Water Systems or any applicable local, state, or federal laws.

16. The Parties expressly recognize that failure to comply with the terms of this Consent Order may result in district court action seeking specific performance of this Consent Order, assessment of costs and expenses, restraining orders, injunctions, damages, and other relief as the court considers just and reasonable under the circumstances.

17. If any event occurs that causes, or may cause, delay in the achievement of any requirement of this Consent Order, Spirit Lake shall notify the Department in writing within fifteen (15) days of the date Spirit Lake knew, or should have known, of the delay. Any notice under this paragraph shall describe in detail the anticipated length of the delay, all anticipated consequences of the delay, measures taken by Spirit Lake to prevent or minimize the delay, and a timetable by which those measures shall be implemented. Spirit Lake shall utilize all reasonable measures to avoid or minimize any such delay. If the Department determines that the delay or anticipated delay in achieving any requirements of this Consent Order has been or will be caused by circumstances beyond the reasonable control of Spirit Lake, the Department shall grant an extension of time for completion of any requirement of this Consent Order. The burden of proving that any delay is caused by circumstances beyond the reasonable control of Spirit Lake shall rest wholly with Spirit Lake.

18. This Consent Order shall remain in full force and effect until Spirit Lake provides the Department with written notice from an Idaho licensed professional engineer that the Company has completed the items in paragraphs 7 and 8 of this Consent Order as called for in the Department-approved CAP Plan and Implementation Plan. If the Department determines that all Consent Order items have been completed, the Department shall acknowledge in writing that the Consent Order is terminated and that Spirit Lake has fulfilled the requirements of the Consent Order.

19. This Consent Order shall bind the Parties, their successors and assigns, until terminated in writing by the Department.

20. The Consent Order constitutes the entire agreement between the parties and may not be amended, supplemented, or modified, except as provided herein.

21. No changes, additions, modifications, or amendments of this Consent Order shall be effective unless they are set out in writing and signed by the parties hereto.

22. This Consent Order may be executed in two or more counterparts, each of which shall be deemed an original, but of which shall constitute one and the same instrument.

23. A waiver by the Department of any provision, term, condition, or requirement of this Consent Order shall not constitute a waiver of any other provision, term, condition, or requirement. Any such waiver shall be in written form.

24. Each undersigned representative to this Consent Order certifies that he or she is fully authorized to enter into the terms and conditions of this Consent Order and to execute and legally bind such party to this document.

25. The effective date of this Consent Order shall be the date of signature by the Director of the Idaho Department of Environmental Quality.

DATED this 29 day of MAY, 2007.

By: R. A. Hanson  
Raymond Hanson, President  
Spirit Lake East Water Company

DATED this 5<sup>th</sup> day of June, 2007.

By: Toni Hardesty  
Toni Hardesty, Director  
Idaho Department of Environmental Quality